

University of Waterloo
SENATE EXECUTIVE COMMITTEE
Notice of Meeting

Date: Monday 4 April 2022
Time: 1:30 p.m. – 2.30 p.m.
Place: Microsoft Teams Videoconference

AGENDA	Action
1. Minutes of the 7 March 2022 Meeting	Decision
2. Business Arising from the Minutes	
3. Draft 18 April 2022 Senate Agenda	Decision
4. Senate Governance Review ¹ a. Update on Consultations b. Senate Orientation c. Senate Communications d. Summary of Discussions and Early Draft Report	Discussion
5. Other Business	

23 March 2022

Karen Jack
University Secretary

¹ Materials to follow

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University of Waterloo
SENATE EXECUTIVE COMMITTEE
Minutes of the 7 March 2022 Meeting

Present: Michael Beauchemin, Jeff Casello, Joan Coutu, Lori Curtis, Benjamin Easton, George Freeman, Vivek Goel (chair), Karen Jack (secretary), Glaucia Melo, Christiane Lemieux, Kristina Llewellyn, Graham Murphy, Luke Potwarka, James Rush, Johanna Wandel

Regrets: Oudy Noweir

Guests: Diana Gonçalves, Andrea Kelman

1. MINUTES OF THE 7 FEBRUARY 2022 MEETING

Members heard a motion to approve the minutes of the 7 February 2022 meeting.

Freeman and Easton. Carried unanimously.

2. BUSINESS ARISING FROM THE MINUTES

There was no business arising.

3. DRAFT 28 MARCH 2022 SENATE AGENDA

The chair offered a brief overview of the agenda and spoke to the plan for an in-depth update at the meeting on the “Strengthening Sustainable and Diverse Communities” theme of the Strategic Plan. The committee heard a motion to approve the agenda.

Casello and Llewellyn. Carried unanimously.

4. SENATE GOVERNANCE REVIEW

Update on Consultations

The chair informed members of the excellent response rate to the survey (~50%) and that Christine Tausig Ford, President, Higher Thinking Strategies, and former Vice-President, Universities Canada has been engaged to analyse the results of the survey and complete the 1:1 interviews. Members understood that she will produce a report on findings for this committee’s May meeting.

Review of Senate Agenda Materials

The chair invited the secretary to speak to the briefing note regarding Senate agenda materials, which she did. In the discussion that followed: a suggestion that a database of the information contained in the reports from the Deans of the Faculties might be useful for a variety of purposes including Senate reporting; expressions of support for maintaining the confidential session at the conclusion of regular business at Senate meetings; broad agreement with the proposal to establish report cover page templates so that reports contain information about the due diligence already undertaken and make more explicit what is being asked of Senate; an observation that Senators might appreciate advice about how to share information from Senate meetings with colleagues; a suggestion that further context be provided when new academic programs are introduced, and, from the chair, agreement with that idea, and hence why, at recent meetings the deans have been invited to speak to some of the new academic programs that have come forward, and, in addition, that future Strategic Plan updates at Senate will provide opportunities for Senators to learn about and weigh in on burgeoning initiatives; a suggestion that this committee be tasked though its terms of reference to identify topics or themes for presentation and discussion at Senate; a suggestion that the reports from the councils would benefit from motions being grouped at the front of reports with supporting materials attached; a suggestion that the councils’ reports include more detail about which matters generated concerns or discussion so that Senate can discuss these matters more fully.

Review of Senate Committees and Councils

The chair reviewed the briefing note distributed before the meeting, including the U6+ sector scan, the mandates of current committees and councils, and a submission from the associate deans of research regarding the Graduate and Research Council. He invited members to weigh in on where key matters should be discussed, and whether any current committees or councils require reconsideration. In discussion: agreement that the Senate Graduate and Research Council should discuss the memo from the associate deans and that Casello will report back to this committee on the conversation; a suggestion that the Long Range Planning Committee's mandate might benefit from the addition of consideration of space and sustainability; ways to enable communication between Senate and the Board to ensure they are more aware of each other's business, and that consideration be given to potential joint meetings when there are subjects of mutual interest; agreement with the suggestion to find ways for Senate to have lines of sight into and predictable reporting about activities that do not naturally arise via committee and council reports (e.g., activities at the Centre for Teaching Excellence, the Student Success Office, the Undergraduate and Graduate Student Relations, and Operations Committees, and other offices which are addressing institutional commitments about wellness, equity, diversity, inclusion, and anti-racism); the potential benefits of two-way communications between Senate and the community; a suggestion that consideration be given to opening Senate committee and council chair roles to Senators outside of administration; the need to find opportunities for discussions at Senate (or its committees and councils) about ways to ensure students are exposed to important subjects like sustainability and Indigenization; a suggestion that the councils review their delegated authorities and bring forward any suggestions for potential changes.

The chair thanked members for the rich discussion and advised that a summary of the committee's discussions and an early draft of the eventual report to Senate with key recommendations will be shared at the next meeting.

5. OTHER BUSINESS

There was no other business.

14 March 2022

Karen Jack
University Secretary

University of Waterloo
SENATE
Notice of Meeting

Date: Monday 18 April 2022

Time: 3:30 p.m.

Place: Microsoft Teams Videoconference

	OPEN SESSION		PAGE #
3:30	<p><u>Consent Agenda</u> Motion: To approve or receive for information by consent items 1-4 below.</p> <p>1. Minutes of the 28 March 2022 Meeting *</p> <p>2. Reports from Committees and Councils a. Graduate & Research Council</p> <p>3. Report of the Vice-President, Academic & Provost</p> <p>4. Reports from the Faculties</p>	Decision Information TBD Information	 7 9
	<u>Regular Agenda</u>		
3:35	5. Business Arising from the Minutes		
3:40	6. Presentations from the Presidents of the Faculty Association, the Waterloo Undergraduate Student Association, and the Graduate Student Association	Information	
4:10	7. Reports from Committees and Councils a. Executive Committee * b. Graduate & Research Council c. University Appointments Review Committee *	Decision Decision Information	11
4:30	8. Report of the President a. President's Update	Information	
4:50	9. Report of the Vice-President, Academic & Provost	Oral	
5:00	10. Report of the Vice-President, Research & International	Information	13
5:10	11. Other Business		
	CONFIDENTIAL SESSION		
5:15	12. Minutes of the 28 March 2022 Meeting *	Decision	
5:20	13. Business Arising from the Minutes		
5:25	14. Report of the President		
5:30	15. Other Business		
	* Materials to follow		

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University of Waterloo
SENATE GRADUATE & RESEARCH COUNCIL
Report to Senate
18 April 2022

Senate Graduate & Research Council met on 7 March 2022 and agreed, in accordance with [Senate Bylaw 2](#) (section 4.03), to forward the following items 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

ACADEMIC PROGRAM REVIEWS

On behalf of Senate, council approved, as presented:

- Final Assessment Report: Kinesiology Programs and Minors
- Two-Year Progress Report: Nanotechnology Collaborative Program

CURRICULAR SUBMISSIONS

On behalf of Senate, council approved new courses, course revisions, and minor program revisions for Conrad Grebel (Theology), the Faculty of Engineering (Systems Design Engineering, Conrad School of Entrepreneurship and Business), and the Faculty of Health (School of Public Health Sciences).

RESEARCH CENTRES AND INSTITUTES

On behalf of Senate, council approved the following extensions due to Pandemic Circumstances;

- 12-month extension of the mandate for the Waterloo Centre for Microbial Research. The revised centre renewal date is 31 March 2023.
- 6-month extension of the mandate for the Waterloo Artificial Intelligence Institute. The revised institute renewal date is 30 November 2022.

UNIVERSITY RESEARCH ETHICS

On behalf of Senate, council approved the following:

- Human Research Ethics Board – new member (1)
- Clinical Research Ethics Board – member renewal (1)

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

Charmaine Dean
Vice-President, Research & International

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University of Waterloo
REPORT TO SENATE FROM THE FACULTIES
18 April 2022

FOR INFORMATION

The Faculty Reports for Senators' information regarding the variety of appointments, reappointments, special appointments, leaves, and other matters of interest about individuals in the Faculties are available at the [Senate agenda page](#)¹.

¹ https://uwaterloo.ca/secretariat/sites/ca.secretariat/files/uploads/files/april_report_faculties_all.pdf

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University of Waterloo
SENATE GRADUATE & RESEARCH COUNCIL
Report to Senate
18 April 2022

Senate Graduate & Research Council met on 7 March 2022 and agreed, in accordance with [Senate Bylaw 2](#) (section 4.03), to forward the following item to Senate for approval as part of the regular agenda.

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FOR APPROVAL

PROGRAM CHANGES

Faculty of Health

- 1. Motion:** To change the coursework study option degree type/designation from Master of Science (MSc) in Kinesiology to Master of Kinesiology (MKin), effective 1 September 2022, as presented.

Rationale This proposed change by the department of Kinesiology and Health Sciences is being made in response to a specific recommendation from a recent External Program Review (Fall 2019). Specifically, the External Review Committee identified the need to differentiate between the current course-based and thesis-based masters pathways within the Department's graduate program. The Reviewers suggested differentiating the two pathways with distinct program status and degree designations based on the rationale that the current course- and thesis-based pathways have distinctive requirements for graduation including: (a) lengths (1-yr vs 2-yr, respectively), (b) course credit requirements (4.0 vs 2.0), and (c) milestones (Practicum/Colloquium vs Thesis).

The current modification accomplishes the reviewer recommendation by changing the course-based degree type/designation from Master of Science (MSc) in Kinesiology to Master of Kinesiology (MKin). These distinctions and degree designations align with the approaches taken in similar departments at other Canadian institutions (e.g., UBC, University of Calgary). Beyond addressing this reviewer recommendation, no other changes are being proposed. Consultations have been undertaken with faculty, staff, and graduate students within the Department. In addition, feedback was solicited from previous course-based masters students, and a survey was conducted amongst Kinesiology practitioners within Ontario (> 80 responses). Support for the proposals contained within this motion was expressed by all stakeholders

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

Charmaine Dean
Vice-President, Research & International

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Vice-President, Research & International

Report to Senate

April 2022

Introduction

This report to Senate highlights successful research outputs and outcomes for the period March 2022 by the thematic areas as outlined in Waterloo's Strategic Plan 2020-25.

ADVANCING RESEARCH FOR GLOBAL IMPACT

R1 - Research strengths to solve real-world problems

Awards and Distinctions

- **Linda Nazar** (Chemistry) – EWR Steacie Award – Canadian Society for Chemistry
 - The E.W.R. Steacie Award is presented to a scientist who has made a distinguished contribution to chemistry while working in Canada. Nazar is an Officer of the Order of Canada, and the recipient of several international awards including the MRS Medal, the Battery Research Award from the Electrochemical Society, the August-Wilhem von Hofman Lectureship (Germany Chemical Society), the International Battery Association award and the International Automotive Lithium Battery award.
- **Scott Hopkins** (Chemistry) - Keith Laidler Award - Chemical Institute of Canada
 - This award recognizes outstanding early-career contributions to physical chemistry, for research carried out in Canada, by a scientist residing in Canada. Scott Hopkins is an Associate Professor of Chemistry at the University of Waterloo. His research explores gas phase ion chemistry and employs controlled environments to study the evolution of condensed phase properties. Hopkins' research develops and uses experimental tools such as ion mobility spectrometry, mass spectrometry, and laser spectroscopy, as well as computational tools including artificial intelligence. His work has application in areas such as nanotechnology, environmental analysis, and drug discovery.
- **Zhongchao Tan** (Mechanical and Mechatronics Engineering) - 2022 Fellow - Canadian Society of Mechanical Engineering (CSME)
 - This award recognizes those who have made *significant contributions* to the field of mechanical engineering. Dr. Tan, whose teaching and research focus on filtration and separation technologies for green energy and a clean environment, is the Director of the University's Green Energy and Pollution Control Research Lab.

- **Jo Atlee** (Cheriton School of Computer Science) - 2022 ACM SIGSOFT Distinguished Service Award
 - This honour has been bestowed to Dr. Atlee for her sustained and outstanding service to the software engineering community and for enabling an equitable, diverse and inclusive research environment in software engineering worldwide.
- **Sherry Schiff** (Earth and Environmental Sciences) - 2022 Frank Rigler Award - Society of Canadian Limnologists
 - First presented in 1984, this award recognizes and honours major achievements in the field of limnology by Canadians or those working in Canada. Awardees are established aquatic scientists with a proven record of contribution to the field of aquatic sciences, whose work is widely recognized for its influence and importance.
- **Marjory Phillips** (Psychology) - Award for Excellence in Professional Training (Academic Training Category) - Canadian Council of Professional Psychology Programs
 - The Canadian Council of Professional Psychology Programs (CCPPP) Award for Excellence in Professional Training is awarded every year in which meritorious candidates are nominated. The objective of the awards is to acknowledge the importance of professional training in psychology by recognizing a psychologist for his/her outstanding contributions to the professional training of graduate students/interns.

Research Partnerships

NSERC Alliance

Rafaat Mansour (Electrical and Computer Engineering): Tunable RF Devices for Full Duplex Communication Systems, \$480,000

- In traditional communication systems, the receive and transmit channels operate at different frequencies in Frequency Division Duplex (FDD) systems or at different time slots in Time Division Duplex (TDD) systems. This project develops the concept of Full Duplex (FD) to allow the receive and transmit channels to operate at the same frequency and at the same time. The ability to operate at the same frequency would immensely benefit network operators to double channel capacity without the need for licensing of additional spectrum. Industry partner: Redline Communications Inc.,

Sebastian Fischmeister (Electrical and Computer Engineering): FAUST: Fault and Security Testing for Vehicle Systems, \$1,730,000

- The automotive industry primarily focuses on delivering safe vehicles to consumers, where the residual risk of hazard is lower than the level accepted by

society. With the introduction of automation and connectivity, vehicles must also be secure. This project brings together academia, industry, and government to ascertain security needs for modern connected and automated vehicles as well as develop security testing technology for electronic control units used in the automotive domain.

Industry and public sector partners: AVL List GmbH; The Automotive Parts Manufacturing Assoc. of Canada; Transport Canada; Public Risk Management; Challengers Motor Freight

Mitacs

Waterloo's applications to Mitacs, the primary Canadian organization facilitating graduate student and postdoctoral research internships in private and public sector placements, is on track to secure over 1,000 new one-term placement units, this fiscal year. This represents \$18 million in research funding booked this year (many of the internships will spread out over the next 2-3 years). Major sponsoring organizations for this year's applications include Rogers, Stellantis, Niobay Metals, the Canadian Community Economic Development Network, Schlegel Homes and Tidal Medical.

Institutional Awards

Canada Foundation for Innovation- John Evans Leaders Fund (CFI-JELF)

- **Chris Bachmann** (Civil and Environmental Engineering): *Virtual Mobility Lab (VML) for Innovative Transportation Research*, \$174,850
- **Dayan Ban** (Electrical and Computer Engineering): *An advanced evaporator for dedicated high-quality and high-precision indium deposition*, \$145,000
- **Slim Boumaiza** (Electrical and Computer Engineering): *Realistic Over-the-air Test System for Researching Wireless and Satellite Communications at up to 44 GHz*, \$270,000
- **Joyce Kim** (Civil and Environmental Engineering): *An integrated digital platform for occupant-centric building operation*, \$160,000
- **Ewen MacDonald** (Systems Design Engineering): *Measurement Systems for Investigating Speech Communication*, \$ 80,000
- **Jozef Nissimov** (Biology): *Experimental modelling of aquatic microbial hosts and their viruses*, \$100,000
- **Serhiy Yarusevych** (Mechanical and Mechatronics Engineering): *Infrastructure for the analysis of multi-phase flows for airborne disease mitigation and pollution control*, \$180,000
- **Shunde Yin** (Civil and Environmental Engineering): *Laboratory investigation of geosynthetics reinforced pavement system in response to low temperature and climate change*, \$90,000

Ontario Research Fund – Research Infrastructure (ORF-RI)

- **Kelsey Leonard** (Environment): *Chair Indigenous Waters, Climate and Sustainability*, \$125,000
- **Jason Au** (Kinesiology and Health Sciences): *Infrastructure for advanced hemodynamics research*, \$100,000
- **Chul Min Yeum** (Civil and Environmental Engineering): *Infrastructure for Advancing Vision-Based Structural Assessment Technologies*, \$137,000

Waterloo International

University of Warwick: On February 22, 2022, Waterloo International announced that Representatives from the University of Waterloo (Canada) and the University of Warwick (United Kingdom) are exploring ways in which each of their burgeoning esports activities can be enriched by trans-Atlantic international collaboration. It is anticipated that ongoing meetings will soon be supplemented by more focused inter-university collaborations, be they virtual or in-person. Individual units involved in the collaboration include the Department of Athletics and Recreation, the Department of Recreation and Leisure Studies, the Games Institute and Waterloo International at Waterloo in liaison with the International Strategy Team, Innovation Group and the School for Cross-faculty Studies at Warwick. See <https://uwaterloo.ca/international/news/university-waterloo-and-university-warwick-collaborate> for more information.