

Senate **Notice of Meeting**

Date: Monday 19 September 2022 **Time:** 3:30 pm **Place:** NH 3407 ¹

	OPEN Session		Page #
3:30	1. Conflict of Interest	Declaration	
	2. Approval of the Agenda	Decision	
	3. Minutes of the 20 June 2022 Meeting	Decision	5
	4. Business Arising from the Minutes		
	5. Memo: Senate Governance Review Follow-ups	Information	11
	6. Senate Workplan	Information	15
3:40	7. Report of the President a. President's Update	Oral/Information	
3:55	 8. Leadership Updates a. Report of the Vice-President, Academic & Provost i. Operational and Strategic Matters Underway ii. Campus Housing – Chris Read, Glen Weppler b. Report of the Vice-President, Research & International 	Oral Oral Information	17
4:35	 9. Reports from Committees and Councils a. Senate Graduate & Research Council i. Centre for Advanced Trenchless Technologies To approve the dissolution of the Centre for Advanced Trenchless Technologies (CATT), as presented. 	Decision	31
	ii. Institute for Computer Research (ICR) To approve the dissolution of the Institute for Computer Research (ICR), as presented.	Decision	
	iii. Faculty of Arts To approve the deletion of the graduate research fields from the Master of Arts (MA) in History program, effective 1 September 2022, as presented. b. Senate Undergraduate Council	Decision	33
	i. Faculty of Arts - English Language and Literature That Senate approve the proposed new Three-Year General English – Creative and Professional Writing academic plan, as described below, effective 1 September 2023.	Decision	

¹ Telephone coordinates will be provided to Senators unable to attend in person

SENATE 1



	ii. Faculty of Arts - St. Jerome's University That Senate approve the proposed new Diploma in Health Humanities, as described below, effective 1 September 2023.	Decision	
	iii. Faculty of Mathematics That Senate approve the proposed new Mathematics/ Chartered Professional Accountancy Data Analytics Specialization, as described below, effective 1 September 2023.	Decision	
	c. Joint Senate Graduate & Research Council and Senate Undergraduate Council	Decision	37
	i. Academic Calendar Dates 2022-2023 To approve revised academic calendar dates for 2022-2023 and calendar guidelines for establishing academic dates as presented in Appendix 1.	Decision	
	d. Executive Committee i. Election to Board of Governors	Decision	43
	To approve the appointment of Stephanie Ye-Mowe as undergraduate student representative, term to 30 April 2024.		
	ii. Nomination to Senate Executive Committee To approve the appointment of Stephanie Ye-Mowe as undergraduate student representative, term to 30 April 2024.	Decision	
4:55	10. Other Business		
5:00	CONSENT Agenda Motion: To approve or receive for information the items on the consent agenda, listed as items 11-15 of the Senate agenda		
	11. Reports from Committees and Councils	T. C	4.5
	a. Honorary Degreesb. Senate Graduate & Research Council	Information Information	45 49
	 c. Senate Undergraduate Council i. Faculty of Arts - Invalid Credential Combinations That Senate approve the following revision to the invalid credential combinations for the Faculty of Arts, effective 1 September 2023. 	Decision	51
	 ii. Faculty of Arts - BA Breadth Requirements – New subject codes That Senate approve the following revision to the BA Breadth Requirements for the Faculty of Arts, 	Decision	
	effective 1 September 2023. iii. Minor Plan & Curricular Modifications	Information	
	Report of the President a. Tenure and Promotion of Faculty Members	Information	55
	13. Report of the Vice-President, Academic & Provost a. Call for Nominations for University Professor	Information	57

SENATE 2



	14. Reports from the Faculties	Information	59
	15. Report from the COU Academic colleague	Information	61
5:05	CONFIDENTIAL Session		
	16. Minutes of the 20 June 2022 Meeting	Decision	9
	17. Business Arising from the Minutes		
	18. Report of the President	Oral/Information	
	19. Other Business		

MG/dg 12 September 2022 Mike Grivicic Associate University Secretary Secretary to Senate

SENATE 3

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University of Waterloo SENATE

Minutes of the Monday 20 June 2022 Meeting

Present: John Abraham, Jean Andrey, Marc Aucoin, Michael Beauchemin, Anne Bordeleau, Jeff Casello, Trevor Charles, Joan Coutu, Kim Cuddington, Lori Curtis, Laura Deakin, Charmaine Dean, Jack DeGooyer, David DeVidi, Nenone Donaldson, Catherine Dong, Benjamin Easton, Aiman Fatima, Paul Fieguth, Wendy Fletcher, Cindy Forbes, George Freeman, Mark Giesbrecht, Moira Glerum, Vivek Goel (chair), Rob Gorbet, Kelly Grindrod, David Ha, Kevin Hare, Dennis Huber, Natalie Hutchings, Sonia Ismail, Karen Jack (secretary), Narveen Jandu, Martin Karsten, Achim Kempf, Jennifer Kieffer, Veronica Kitchen, Christiane Lemieux, Robert Lemieux. Xianguo Li, Lili Liu, Kristina Llewellyn, Brad Lushman, Blake Madill, Ceileigh McAllister, Peter Meehan, Graham Murphy, Richard Myers, Erin O'Connell, Daniel O'Connor, Douglas Peers, Nicholas Pfeifle, Luke Potwarka, Mary Robinson, James Rush, Matthew Schwarze, Siv Sivaloganathan, Siva Sivoththaman, Julian Surdi, Chao Tan, Graeme Turner, Diana Vangelisti, Paul Ward, Dan Weber, Stan Woo, Clarence Woudsma, Changbao Wu, Annie Yang, En-Hui Yang

Guests: Jean Becker, Sonya Buffone, Sarah Burch, Bruce Campbell, Aldo Caputo, Sam Charles, Adrien Cote, Donna Ellis, Jenny Flagler-George, Barbara Forrest, Anne Galang, Diana Goncalves, Sarah Hadley, Scott Inwood, Ross Johnston, Suzanne Kearns, Andrea Kelman, Megan Lambe, Nick Manning, Norah McRae, Bessma Momani, Kristiina Montero, Fayaz Noormohamed, Mary Power, Alice Raynard, Chris Read, Karim Sallaudin Karim, Allan Starr, Kerry Stryker, Sherri Sutherland, Mathew Thijssen, Sean Thomas, Ian Vanderburgh, Sarah Willey-Thomas

Absent: Dominic Barton*, Sandra Banks, Lisa Bauer-Leahy, Neil Craik*, Kristine Dalton*, Onurcan Gokkaya, Scott Kline, Alysia Kolentsis, Ellen MacEachen, Carol Ann MacGregor, Nasser Mohieddin Abukhdeir, Beth Namachchivaya, Cathy Newell Kelly, Oudy Noweir, Troy Osborne, Naima Samuel, Marcus Shantz*, Sharon Tucker *regrets

OPEN SESSION

CONFLICT OF INTEREST

Senators were asked to declare any conflicts they may have in relation to the items on the agenda. No conflicts were declared.

CHAIR'S REMARKS

The chair welcomed Senators to meeting, including the new president of the Graduate Student Association, Julian Surdi, and remarked on those Senators attending their last meeting, Jean Andrey and Kristina Llewellyn. He also noted that June is Pride month, and Indigenous History month, and invited members to reflect on and participate in these cultural observances.

Consent Agenda

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

Llewellyn and Hare.

1. MINUTES OF THE 16 MAY 2022 MEETING

Senate approved the minutes of the meeting.

2. REPORTS FROM COMMITTEES AND COUNCILS

Senate Graduate & Research Council

Senate received the report for information.

Senate Undergraduate Council

Senate received the report for information.

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3. REPORTS FROM THE FACULTIES

Senate received the reports for information.

4. COMMITTEE APPOINTMENTS

Senate approved Julian Surdi as the graduate student representative to the Senate Executive Committee (term to 30 April 2023).

The question was called and the motion carried with one abstention.

Regular Agenda

5. BUSINESS ARISING FROM THE MINUTES

There was no business arising.

6. REPORTS FROM COMMITTEES AND COUNCILS

Senate Executive Committee

Senate heard a motion to endorse the Executive Committee's Senate Governance Review Report and its recommendations.

Freeman and Hare.

The president spoke to the excellent conversations that occurred at the committee's meetings over the past five months and he invited Senators to review the report for the common themes that emerged. He spoke to the accountability framework and the proposed timing of implementing the recommendations. In discussion: some concern from a Senator that the report is a good start, but lacks coverage of some key issues; agreement from some for the desirability of moving away from "rubber-stamping"; an observation that the implementation of a portal will help to address some technical issues; agreement with the need to find paths to Senate for some key discussions that are not occurring now; that endorsing the report will enable work to begin in effecting changes.

The question was called and the motion passed with two abstentions.

Graduate & Research Council

Following a brief overview of the report from Casello, Senate heard motions to approve:

Several Faculties joining the Collaborative Aeronautics Program (CAP), effective 1 September 2022. Casello and Dean. Carried unanimously.

Updating the MEng in Electrical and Computer Engineering degree requirements to include one new Graduate Specialization in Business Leadership, effective 1 September 2022. Casello and Fieguth. Carried unanimously.

A direct entry Co-operative program/option to the MEng in Electrical and Computer Engineering program., effective 1 September 2022.

Casello and Fieguth. Carried unanimously.

Adding a new Master's Research Paper with Internship study option to the Master of Environmental Studies in Social and Ecological Sustainability, effective 1 September 2022. Casello and Andrey. Carried unanimously.

Changing the PhD and MSc program names to align with the following recent department and school name changes, effective 1 September 2022.

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Casello and Liu. Carried unanimously.

The discontinuation of the coursework study option from Master of Mathematics in Computer Science and the Co-operative Program, effective 1 September 2022. Casello and Giesbrecht. Carried unanimously.

Senate Long Range Planning Committee

The president observed: that the report distributed with the agenda summarizes the key points of discussion about "Waterloo @ 100"; that a first draft of the paper will be worked on over the summer and consultations will occur in the fall; that Senate will be invited to part of the Board of Governors Retreat on 28 September to participate in a visioning exercise about the activity; tht the committee will be meeting about it in September and beyond; that a final draft of the report will be ready for Senate's and Board's consideration in early 2023. There were no questions.

Senate Undergraduate Council

Following a brief overview of the report from DeVidi, Senate heard a motion to approve the inactivation of the Honors Chemistry, Biobased Specialization, effective 1 September 2023. DeVidi and R. Lemiuex. Carried unanimously.

7. REPORT OF THE PRESIDENT

Strategic Plan Update - Research

The president invited Dean to present the strategic plan research update. Dean was joined by Karim Karim, associate vice-president, commercialization and entrepreneurship, Adrien Cote, executive director of Velocity, and Scott Inwood, director of commercialization. In turn, Senators heard about: the office of commercialization and entrepreneurship (the provincial environment; connecting to the Strategic Plan; key members of the office of C&E); some details about the office (vision; mission; key pillars; support for innovators; engagement with the ecosystem; thought leadership; Velocity; the Waterloo Commercialization Office (WatCo); future considerations.

In discussion, Dean affirmed the continued and ongoing commitment to basic research throughout the Office of Research. There were no other questions.

President's Update

In a wide-ranging report, the president offered updates on: the increase of in-person events on campus; the excellent convocation ceremonies that occurred earlier in the month and the important steps taken to include new Indigenous elements with openings and closings provided by Elder Myeengun Henry and drumming and singing by the Cedar Hill Singers; the address to students by Ukrainian president Zelenskyy being organized this week. He invited Rick Myers, president of St. Paul's University College to speak to a pending name change for his institution. Myers advised Senators about the name change to United College and spoke to some of the rationale for the change which will be effective on 24 September.

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

Rush invited David DeVidi, and Ian Vanderburgh, from the Complementary Teaching Assessment Project to provide Senators with an update on the ongoing work. Senators heard about: the Complementary Teaching Assessment Project team; key goals of the second phase; some work being one on peer review of teaching, teaching dossiers, principles, and important factors; the main focus of the update: summative PRT, including: consultations, use for non-faculty instructions, implementation and adaptation to come, concerns around bias, and results.

In discussion: the growing sense of community; some of the work to follow; plans for training for the peer review process, and, that this is a priority; the complementarity of the plans with existing student surveys; expressions of thanks for the work done to date.

Rush next provided his general update, touching on: the recent convocation celebrations; student services updates; the coming suspension of the campus mask requirement; fall term confirmations; the advent of the new Council of Academic Leaders; some accomplishments and work being done on the budget and integrated planning review.

In discussion: how the decision to not extend the mask requirement aligns with advice from the Region; senior leaders will revisit the mask decision if public health conditions suggest it; from the president that the intention is to hold Senate meetings in person in the fall; support for the sentiments expressed by the provost that community members must remain cooperative and respectful to one another as the University continues to manage through the pandemic.

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

In light of the time, Dean did not present and Senate received her report for information.

10. OTHER BUSINESS

There was no other business.

Senate convened in confidential session.

21 July 2022

Karen Jack University Secretary

CONFIDENTIAL SESSION

The Confidential Session minutes have been removed.

The meeting was adjourned at 6:09 p.m.

21 July 2022

Karen Jack University Secretary

MEMORANDUM

To: Senate

From: Dr. Vivek Goel, President and Vice-Chancellor

Date: 12 September 2022

Subject: Senate Governance Review Follow-ups

In the Senate agenda you will notice some significant changes from previous agendas. Following from the Senate Governance Review, the September agenda has been prepared with the following changes:

- **Descriptive agenda titles and motions.** This provides a high-level summary for all Senators to understand the scope of the motions and to increase engagement and further increase transparency in the agenda and presentation of materials
- Modified chart format and simplified timing. A slightly modified chart format is being proposed to organize and maintain various columns; the timing provided is simplified from past practice
- Introduction of 'Leadership Updates' section in addition to the update from the
 President/Chair of Senate. This will include a broad range of updates and may include
 printed and/or oral updates. Written updates may be favourable in the interest of
 expediency and so Senators can come to the meeting with any questions they might have to
 further emphasize discussion at Senate
- Special attention to grouping of recommendations by department or faculty, as appropriate. It will be the practice of the Secretariat going forward to group recommendations as possible. This change will work hand in hand with the pending implementation of a Senate Cover Item template and the guidance it provides
- Inclusion of a newly developed annual Senate work plan. This work plan aims to account for and allow tracking of regularly anticipated items that occur throughout the year
- Consent agenda is moved to follow the business of the regular open session

The revisions to the Senate agenda take into consideration the recommendation of the Senate Governance Review, practices at other comparator institutions, and Waterloo's own Senate history and perspective.

Members will recall that a review of the flow of the Senate agenda is one of many interrelated recommendations coming from the Senate Governance Review. These other recommendations will continue to be explored and brought forward for recommendation in due course, including

the length and timing of Senate meetings, the preparation of materials for Senate packages generally, and firm recommendations/instructions for those presenting to Senate (to ensure they are not repeating information provided in the advance reading materials, and designing their presentations to engage Senate in active discussions).

For members' awareness, additionally, work and discussions have begun on a variety of other recommendations, including:

- Development of a report template
- Reviewing Senate's delegation of some of its activities elsewhere (with appropriate reporting back to Senate on such activities).
- Engaging the Provost's office and the Faculties on the development of a shared database of administrative appointments and promotions.
- Discussing with the Deans implementing regular reports from their Faculties (on a one Faculty per meeting basis) and some highlights of discussions/work done at their Faculty Councils.
- Initiation of an RFP for a governance portal.
- Discussions with the chairs of the committees and councils to assist them with and enable consistency in their respective reviews of their terms of reference, membership, delegated activities, and how to facilitate strategic discussions at their meetings.
- Consideration of a potential joint committee with the Board.

Over the fall and winter terms, updates and proposed changes arising from these activities will be brought to the committee for discussion.



For Recommendation In Camera In Camera Session

To: Choose an item.

Sponsor: Name, Position, Division/Department/Unit

Contact Information: Phone Number, Email Address

Presenter: Name, Position, Division/Department/Unit

Contact Info: Phone Number, Email Address

Date of Meeting: September 18, 2022

Agenda Item Number: Added by the Secretariat

Item Identification:

The full name of item as listed on the agenda appears here. Please note that this may include a series of related items, particularly in the case of interrelated curriculum proposals.

Summary:

A few high-level sentences that provide a summary of what the item is about. Please indicate if there are related proposals.

Recommendation/Motion:

Consult with the Secretariat in preparation of the recommendation or motion. Consider if multiple recommendations or motions are submitted together.

Jurisdictional Information:

Drawing directly from the terms of reference, the item's relationship to the body's specific responsibility is delineated here. This section provides guidance to members in order to focus on the body's authority and role. Please reach out to the Secretariat for assistance.

Governance Path:

The item's complete path through institutional governance is provided here. All bodies where the item is considered for approval are listed. Steps where the item is presented for information are listed as such.



Previous Action Taken:

Previous action taken in governance is outlined here (e.g., previous revisions to a policy or approvals of operating plans in the previous year). Relevant action taken in the current year, along with decisions and dates, at the divisional level and in other bodies is summarized. A description of consultation activities that have occurred in governance is included (e.g., previous reports, consultation or information sessions with bodies).

Highlights:

In reference to the governance body's specific responsibility, an overview of the item is provided in this section. Members may find the information in this section helpful in facilitating a focused discussion that is relevant to the body's authority. Contextual information regarding matters beyond the scope of responsibility of the body is normally included. Information about the manner in which the item fits within a University plan and/or the University's overall mission is described here. A description of administrative consultation activities is also included (e.g., town hall meetings/forums, preliminary discussions for advice, consultation meetings with student organizations, etc.). Identification of key risks and how they are addressed should be considered. Additional context around the change, including activities at comparator institutions may also be contemplated here.

Next Steps:

Follow up activities, further recommendations or other commitments coming from the change. These may be included on future Business Arising items or to flag for follow-up by the Secretariat for future meetings.

Documentation Provided:

A list of the documents provided to members for consideration of the item is provided here. Please label appendices "A", "B", "C", etc.

2022-2023 Senate Work Plan

Senate Agenda Items • expected *as needed	. 16 May 2022	20 June 2022	19 September 2022	17 October 2022 Strategic Plan Annual Update / Waterloo at 100	21 November Degree Level Expe	19 December 2022	16 January 2022 Talent	27 February 2023 <i>TBD</i>	27 March 2023 Strategic Plan – Communities - Sustainability	17 April 2023 TBD
REGULAR AGENDA (including items for Minutes	or info •	rmatic	on and	aiscu.	ssion)			-		_
Business Arising			-	-	•	•	•	•	•	•
LEADERSHIP UPDATES ⁶		_	_		-	-	-	_		
Report of the Vice-President Academic and Provost			•							
Report of the Vice-President Research & International	•				•	•	•		•	•
REPORTS FROM COMMITTEES AND COUNCILS Executive Committee	> *	*	*	*	*	*	*	*	*	*
Graduate & Research Council (GRC)	•	•				•		•		
Undergraduate Council (UC)	•		•		•	-:-	-:-	•		•
Long Range Planning Committee	•	•	•			•	•		•	
Joint Report of GRC & UC on Academic Calendar Dates				•				•		•
University Committee on Student Appeals Annual Report					•					
University Appointment Review Committee Annual Report										•
Finance Committee - Budget Update ³								•		
Finance Committee - Budget recommendation ^{2, 3}									-	
OTHER SENATE AGENDA ITEMS	I	I	ı	I	I			I	I	
New Senator Orientations (before meeting)	•									
Teaching Awards Committee								•		
Roster of Graduands	•			•						
Undergraduate and Graduate Admissions Update										•
SENATE PRESENTATIONS										
Presentations from the Presidents of the Faculty Association, Waterloo Undergraduate Association and Graduate Student Association										•
Strategic Plan Accountability Update				•						
Research Annual Update				•						
Waterloo International Annual Update								•		

¹ Annual item

 $^{^{2}\,\}mathrm{Board}$ of Governors approval

³ Presented by the Vice-President Academic and Provost

⁴ Presented by the President and Vice-Chancellor, and Chair of Senate

⁵ Presented by the University Secretary

⁶ Leadership updates may include such topics as: Talent, We Accelerate Report, Communities (EDI, Sustainability), Waterloo International, etc.



Senate Agenda Items • expected *as needed	16 May 2022	20 June 2022	19 September 2022	17 October 2022 Strategic Plan Annual Update / Waterloo at 100	vember Level Expe	19 December 2022	16 January 2022 Talent	27 February 2023 <i>TBD</i>	27 March 2023 Strategic Plan – Communities - Sustainability	17 April 2023 TBD
CONSENT AGENDA										
Reports from Faculties (e.g., appointments, administrative appointments, sabbaticals) ²		•	•	•	•	•	•	•	•	
Tenure and Promotion Report ⁴			•							
University Professor Designation ³									•	
Call for Nominations for University Professor ³			•							
Call for Nominations for Honorary Degree Recipients and Convocation Speakers ⁴								•		
Report of the COU Academic Colleague					•					
Senate Committee Appointments ⁵	*	*	•	*	*	*	*	*	*	*
CONFIDENTIAL AGENDA										
Minutes	•	•	•	•	•	•	•	•	-	•
Business Arising	•	•	•	•	•	•	•	•	•	•
Reports from Committees and Councils	*	*	*	*	*	*	*	*	*	*
Honorary Degree Recommendations	*	*	*	*	•	*	*	•	*	*
Reports from Search and Review Committees for Policy-based Senior Leadership Appointments and Reappointments	*	*	*	*	*	*	*	*	*	*
Report of VP Advancement on Policy 7										•

Joint SENATE/BOARD Strategic Plan Focus Sessions 3-4:30	Joint SENATE/BOARD Continuing Education Sessions 3-4:30
January 10 2023 - Talent	February 1 2023 – Quality assurance Framework
 March 21 2023 Communities (Sustainability) 	(Undergrad/Grad Programs)
May 2 2023 Research	March 1 2023 – Funding Environment, SMA, Corridors

Special Topics for 2022-2023 to be Scheduled:

- President's Anti-racism Task Force Update (PART)
- Waterloo at 100
- Senate Governance Review Recommendations and Updates

For more information:

uwaterloo.ca/secretariat secretariat@uwaterloo.ca NH 3060

¹ Annual item

² Board of Governors approval

³ Presented by the Vice-President Academic and Provost

⁴ Presented by the President and Vice-Chancellor, and Chair of Senate

⁵ Presented by the University Secretary

⁶ Leadership updates may include such topics as: Talent, We Accelerate Report, Communities (EDI, Sustainability), Waterloo International, etc.

Vice-President, Research & International Report to Senate September 2022

Introduction

This report to Senate highlights successful research outputs and outcomes for the period June – July 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

Anita Layton (Applied Mathematics) - 2022 Fellow, Royal Society of Canada

 Dr. Layton, an internationally acclaimed authority and leading researcher in mathematical medicine and biology, solves long-standing problems in scientific computing and renal physiology. She is recognized for her pioneering contributions to computational methods for fluid-structure interaction problems, and to mathematical modeling of mammalian physiology and pathophysiology, including the first sex-specific models of kidney physiology and blood pressure regulation.

Richard Hughson (Kinesiology and Health Sciences) - 2022 Fellow, Royal Society of Canada

 Dr. Hughson is Schlegel Research Chair in Vascular Aging and Brain Health in the Schlegel-UW Research Institute for Aging. His NASA award-winning research revealed accelerated vascular aging for astronauts on the International Space Station and implications for vascular aging on Earth. His pioneering work on human cardiorespiratory adaptations to exercise and physical inactivity continues to profoundly influence research directions in Canada and around the world.

Kristina Llewellyn (Social Development Studies) - Member, Royal Society of Canada, The College of New Scholars, Artists and Scientists

• Members of the College are at an early stage in their career and have demonstrated a high level of achievement. The criterion for election is excellence, and membership is for seven years.

Fellow, Canadian Academy of Engineering (CAE): The CAE is the national institution through which Canada's most distinguished and experienced engineers provide strategic advice on matters of critical importance to the country. Recipients of the award include:

• **Duane Cronin** (Mechanical and Mechatronics)

- David Clausi (Systems Design Engineering)
- Karim Karim (Electrical and Computer Engineering)
- Maria Anna Polock (Civil and Environmental Engineering)
- **Zhongchao Tan** (Mechanical and Mechatronics Engineering)

Kelly Skinner (School of Public Health Systems) - CIHR Applied Public Health Chair in Healthy Environments for Climate Change and Food Security in Northern Canada

• The prestigious position, one of only seven awarded, includes \$1.15 million in funding over five years for highly focused research that improves health equity for citizens in Canada and around the world.

Andrea Edginton (School of Pharmacy) - Roger Jelliffe Individualized Therapy Award - American College of Clinical Pharmacology (ACCP)

• This Award recognizes an individual who significantly advances the field of personalized medicine by improving the use of drugs or biologics in patients.

Lai-Tze Fan (Sociology and Legal Studies) - 2022 N. Katherine Hayles Award for Criticism of Electronic Literature - Electronic Literature Organization

• This is an award given annually for the best work of criticism, of any length, on the topic of electronic literature. Dr. Fan was recognized for a special journal issue called "Critical Making, Critical Design."

Florian Kerschbaum (Cheriton School of Computer Science) - 2022 Golden Jubilee Research Excellence Award, Faculty of Mathematics - Mid-career category

• This Award recognizes outstanding research contributions from early and midcareer faculty members and is awarded based on a faculty member's overall research program or based on a single, highly influential paper.

Pengfei Li (Statistics and Actuarial Sciences) - Fellow, Institute of Mathematical Sciences

• This award recognizes Li's ground-breaking and pioneering research contributions to the EM-test for the order of finite mixture models; for original and creative methodological developments in the areas of the empirical likelihood, density ratio models, statistical genetics, non-probability sampling; for exceptional research productivity; and excellence in statistical education.

Ruodu Wang (Statistics and Actuarial Sciences) - Fellow, Institute of Mathematical Sciences

• This award recognizes Wang's significant contributions to statistics and applied probability in operations research, risk management, and actuarial science, and highly influential interdisciplinary research bridging statistics and probability.

Wayne Oldford (Statistics and Actuarial Sciences) - Fellow, American Statistical Association

• This fellowship recognizes "major contributions to the development of statistical programming environments and visualization, for developing problem-based

learning (PPDAC) approaches to teaching, for exceptional service, and for cofounding AISTATS, a conference in its 38th year of operation."

Anita Layton (Applied Mathematics) - 2022 Fellow - Canadian Mathematical Society (CMS)

 The Fellowship recognises CMS members who have made excellent contributions to mathematical research, teaching, or exposition as well as having distinguished themselves in service to Canada's mathematical community.

Donna Strickland (Physics and Astronomy) - Inaugural Fellow - Canadian Association of Physics (CAP)

CAP Fellowships are awarded for outstanding contributions to physics research
and education, for leadership within the Canadian physics community and for
inspiring the next generation of physics graduates.

Melanie Campbell (Physics and Astronomy) - 2022 Silver Fellow - Association for Research in Vision and Ophthalmology (ARVO)

 ARVO Fellows serve as role models and mentors for individuals pursuing careers in vision and ophthalmology research and help further ARVO's vision which includes advancing basic and clinical knowledge, and serving as the leading international forum for vision research and the primary advocate for vision science worldwide.

Scott Hopkins (Chemistry) - 2022 Keith Laidler Award - Physical, Theoretical and Computational Division of the Canadian Society of Chemistry

• This Award recognizes outstanding early-career contributions to physical chemistry, for research carried out in Canada, by a scientist residing in Canada.

Scott Hopkins (Chemistry) - 2022 PerkinElmer Award for Analytical Science and Spectroscopy - Canadian Society for Analytical Sciences and Spectroscopy

 Awarded to a Canadian Scientist for significant achievements in the fundamental development of instrumentation or techniques, or for the novel application of spectroscopy, spectrometry or analytical sciences to analytical problems in industry, medicine, the environment, or related fields.

Laura Hug (Biology) - 2022 Thermo Fisher Scientific Award - Canadian Association for Microbiologists

 Dr. Hug's research examines the diversity and function of microbial communities in contaminated sites using a combination of omics approaches and enrichment culturing. Current research involves characterizing the microbial communities colonizing municipal landfills, with foci on methane cycling, bioplastics degradation, and community interactions.

Ben Thompson (School of Optometry and Vision Sciences) - New Zealand's 2021 Te Pūiaki Putaiao Matua a Te Pirimia Science Prize, Prime Minister's Science Prizes Secretariat Professor Thompson, a member of an inter-disciplinary research team, was awarded this Prize for changing international neonatal hypoglycemia practice. The prize is New Zealand's top award for scientific discoveries that have had a significant economic, health, social and/or environmental impact around the world.

David Edwards (School of Pharmacy) - 2022 Woods-Hughes Special Service Award - Association of Faculties of Pharmacy of Canada

• Presented to an individual or group of individuals who have provided exceptional service to the Association.

Kelly Grindrod (School of Pharmacy) - Exceptional Achievement in Research and Academia - Ontario Pharmacists Association

• Dr. Grindrod is a practicing pharmacist that has worked in a variety of settings including community pharmacy, primary care, and public health. Taking an interdisciplinary approach, she often works alongside researchers in computer science, human factors, systems design, medicine, and more.

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.

M. Tamer Özsu (Cheriton School of Computer Science) - Best Paper Award, ICDE 2022, the 38th IEEE International Conference on Data Engineering

• This Award recognizes the paper, "Evaluating Complex Queries on Streaming Graphs," which introduced a foundational model to efficiently query streaming graphs, a complex type of data structure that evolves over time and is ubiquitous in today's big data era.

Muhammad Sulaiman, Arash Moayyedi, Mohammad A. Salahuddin and Raouf Boutaba (Cheriton School of Computer Science) - Best Paper Award, The 18th IFIP/IEEE Network Operations and Management Symposium (NOMS 2022)

• The NOMS 2022 Best Paper Award is in recognition for their paper: "Multi-agent deep reinforcement learning for slicing and admission control in 5G C-RAN."

John Zelek (Systems Design Engineering) - Best Paper Award - 2022 Computer Vision and Pattern Recognition conference

• This honour, shared with **David Abou Chacra**, a student in the lab, is in recognition for their paper presented at the 1st Workshop on Vision Datasets Understanding titled "The Topology and Language of Relationships in the Visual Genome Dataset."

Tri-Council Funding

NSERC CREATE – see Appendix

Michael Pope (Department of Chemical Engineering), NSERC CREATE in Scalable 2D-Materials Architectures dubbed 2D-MATURE ~4 million (9-year project)

- This is not a typical CREATE but an International Stream application which involved a large group of researchers at the highly ranked University of Duisburg-Essen and RWTH Aachen University in Germany who were also successful in receiving an additional roughly \$7 million euro (about \$9.5 M CAD) in funding through the DFG International Research Training Group program. The research training aspects of the program will focus on understanding the scale-up of 2D materials, with the most well-known being the Nobel Prize winning graphene, and the integration of these materials into energy storage devices such as batteries and supercapacitors, energy efficient lighting and light sensors for applications in clean energy and the internet-of-things.
- In addition to a mandatory exchange in Germany, a rotating three-week summerschool, and monthly colloquium series, the technical program will be complemented by unique techno-socio-economic training in manufacturing readiness, life-cycle analysis, carbon trading and IP/commercialization. Probably the most unique aspect of the training is the focus on learning about Indigenous culture and, in particular, the Indigenous People's viewpoint with regards to natural resource extraction in Northern Ontario and Quebec with a goal of HQP learning how to respectfully engage with these communities.
- Other Waterloo team members include Pu Chen (ChE), Kyle Daun (MME), Kevin Musselman (MME), Irene Goldthorpe (ECE), Na Young Kim (ECE), Rodney Smith (Chemistry), Germán Sciani (Chemistry)

Spring CIHR 2022 Project Grant Competition

For the 2022 CIHR Project Grant competition, Waterloo was successful in securing three full grants of the 16 (or 19% success rate, up from 13% in Fall 2021) submissions, totalling **\$1,644,752** in funding. Waterloo's success rate matched that of the national average (19%, which was down from 21% in the Fall 2021 competition). For the 2022 competition round, CIHR took a 24% across-the-board cut of all awarded budgets of full grants (up from the 23% cut in Fall 2021 competition).

- **Richard Cook** (Statistics), Methods for assessing real-world causal effects with electronic health records: biologic therapies in autoimmune diseases, \$631,126 (five-year project)
- Laura Middleton (Kinesiology), The Lifestyle, Exercise and Diet (LEAD) Trial: A Virtual, Lifestyle Approach to Improve Cognitive Function, \$566,100, (three-year project)
- **Ewa Niechwiej-Szwedo** (Kinesiology), Hidden binocularity and visuomotor function after congenital cataracts, \$447,526, (five-year project)

NSERC Discovery Grants.

These five-year grants recognize the creativity and innovation that are at the heart of all research advances.

• Waterloo secured **102 Discovery Grants**, totalling **\$4,197,300** annually (**\$20,986,500** over five years). Waterloo's success rate of **83**% was markedly higher than the national success rate of **68**%.

NSERC Discovery Northern Supplement

This five-year supplement is aimed at NSERC-funded researchers who intend to conduct Discovery research in Canada's North.

• **Roland Hall**, (Biology), Characterizing vulnerability of northern freshwater ecosystems to climate variation and airborne pollution, \$13,000/year for five years, totalling \$65,000.

NSERC Research Tools and Instrument (RTI)

A total of **14** researchers secured RTI grants, totalling **\$1,582,064**. Waterloo's success rate was **39**% compared to that national success rate of **29**%. RTI grants foster and enhance the discovery, innovation, and training capability of university researchers in the natural sciences and engineering by supporting the purchase of research equipment.

- 1. **Evelyn Yim** (Chemical Engineering), Mechanical Testing of Small Hydrated Biomaterials in Fluid Under Controlled Temperature, \$60,914
- 2. **Germán Sciaini** (Chemistry), Liquid-Phase Ultrafast Electron Diffraction, \$97,836
- 3. **Scott Taylor** (Chemistry), Critical Replacement of a Low-Resolution Mass Spectrometer, \$150,000
- 4. **Peter Buhr** (Cheriton School of Computer Science), Parallel Client/Server System for Programming Language Research, \$113,899
- 5. **Na Young Kim** (Electrical and Computer Engineering), Programmable Laser Beam Shaping Tools for Exciton-Polariton Quantum Simulators, \$33,753
- 6. **Christine Dow** (Geography and Environmental Management), A Helicopterborne Radar System for Canadian Glacier Mass Assessment, \$149,189
- 7. **Clark Dickerson** (Kinesiology and Health Sciences), Next-generation Characterization of Movement and Musculoskeletal Exposures, \$138,163
- 8. **William Staines** (Kinesiology and Health Sciences), Electroencephalography (EEG) System, \$105,586
- 9. **Ken Stark** (Kinesiology and Health Sciences), Replacing Key Infrastructure for a High Throughput Fatty Acid Profiling System, \$142,745
- 10. **Stewart McLachlin** (Mechanical and Mechatronics Engineering), Phase-Contrast X-ray Micro-Computed Tomography for Enhanced 3D Microstructural Analysis of Bone and Joint Tissues, \$150,000
- 11. **Sushanta Mitra** (Mechanical and Mechatronics Engineering), Research Tools for Understanding Soft Wetting, \$149,673

- 12. **John Wen** (Mechanical and Mechatronics Engineering), Simultaneous Particle Trajectory and Temperature Diagnosis System for Developing Space Propellants, \$146,922
- 13. **Kostadinka Bizheva** (Physics and Astronomy), Deformable Mirror for Adaptive Optics OCT, \$73,628
- 14. Raffi Budakian (Physics and Astronomy), Multichannel Arbitrary Waveform Generator for Sub-nm Resolution Nuclear Magnetic Resonance Diffraction Imaging Measurements of Protein Nanocrystals and Quantum Transport Studies, \$69,756

NSERC Discovery Launch Supplement.

NSERC awarded 20 Waterloo researchers Discovery Launch Supplements, valued at **\$12,500** per early career researcher, totalling **\$250,000**.

- 1. **David Del Rey Fernandez** (Applied Mathematics), Mathematically Rigorous High-fidelity Solvers
- 2. **Jozef Nissimov** (Biology), Ecology and Biology of Aquatic Viruses and their Microbial Hosts in a Changing Climate.
- 3. **Subha Kalyaanamoorthy** (Chemistry), An Integrated Computational Framework for Protein Engineering and Novel Biocatalyst Design
- 4. **Joyce Kim** (Civil and Environmental Engineering) Personalizing Thermal Environment using Digital Technologies: Towards Greater Occupant Wellbeing and Decarbonization of Buildings
- 5. **Logan Crew** (Combinatorics and Optimization), Chromatic Symmetric Functions: Solving Algebraic Conjectures Using Graph Theory
- 6. **Mohammad Hajiabadi** (Cheriton School of Computer Science), New Techniques for Public-Key Cryptography
- 7. **Meng Xu** (Cheriton School of Computer Science), High-fidelity Symbolic Execution for Vulnerability Hunting
- 8. **Hongyang Zhang** (Cheriton School of Computer Science), Foundations for Robust and Minimally-Supervised Learning Systems
- 9. **Mohammad-Reza Nezhad-Ahmadi** (Electrical and Computer Engineering), Integrated Multi-Beam Sub-Millimeter Wave System on Chip/In-package for Emerging Wireless/Sensing Applications
- 10. **Yash Vardhan Pant** (Electrical and Computer Engineering), Real-time Temporal Logic-based Planning for Multi-agent Autonomous Systems in Partially-known and Uncertain Environments
- 11. **Leah Zhang-Kennedy** (Systems Design Engineering), Enhancing User Interfaces to Support Privacy Mental Models
- 12. **Sirisha Rambhatla** (Management Sciences), Interpretable Time Series Representation Learning via Disentanglement and Domain Priors
- 13. **Yue Hu** (Mechanical and Mechatronics Engineering), Human-state Based Active Physical Human-robot Interaction

- 14. **Saeed Maleksaeedi** (Mechanical and Mechatronics Engineering), Defecttolerant Metallic Components Via Architectured Compositional Shift Using Additive Manufacturing
- 15. **Pooya Ronagh** (Physics and Astronomy), Quantum Simulation of Diffusion Processes and Applications in Artificial Intelligence
- 16. Elie Wolfe (Physics and Astronomy), Quantum-Inspired Causal Inference
- 17. **Elana Kalashnikov** (Pure Mathematics), Mirror Symmetry and Quiver Flag Varieties
- 18. **Kateryna Tatarko** (Pure Mathematics), Applications of Analytic and Probabilistic Methods in Convexity to Geometric Functionals
- 19. **Peng Hu** (Statistics and Actuarial Science), Autonomous Maintenance for Satellite-Terrestrial Integrated Networks
- 20.**Glen McGee** (Statistics and Actuarial Science), Statistical Methods for Informative and Outcome-Dependent Data

Institutional Research Funding

Canada Research Chairs (CRC)

Waterloo secured one renewal and three new CRC awards (100% success rate).

- 1. **Steven Smith** (Electrical and Computer Engineering), Renewal Tier 2 NSERC, Autonomous Systems, \$100,000/year for 5 years
- 2. **Naila Keleta-Mae** (Communication Arts), New Tier 2 SSHRC, CRC in Race, Gender, and Performance, \$100,000/year for 5 years + \$20K/year for five years of Federal Research Funds (only for new Tier 2 CRCs)
- 3. **Carolyn Ren** (Mechanical and Mechatronics Engineering), New Tier 1 NSERC, CRC in Microfluidics and Wearable Soft Robotics, \$200,000/year for 7 years
- 4. **Nandita Basu** (Civil and Environmental Engineering), New Tier 1 NSERC, CRC in Global Water Sustainability and Ecohydrology, \$200,000/year for 7 years

For the **October 2021** CFI JELF submission cycle (17/18 or 94% success rate), Waterloo received two delayed notices of awards in June 2022:

- 1. **Andrea Brookfield** (Earth and Environmental Sciences), Developing a Unique Canadian Critical Zone Observatory at the Lake-Landscape Interface, \$150,000
- 2. **Carolyn Ren** (Mechanical and Mechatronics Engineering), Droplet Microfluidics and Microfluidics Enabled Soft Robotic Wearables, \$100,000

For the **January 2022 CFI-JELF off cycle submission**, Waterloo secured one of one CRC partnership submission (100% success rate).

 Nandita Basu (Civil and Environmental Engineering), Measuring and Modelling Fine-scale Phosphorus Dynamics in Agricultural Watersheds, \$106,809 For the **February 2022** CFI-JELF submission cycle, Waterloo submitted 10 applications and has received seven notice of awards (NOA) and is awaiting one additional NOA for a CRC JELF partnership application (currently a 77.8% success rate).

- Giovanni Cascante (Civil and Environmental Engineering), Mitigation of Collapse Risks of Civil Infrastructure by Developing Novel and Reliable Nondestructive Testing Techniques, \$109,095
- 2. **Paolo Dominelli** (Kinesiology and Health Sciences), Next Generation Fire Safety: Grounded in Science, Embracing Population Diversity, \$125,564
- 3. **Zoya Leonenko** (Biology), Atomic Force Microscopy Combined with Electrophysiology for Molecular Neuroscience Research, \$173,575
- 4. **Sushanta Mitra** (Mechanical and Mechatronics Engineering), Development of Sustainable Technology Platform for Paper-based Monitoring Devices, \$125,200
- 5. **Paul Parker** (School of Environment), Electric Aviation: Operational Testing of Low Carbon Aviation Technology, \$131,124
- 6. **Taisiya Sigaeva** (Systems Design Engineering), Infrastructure to Launch a Novel Skin Biomechanics Research Program in Canada, \$90,000
- 7. **Chris Yakymchuk** (Earth and Environmental Sciences), Tracking the Coevolution of Earth's Biosphere, Hydrosphere and Geosphere using Novel Isotope Systems, \$198,412

Ontario Research Fund- Small Infrastructure Fund (ORF-SIF)

The ORF-SIF program co-funds with John R. Evans Leaders Fund through the Canada Foundation for Innovation. Waterloo received notice of award decisions for the Feb. 2021 CFI JELF cycle and were successful in 10 of 11 (90.9%) submissions.

- Ashley Mehlenbacher (English Language and Literature), Demos Lab, \$30,000
- 2. **Gautam Kamath** (Cheriton School of Computer Science), Infrastructure for Scalable End-to-End Differentially Private Machine Learning, \$80,000
- 3. **Jenine McCutcheon** (Earth and Environmental Sciences), Biofilms as Bioreactors: Using Microbial Processes to Sequester Carbon and Remediate Metals in Mine Waste Materials, \$100,000
- 4. **Shane McIntosh** (Cheriton School of Computer Science), Developing Correct, Efficient, and Transparent Build and Deployment Pipelines, Conditional Funding, \$100,000
- 5. **Kevin Musselman** (Mechanical and Mechatronics Engineering), Advanced Characterization Facility for Stable Metal Halide Perovskite Materials and Devices, \$125,619
- 6. **Lennart Nacke** (Communication Arts), The Seamless User-Centred Conscious Experience Study System (SUCCESS), \$71,000
- 7. **Michelle Rutty** (Environment), deTOUR lab, \$32,652

- 8. **Crystal Senko** (Physics and Astronomy), Laboratory for Trapped Ion Quantum Computing with Nonidentical Qubits, \$202,421
- 9. **Valerie Ward** (Chemical Engineering), Advancing the next generation of biomanufacturing systems, \$472,000
- 10. **Yimin Wu** (Mechanical and Mechatronics Engineering), Understanding the Role of Defects in Artificial Leaves using In-Situ Multimodal Characterizations and Calculation, \$105,000

R3 - Leveraging partnerships for research impact

NSERC Alliance International Catalyst grants. Three Waterloo researchers secured an Alliance International Catalyst grant, totalling **\$75,000**. This is an ongoing program with two streams (Catalyst and Collaboration) intended to support engagement with international collaborators to further develop areas of Canadian research strength and leadership.

- **Sushanta Mitra** (Mechanical and Mechatronics Engineering): Scalable Liquid-Liquid Encapsulation for Drug Delivery, \$25K
- **Eihab Abdel-Rahman** (Systems Design Engineering): Graphene-Based CMUTs, \$25K
- **Patrick Lam** (Electrical and Computer Engineering): Library Fission: Improving APIs by observing real-world API usage, 25K

Waterloo International Agreements

Waterloo International facilitated the signing of three renewal agreements, one new international partnership agreement and one new MOU as follows:

University of Queensland (Australia), Student Mobility (Exchange-Traditional).

• This is a renewal of an existing exchange agreement that was first signed in 1993. It applies university-wide at both Waterloo and UQ.

Shandong Normal University (China), Joint Academic (UG, 2+2).

• This is a renewal of a joint academic agreement that was first signed in 2011. It involves the Faculties of Arts and Science at Waterloo and allows students to come to Waterloo under joint academic programs in these faculties

National Taiwan University, Student Mobility (Exchange-Traditional).

• This is a renewal of an exchange agreement that was first signed in 2003. It applies university-wide at Waterloo and at the Colleges of Liberal Arts, Sciences, Social Sciences, Medicine, Engineering, Bio-resources & Agriculture, Management, Public Health, Electrical Engineering & Computer Sciences, Law, and Life Sciences at NTU.

University of Twente (Netherlands), Strategic International Partnership Agreement.

• This agreement is intended to facilitate activities regarding increased cooperation and collaboration between the two institutions. Primary focus areas of

collaboration include, but are not limited to, Bioengineering and Biotechnology, Health, Nanotechnology, and Water.

Karlsruhe Institute of Technology (Germany), Memorandum of Understanding.

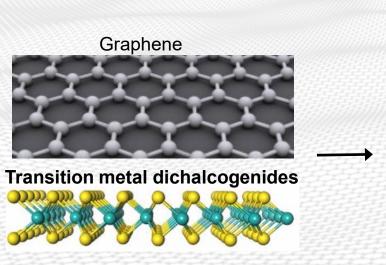
• This MOU is intended to formally acknowledge and recognize the partnership between the two institutions and to express interest in promoting various cooperative activities.

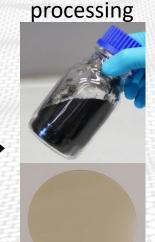
Waterloo International Delegations:

- May 2022: Delegation from the **University of Warwick (United Kingdom)**.
- June 2022: Brazilian delegates from the **Instituto Brasileiro de Governança Corporativa** organized by the Chamber of Commerce Brazil-Canada.
- June 2022: With the Waterloo Economic Development Corporation hosted delegates from the **University of Twente**.
- June 2022: Meetings in **Kigali**, **Rwanda** to engage in the Commonwealth Heads of Government meetings, and discussions at the African Institute for Mathematical Sciences Rwanda (AIMS-Rwanda) and the African Leadership University (ALU).
- June 2022: Meetings in Europe with **TU Delft**, the **Canadian Embassy in the Netherlands**, **RWTH Aachen University**, and the **University of Mannheim**.
- July 2022: With President Goel, meetings in Germany and the Netherlands with Karlsruhe Institute of Technology, the University of Twente, and Eindhoven University of Technology.

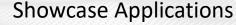
Appendix: NSERC CREATE in Scalable 2D-Materials Architectures

(2D-MATURE) - International Stream



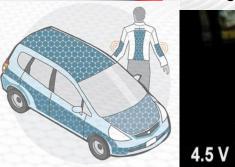


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- Energy storage
- Light emission
- Light detection







ChE

- Chem **ECE MME**
- 9-year project with mandatory international exchange, summer schools, symposium series
 - ~\$4M of support through NSERC CREATE
 - ~\$9.5M support to German partner Universities through DFG IRTG program (University of Duisburg-Essen and RWTH Aachen University)
- > 72 UW HQP to be trained in:
 - Manufacturing readiness; ISO/IEC standards; IP & commercialization
 - Indigenous views on natural resource extraction; life-cycle analysis and carbon trading

Interlocking Training Programs





Interdisciplinary research organization



Support early-career researcher





mentoring³

Study programs

NanoEngineering, Energy Science

Current examples

Cotutelle PhDs



DAAD-PPP exchange projects

UDE

U W



Interdisciplinary research organization



Support early-career researcher

Nanotechnology graduate program (1st in Canada)

Graduate studies & postdoc affairs

Mitacs training

Study program

Nanotechnology Engineering





We are looking forward to 2D-MATURE











University of Waterloo SENATE GRADUATE & RESEARCH COUNCIL Report to Senate 19 September 2022

Senate Graduate & Research Council met on 13 June 2022 and agreed, in accordance with <u>Senate Bylaw 2</u> (section 4.03), to forward the following item to Senate for approval as part of the regular agenda.

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

FOR APPROVAL	

DISSOLUTION OF RESEARCH CENTRES AND INSTITUTES

Centre for Advanced Trenchless Technologies (CATT)

1. Motion: To approve the dissolution of the Centre for Advanced Trenchless Technologies (CATT), as presented.

Rationale: Over the past 28 years the Canadian underground infrastructure has changed. To adapt to this change and to better represent the Canadian industry, the Canadian Underground Infrastructure Innovation Centre (CUIIC), at the University of Alberta has been established and CATT's mandate will be transferred there so that it can continue and evolve. So, there is only one voice in Canada and to fully support CUIIC, CATT is winding down at the University of Waterloo on April 30, 2022 as approved by CATT's Board of Directors and its membership.

Institute for Computer Research (ICR)

2. **Motion**: To approve the dissolution of the Institute for Computer Research (ICR), as presented.

Rationale: When ICR was formed in 1982, computing was revolutionizing many fields. ICR was created as a federation of research groups and individuals involved in computer-related research at the University of Waterloo, providing shared expertise and resources that enabled collaboration and innovation. Now computing is ubiquitous and part of all research that is conducted, and as a result the initial motivation for this Institute no longer exists. ICR is no longer active with the retirement of its Executive Director in 2018 and its manager in 2019; there is no staff or space associated to it, and there are no funds remaining.

PROGRAM CHANGE

Faculty of Arts

3. **Motion:** To approve the deletion of the graduate research fields from the Master of Arts (MA) in History program, effective 1 September 2022, as presented.

Rationale: Master of Arts in History students do not select graduate research fields when registering for or completing the MA program. The listing of graduate research fields in the Calendar is a former requirement and removing them standardizes the MA program description with Tri-University graduate program partners at Guelph and Wilfrid Laurier University. Removing the fields will also reduce any confusion for students applying to the program.

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

Charmaine Dean Vice-President, Research & International This page intentionally left blank.

University of Waterloo SENATE UNDERGRADUATE COUNCIL Report to Senate 19 September 2022

Senate Undergraduate Council met on 28 June 2022 and agreed, in accordance with <u>Senate Bylaw 2</u> (section 5.03) to forward the following items to Senate for approval in the regular agenda.

Further details are available at: <u>uwaterloo.ca/secretariat/committees-and-councils/senate-undergraduate-</u>council

FOR APPROVAL	

Faculty of Arts English Language and Literature

NEW ACADEMIC PLANS

1. **Motion:** That Senate approve the proposed new Three-Year General English – Creative and Professional Writing academic plan, as described below, effective 1 September 2023.

Background and Rationale: The Faculty of Arts offers 3-year versions of all of their Plans (English Literature; Rhetoric, Media, and Professional Communication; Literature and Rhetoric). This new plan is a 3-Year version of the recently approved Honours and Four-Year General English – Creative and Professional Writing Plans.

New Plan Requirements (calendar text):

Continuation in this academic plan requires a cumulative minimum overall average of 60% and a cumulative minimum English major average of 65%.

Eligibility for graduation in the Three-Year General English – Creative and Professional Writing academic plan includes successful completion of the following requirements:

- Appropriate program-level requirements. See Bachelor of Arts Degree Requirements.
- English plan-level requirements:
 - o a minimum English major average of 65%
 - o at least six academic course units (12 courses) in English, including:
 - two ENGL courses at the 100-level (see Note 1)
 - Advanced Introduction to Literature: one of ENGL 200A, ENGL 200B, ENGL 200C
 - Criticism: ENGL 251, ENGL 292
 - Genre and Literature: one of ENGL 201, ENGL 205R, ENGL 206, ENGL 208A, ENGL 208B, ENGL 208C, ENGL 208G, ENGL 208K, ENGL 208M, ENGL 211/GSJ 211, ENGL 217, ENGL 275, ENGL 280, ENGL 294
 - Creative Writing: two of ENGL 210C, ENGL 332, ENGL 335, ENGL 336, ENGL 373/BLKST 308
 - Writing Across Modes: one of ENGL 210F, ENGL 210G, ENGL 210H, ENGL 210I/LS 291, ENGL 225/BLKST 203, ENGL 295, ENGL 309E/SPCOM 323, ENGL 408A, ENGL 408B, ENGL 471
 - Editing: Communication Design: one of ENGL 210J, ENGL 371, ENGL 392A, ENGL 392B, ENGL 408C, ENGL 493

- Literature: one of ENGL 305A, ENGL 305B, ENGL 308/GSJ 307, ENGL 310A, ENGL 310B, ENGL 313, ENGL 315, ENGL 316, ENGL 318, ENGL 322, ENGL 324, ENGL 325, ENGL 326/BLKST 210, ENGL 327/BLKST 240, ENGL 328/BLKST 244, ENGL 330A, ENGL 330B, ENGL 342, ENGL 343, ENGL 344, ENGL 345, ENGL 346, ENGL 346R/EASIA 346R, ENGL 347, ENGL 348, ENGL 350A, ENGL 350B, ENGL 361, ENGL 362/THPERF 386, ENGL 363/THPERF 387, ENGL 364, ENGL 410/GSJ 410, ENGL 411, ENGL 412, ENGL 425, ENGL 430A, ENGL 430B, ENGL 451A, ENGL 451B, ENGL 460A, ENGL 460B, ENGL 460C, ENGL 460D, ENGL 463/GSJ 463, ENGL 470A, ENGL 471, ENGL 484, ENGL 485, ENGL 486, ENGL 491
- Elective: one additional ENGL course at the 200-level or above

Notes

- 1. Students may use only two English courses at the 100-level to fulfil English plan requirements; additional 100-level ENGL courses may count as degree electives. Courses transferred from other institutions without a specific course designation (e.g., ENGL 1XX) may only be counted towards the English electives.
- 2. Although the Department of English Language and Literature provides advisors to help students choose their academic plans, arrange their courses, and conform with the University of Waterloo, Faculty of Arts, and Department regulations, students are urged to study the Undergraduate Calendar very carefully because they are themselves responsible for failure to abide by these regulations.

Faculty of Arts St. Jerome's University

Motion: That Senate approve the proposed new Diploma in Health Humanities, as described below, effective 1 September 2023.

Background and Rationale: As the pandemic has revealed, training in humanities-based thinking and methodologies is vital both for policy-development and health-related communications. Being able to contextualize the present through lessons of the past, to consider the ethics of one's strategies, to form strong arguments, to communicate clearly, and to inspire trust are skills that can help both health clinicians and public health practitioners to serve the public and, more broadly, that can ease social discord and save lives. This diploma seeks to offer current undergraduate students and non-degree/post-degree community members, health clinicians, and public health practitioners a means of developing these competencies so that they can grow as responsible citizens and leaders able to respond holistically to health-related questions and, consequently, to guide and nurture action.

The proposed diploma would draw on multiple humanities disciplines to help students appreciate the human, subjective, qualitative side of health and whole person care. The courses included in this diploma would train students in narrative competencies such as engaging authentically with others' points of view and formulating and communicating one's own thoughts, feelings, and values. Through dialogue, discussion, and written analysis, students will explore the representation and lived experience of health, illness, the body, and the patient-caregiver relationship. Candidates for this diploma will learn the importance of a historical perspective, develop their abilities to think critically and reflectively and engage in ethical deliberation, acquire a range of interpretive skills (e.g. close readings of texts, artworks, discourses, images, etc.), and increase sensitivity to cultural difference and inequalities.

Since many post-graduate programs in health-related disciplines, including medical school, are increasingly expecting candidates to show facility with humanities-related skills (including those related to effective communication, narrative interpretation, and ethics), this program would provide students a

means of distinguishing themselves. Furthermore, as a diploma, this program requires a relatively small number of courses (2.5 units), which thereby increases its accessibility to current undergraduates. Additionally, as a diploma, this program allows for the enrollment of non-degree/post-degree students in a way that a minor could not.

New Plan Requirements (calendar text):

Students registered in degree programs or any non- or post-degree academic plan may pursue the Diploma in Health Humanities.

The Diploma in Health Humanities requires successful completion of a minimum of 2.5 academic course units (5 courses) with a minimum cumulative diploma average of 65%, including:

- HHUM101
- Four additional courses (2.0 units) from the following, at least one of which must be at the 300-level:
 - ENGL 108X, HHUM 217/SMF 217, HHUM 218/SMF 218, HUM 221, HHUM 222, HHUM 261/ITALST 261, HHUM 288/RS 288, HHUM 306/MEDVL 306, HHUM 307, HHUM 311, HHUM 312, HHUM 372, HHUM 373, HHUM 391, HIST 209, MEDVL 305, PHIL 319J, PHIL 321J, RS 266, RS 387

Course List

ENGL 108X: Literature and Medicine

HHUM 217/SMF 217: Caregiving, Illness, and Relationships

HHUM 218/SMF 218: Sexual Health and Well-being in Comics

HHUM 221: Monstrous Hunger

HHUM 222: Health, Illness, and Narrative

HHUM 261/ITALST 261: Contagion, Disease, and Illness in Italian Literature and Film

HHUM 288/RS 288: Health, Medicine, and Spirituality

HHUM 306/MEDVL 306: Public Health in Medieval Society

HHUM 307: Concepts of Health and Disease in Western Medical History

HHUM 311: Culture, Mental Health, and Wellness

HHUM 312: Cross-Cultural Care Traditions

HHUM 372: Women and Medicine in Literature

HHUM 373: Early Modern Bodies

HHUM 391: Seminar in Health Humanities

HIST 209: Canadian Medical History

MEDVL 305: Medieval Death and Dying

PHIL 319J: Ethics of End-of-Life Care

PHIL 321J: Philosophy of Palliative Care

RS 266: Death and Dying

RS 387: Aging and the Spiritual Life

Faculty of Mathematics

Motion: That Senate approve the proposed new Mathematics/Chartered Professional Accountancy Data Analytics Specialization, as described below, effective 1 September 2023.

Background and Rationale: Based on discussions with CPA firms, the review of the literature surrounding the profession and a review of programs at other Canadian universities, it is believed the new Data Analytics Specialization is necessary to respond to some challenges facing the CPA profession. Under pressure from the CPA firms, the CPA profession is currently modifying its course requirements to

consider CPA students to complete courses in data science and data analytics. To respond to these changes, it is proposed to start with a Data Analytics specialization by modifying the math component of the program. The modifications involve replacing the current 6 math elective courses with prescribed existing CS/STAT courses. Since STAT 371 is a prerequisite for some of the required 400-level STAT courses, the students in this specialization will take STAT 371 to substitute AFM 323/STAT 374, so that the number of units stays the same.

Calendar text:

This academic plan has the same requirements as <u>Honours Mathematics/Chartered Professional Accountancy</u>, with the following additional requirements:

- All of
 - o CS 234 Data Types and Structures
 - o CS 338 Computer Applications to Business: Databases
 - o STAT 341 Computational Statistics and Data Analysis
 - o STAT 371 Applied Linear Models and Process Improvement for Business
- Three of
 - o STAT 441 Statistical Learning Classification
 - o STAT 442 Data Visualization
 - o STAT 443 Forecasting
 - o STAT 444 Statistical Learning Advanced Regression
- Note
 - Students enrolled in the Mathematics/Chartered Professional Accountancy Data Analytics specialization may substitute STAT 371 for AFM 323/STAT 374

/twk David DeVidi
Associate Vice-President, Academic

University of Waterloo SENATE GRADUATE & RESEARCH COUNCIL and

SENATE UNDERGRADUATE COUNCIL

Report to Senate 19 September 2022

Senate Undergraduate Council (SUC) met on 28 June 2022 and Senate Graduate & Research Council (SGRC) met on 12 September 2022 to considered revised academic calendar dates for 2022-2023, as well as calendar guidelines for determining academic dates. Both SGRC and SUC agreed, in accordance with Senate Bylaw 2 (section 5.03), to forward this item to Senate for approval as part of the regular agenda.

Further details are available at:

https://uwaterloo.ca/secretariat/committees-and-councils/senate-undergraduate-council https://uwaterloo.ca/secretariat/committees-and-councils/senate-graduate-research-council

FOR APPROVAL

ACADEMIC CALENDAR DATES 2022-2023

1. **Motion:** To approve revised academic calendar dates for 2022-2023 and calendar guidelines for establishing academic dates as presented in Appendix 1.

Rationale: The in-person exam days for online courses have now been established and replace the "TBD" designation in the table of academic calendar dates approved at the 15 November 2021 meeting of Senate.

/kw & twk

Jeff Casello Associate Vice-President, Graduate Studies and Postdoctoral Affairs Charmaine Dean Vice President, Research & International

David DeVidi Associate Vice-President, Academic

Senate Graduate and Research Council / Senate Undergrad Council Joint Report Appendix 1 (Regular)

Academic Calendar Dates for 2022-2023

	Fall 2022	Winter 2023	Spring 2023	
Co-operative Work Term	Sept. 6 (T)	Jan. 9 (M)	May 8 (M)	
Begins				
Classes Begin	Sept. 7 (W)	Jan 9. (M)	May 8 (M)	
	Oct. 10 (M)	Feb. 20 (M)	May 22 (M)	
Holidays		Apr. 7 (F)	July 3 (M)	
			Aug. 7 (M)	
Reading Week	Oct. 8-16 (S-U)	Feb. 18-26 (S-U)	N/A	
Convocation	Oct. 21, 22	N/A	June 13-17 (T-S)	
Classes Fad	(F,S)	Amm 10 (NA)	A 1 /T\	
Classes End	Dec. 6 (T)	Apr. 10 (M)	Aug. 1 (T)	
	N/A	Apr. 10 (M) for	May 23 (T) for	
Make up Day(s) for in		Apr. 7 (F schedule)	May 22 (M schedule) July 31 (M) for July 3	
Make-up Day(s) for in- term holidays			(M)	
term nondays			(IVI) Aug. 1 (T) for May 23	
			(T)	
Pre-Examination Study	Dec. 7, 8 (W,	Apr. 11,12 (T,W)	Aug. 2,3 (W,R)	
Day(s)	R)	, (p. 12)22 (1)11)	7 (36. 2/3 (11).1/	
Examinations Begin	Dec. 9 (F)	Apr. 13 (R)	Aug. 4 (F)	
	Dec. 9, 10	Apr. 14, 15	Aug. 11, 12	
In-Person Exam Days for	(F,S)	(F,S)	(F,S)	
Online /Remote Courses	Dec. 14, 17	Apr. 19, 22	Aug. 16, 18	
	(W,S)	(W,S)	(W,F)	
Examinations on Sunday	Dec. 11 (U)	N/A	N/A	
Examinations End	Dec. 23 (F)	Apr. 28 (F)	Aug. 19 (S)	
(including Emergency Day)				
Co-operative Work Term	Dec. 23 (F)	Apr. 28 (F)	Aug. 25 (F)	
Ends				
Teaching days	60	60	60	
Pre-examination Study	2	2	2	
Day(s)				
	13	13	11	
Examination days	(+1 Emergency Day)	(+1 Emergency Day)	(+1 Emergency Day)	

Symbols and abbreviations:

(M) Monday, (T) Tuesday, (W) Wednesday, (R) Thursday, (F) Friday, (S) Saturday, (U) Sunday, N/A – Not Applicable

Guidelines for Determining Academic Calendar of Dates

The following are principles and guidelines either formally agreed upon by Senate or adopted as common practice in determining the dates for the academic year.

- 1. That the practice of setting dates for each academic year continues to be an annual exercise.
- 2. That there be no fewer than **60 teaching days** (12 weeks) in a term. A clear rationale for fewer than 60 teaching days must be communicated to Senate at the time calendar dates are approved. In calculating teaching days in a term, Saturdays, Sundays, and public or University holidays are excluded.
- 3. That attention be given to **balancing the number of meets** in courses. Where an imbalance may occur because of public holidays, the class schedule for a day different than the calendar day can be used to balance the number of course meets.
- 4. That **fall convocation** be the Friday and Saturday that fall in the third full week (beginning Sunday) of October.
- 5. That **spring convocation** be the Tuesday to Saturday in the second full week (beginning Sunday) in June.
- 6. That the **reading weeks** occur in all faculties in the fall and winter terms. They must begin on the Saturday before the public holidays of Thanksgiving Day and Family Day and will end on the following Sunday.
- 7. That **fall term** classes begin on the Wednesday following the public holiday of Labour Day. **Exception:** The fall term begins on Tuesday, September 8 when Labour Day is September 7.
- 8. That the start date for winter term be set as follows:
 - o If January 1 is a Sunday, then start of classes is Wednesday, January 4.
 - o If January 1 is a Monday, then start of classes is Wednesday, January 3.
 - o If January 1 is a Tuesday, then start of classes is Monday, January 7.
 - o If January 1 is a Wednesday, then start of classes is Monday, January 6.
 - o If January 1 is a Thursday, then start of classes is Monday, January 5.
 - o If January 1 is a Friday, then start of classes is Tuesday, January 5.
 - o If January 1 is a Saturday, then start of classes is Wednesday, January 5.
- 9. The start date for **spring term** be set as follows:
 - o If May 1 is a Sunday, then start of classes is Monday, May 2.
 - o If May 1 is a Monday, then start of classes is Monday, May 1.
 - o If May 1 is a Tuesday, then start of classes is Tuesday, May 1.
 - o If May 1 is a Wednesday, then start of classes is Wednesday, May 1.
 - o If May 1 is a Thursday, then start of classes is Monday, May 5.
 - o If May 1 is a Friday, then start of classes is Monday, May 4.
 - o If May 1 is a Saturday, then start of classes is Monday, May 3.

- 10. That there be no fewer than one pre-examination study day and when possible, two pre-examination study days (excluding Saturday, Sunday, and public holidays) between the end of classes and the beginning of examinations. A clear rationale for using fewer than two days or Saturday, Sunday, and holidays as pre-examination study days, must be communicated to Senate at the time calendar dates are approved.
- 11. That there be no fewer than 13 **examination days** in the fall and winter terms, and 11 examination days in the spring term. In addition, one Emergency Day with no scheduled examinations is added to the end of the examination period.
- 12. In calculating **examination days**, Saturdays which fall within the period are included, whereas Sundays and public or University holidays are excluded.

Exceptions:

- Examinations will not be scheduled on the Saturday following Good Friday when that day falls within the examination schedule or the Saturday of the Civic Day weekend.
- The first Sunday within the examination period may be used when required to accommodate the prescribed number of examination days in the fall term.
- 13. That for the **fall term's examination period**, no examinations be scheduled beyond December 22. The Emergency Day cannot be scheduled beyond December 23.
- 14. That **online course examination days** in each term be the first consecutive Friday and Saturday in the examination period.
- 15. **Grades due dates** for on campus courses are normally scheduled seven days from the date of the final examination. Grades for online (Centre for Extended Learning) courses that have a scheduled final examination are due on the last day of the grades submission period. Grades for all courses without a scheduled final examination are normally due 14 days after the start of examinations.
- 16. **Co-op work terms** are expected to be 16 week in duration. Actual start and end dates may vary depending on employer or student requirements in consultation with Cooperative Education.

Prepared by: C. Newell Kelly, Registrar June 2021 October 2021 Revised June 2022

Rules that Require Exceptions with Rationale:

Rule 8

That the start date for **winter term** be set as follows:

- o If January 1 is a Sunday, then start of classes is Wednesday, January 4.
- o If January 1 is a Monday, then start of classes is Wednesday, January 3.
- o If January 1 is a Tuesday, then start of classes is Monday, January 7.
- o If January 1 is a Wednesday, then start of classes is Monday, January 6.
- If January 1 is a Thursday, then start of classes is Monday, January 5.
- o If January 1 is a Friday, then start of classes is Tuesday, January 5.
- o If January 1 is a Saturday, then start of classes is Wednesday, January 5.

A survey of Ontario universities showed that of those respondents, all are beginning the 2023 winter term on Monday, January 9, 2023.

Rule 9

The start date for **spring term** be set as follows:

- If May 1 is a Sunday, then start of classes is Monday, May 2.
- o If May 1 is a Monday, then start of classes is Monday, May 1.
- If May 1 is a Tuesday, then start of classes is Tuesday, May 1.
- o If May 1 is a Wednesday, then start of classes is Wednesday, May 1.
- o If May 1 is a Thursday, then start of classes is Monday, May 5.
- o If May 1 is a Friday, then start of classes is Monday, May 4.
- o If May 1 is a Saturday, then start of classes is Monday, May 3.

Due to the delayed start to the 2023 winter term, the 2023 spring term will be delayed.

Rule 12

... The first Sunday within the examination period may be used when required to accommodate the prescribed number of examination days in the fall term.

With fall term classes beginning September 7, 2022, and the scheduling of two study days prior to the fall final exam period, the first Sunday within the exam period was required for scheduling exams to accommodate the prescribed number of examination days.

... Examinations will not be scheduled on the Saturday following Good Friday when that day falls within the examination schedule or the Saturday of the Civic Day weekend.

Saturday, August 5, 2023 will not be used for schedule of examinations during the 2023 spring term final exam period, as it is the Saturday of the Civic Day weekend.

Rule 14

That online course examination days in each term be the first consecutive Friday and Saturday in the examination period.

At the time of preparation of this document, it is unknown as to when online course examination days will resume, as there has been a hold on in person exams for online courses due to the COVID-19 pandemic. Considerations will be made at a future date.

With the resumption of regular university operations, including that of exam administration, it has been determined that online course examination days are required. It has also been determined that with the

expected volume of online courses with in-person exams, additional days will be required, and therefore dates have been selected for the first consecutive Friday and Saturday, as well as the first Wednesday and second Saturday of each exam period. With the second Saturday of the spring 2023 exam period landing on the emergency day, the second Friday of the exam period will be used.

University of Waterloo SENATE EXECUTIVE COMMITTEE Report to Senate 19 September 2022

FOR APPROVAL					

Election to Board of Governors

Motion: To approve the appointment of Stephanie Ye-Mowe as undergraduate student representative, term to 30 April 2024.

Rationale: Stephanie Ye-Mowe is the new WUSA President and has expressed an interest in serving the remainder of Mr Easton's term. At the meeting further nominations of eligible undergraduate student Senators (Sonia Ismail, Ceileigh McAllister, Annie Yang)¹ will be accepted from the floor. If any other nominations are made, an electronic election will follow after the meeting.

Nomination to Senate Executive Committee

Motion: To approve the appointment of Stephanie Ye-Mowe as undergraduate student representative, term to 30 April 2023.

Rationale: Stephanie Ye-Mowe is the new WUSA President and has expressed an interest in serving the remainder of Mr Easton's term. At the meeting further nominations of eligible undergraduate student Senators (Oudy Noweir, Annie Yang)² will be accepted from the floor. If any other nominations are made, an electronic election will follow after the meeting.

Vivek Goel Chair

¹ Student Senators with term ending in 30 April 2023 are not eligible for this position.

² Other Student Senators are precluded from serving due to their service on other committees per Senate Bylaw 1, Section 10.

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2022 FALL CONVOCATION

List of Honorands with Biographies Attached

HEALTH and SCIENCE Friday, 21 October 2022 at 10:00 a.m.

Richard Hughson – Distinguished Professor Emeritus (S)

Mathematics – Friday, 21 October 2022 at 2:30 p.m.

Claudia Klüppelberg – Honorary Doctor of Mathematics (S)

ARTS – Saturday, 21 October 2022 at 10:00 a.m.

Gerry Remers – Honorary Doctor of Letters (*S*) Katrina Di Gravio – Honorary Member of the University

ENGINEERING and ENVIRONMENT - Saturday, 21 October 2022 at 6:30 p.m

TBD – invited guest speaker (S) Donald Burn – Distinguished Professor Emeritus Carolyn Hansson – Distinguished Professor Emerita Raymond Legge – Distinguished Professor Emeritus

S = speaker

Richard Hughson (Distinguished Professor Emeritus, Health)

Dr. Richard Hughson was a Professor in the Department of Kinesiology from 1977-2021 and is currently the Senior Director of Research and a Schlegel Research Chair in Vascular Aging and Brain Health at the Schlegel-UW Research Institute for Aging. He is internationally regarded for his pioneering work on human cardiovascular adaptations to exercise and cardiovascular responses to long-term exposure to the microgravity environment. He has influenced a generation of scholars publishing over 270 scientific papers and mentoring over 60 graduate students. Dr. Hughson is a Fellow of the Canadian Academy of Health Sciences and was recently named a Fellow of the Royal Society of Canada in 2022.

Claudia Klüppelberg (DMath, Mathematics)

Dr. Claudia Klüppelberg is an outstanding mathematician and statistician known for her fundamental contributions to extreme value theory and its applications to real life problems. Her research interests combine various disciplines of applied probability theory and statistics with applications in the area of biological, economic and technical risks. In 1997 she became the Chair of the Department of Mathematical Statistics at the Technical University of Munich, and in 2008 she was appointed Carl von Linde Senior Fellow at the Institute for Advanced Study of Technical University of Munich. She has also received several prestigious awards and recognitions during her career, including the Order of Merit of the Federal Republic of Germany, PRMIA New Frontiers in Risk Management Award, and a Medallion Lecturer of the Institute of Mathematical Statistics.

Gerry Remers (DLitt, Arts)

Gerry Remers is a distinguished alumnus of the University of Waterloo and was president and COO of Christie Digital Systems where he fostered and solidified Christie's position as a leading global

provider of innovative visual, audio and presentation products. Since retirement, Mr. Remers has been working as a consultant to business and government, and has served as Chair of the Ontario Expert Review Panel, as a Board Member for Next Generation Manufacturing, on the Selection Committee for the Ontario Scale-Up Voucher Program, as Inaugural Chair for the Waterloo Region Economic Development Corporation (WREDC), and as Board Member and co-Chair of Communitech. Mr. Remers is also an active and dedicated member of the university community. He served on the Waterloo Board of Governors and its committees from 2009 to 2016. In 2007, his work and contributions were honoured with a University of Waterloo 50th Anniversary Alumni Award.

Katrina Di Gravio (HM, Arts)

In her career of over 40 years with the University, Katrina Di Gravio has been a well-respected leader and collaborator in initiatives supporting a diverse and inclusive community, and for fostering employee development and wellness. She joined Waterloo in Human Resources in 1980, working in several roles where she became a well-known facilitator of employee training, and developed programs such as the Basic Principles of the Collaborative Workplace program. In 2006, she became director of the newly formed Organizational and Human Development (OHD), and in 2008 established the annual Waterloo Staff Conference. Under her leadership, OHD created the Principles of Inclusivity program which was awarded the Institute of Performance and Learning Silver Award in Facilitated Programs in 2015. Di Gravio has also chaired the Staff Training and Development, and Healthy Workplace committees and was an early adopter of the National Standard of Canada for Psychological Health and Safety in the Workplace.

Donald Burn (DPE, Engineering)

Over the course of his 35-year career, Dr. Donald Burn has played a significant role in building the University of Waterloo's sterling reputation as a destination for top engineering talent. Dr. Burn's landmark hydrological and water resource models, particularly those related to the impacts of climate change, have had a lasting impact on the field. In addition to his research contributions, he has developed and delivered many new courses in water-related areas, has personally supervised or co-supervised more than 45 graduate students, and has greatly expanded graduate offerings in the Civil and Environmental Engineering department. Beyond the classroom, he has served in several administrative leadership roles within the Civil and Environmental Engineering department, including as Acting Chair and Associate Chair, Graduate Studies, where he has helped direct and build capacity in research, graduate enrollment, and education on campus.

Carolyn Hansson (DPE, Engineering)

Throughout her 25-year career at the University of Waterloo, Dr. Carolyn Hansson has constructed an admirable record of scholarship and service that has helped to greatly enhance the University's reputation. Dr. Hansson was a Professor in the Department of Mechanical and Mechatronics Engineering and cross-appointed to the Department of Civil and Environmental Engineering. She joined the University in 1996 as the Vice President, University Research following thirty years of exemplary academic and industry research in the United States, United Kingdom, Denmark and Canada. Dr. Hansson has made pioneering contributions to the field of materials science, specifically the understanding of how a wide range of phenomena affect properties of various structural materials. She is the recipient of several prestigious national and international distinctions, including her induction as a Member of the Order of Canada. She is also a member of the Royal Society of Canada, Canadian Academy of Engineering, the American Concrete Institute and the Institute of Materials.

Raymond Legge (DPE, Engineering)

Raymond Legge's record of scholarship, teaching, and service to the Department of Chemical Engineering and the University of Waterloo is exemplary and extends over 37 years. He has made ground-breaking contributions to the development of biosensors, environmental monitoring and remediation, green bioprocesses, and water treatment and monitoring. Deeply committed to improving engineering education, he has served on over 50 committees within his department and across the university, including several undergraduate task forces. In his roles as Associate Chair, Associate Dean, and Assistant Vice-President, Graduate Studies he has helped shape the engineering curriculum and elevate Waterloo to one of the most prominent engineering schools in the world. During his career he taught over 7000 students and received the Sandford Fleming Foundation Teaching Excellence Award on two occasions.

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University of Waterloo SENATE GRADUATE & RESEARCH COUNCIL Report to Senate 19 September 2022

Senate Graduate & Research Council met on 13 June 2022 and agreed, in accordance with <u>Senate Bylaw 2</u> (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

UNIVERSITY RESEARCH ETHICS

On behalf of Senate, council approved the following:

• Human Research Ethics Board – new member (1); member renewal (1)

RESEARCH CENTRES AND INSTITUTES

On behalf of Senate, council approved:

- Renewal, for a 5-year term, of the Heritage Resource Centre (HRC), as presented.
- Renewal, for a 5-year term, of the Waterloo Artificial Intelligence Institute (Waterloo.AI), as presented.
- 20-month extension of the mandate for the Centre for Bioengineering and Biotechnology. The revised centre renewal date is 31 December 2023, as presented.

GRADUATE AWARDS

On behalf of Senate, council approved the Waterloo Apple PhD Fellowship in Data Science and Machine Learning (trust), President's Graduate Scholarship (PGS) (operating), and the Mac Lewis Memorial Award in Classics (trust).

CURRICULAR SUBMISSONS

On behalf of Senate, council approved new courses, course revisions, course inactivations, and minor program revisions for the Faculty of Arts (Accounting, Economics, English) and the Faculty of Engineering (Conrad School of Entrepreneurship and Business; Electrical and Computer Engineering).

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

Charmaine Dean Vice-President, Research & International This page intentionally left blank.

University of Waterloo SENATE UNDERGRADUATE COUNCIL Report to Senate 19 September 2022

Senate Undergraduate Council met on 28 June 2022 and agreed, in accordance with <u>Senate Bylaw 2</u> (section 5.03) to forward the following items to Senate for information or approval, as noted, in the consent agenda.

Further details are available at: <u>uwaterloo.ca/secretariat/committees-and-councils/senate-undergraduate-council</u>

FOR APPROVAL ACADEMIC REGULATIONS

Faculty of Arts Invalid Credential Combinations

1. Motion: That Senate approve the following revision to the invalid credential combinations for the Faculty of Arts, effective 1 September 2023.

Background and Rationale: The plans have been inactive for some time and there are no students in them.

Proposed changes: Remove the following combinations, as indicated with strikeout.

Legal Studies Minor	Arts	Crime and Deviance Specialization (Sociology major)*; Sociology/Legal Studies - Criminology Specialization*
Arts and Business	Arts	Accounting and Financial Management, Bachelor of; Honours Arts Co-op; French Teaching Specialization (French major); Global Business and Digital Arts, Bachelor of; Management Studies Minor; Mathematical Economics major (BA and BMath); Sociology/Legal Studies - Criminology Specialization*

Add the following combinations (calendar text format TBD), since students pursuing any of the financial management programs should not be able to pursue more than one of them:

The Bachelor of Sustainability and Financial Management (BSFM) cannot be combined with:

- Arts and Business
- Management Studies Minor or Diploma
- Any stand-alone major
- Accounting and Financial Management, Bachelor of
- Computing and Financial Management, Bachelor of

The Bachelor of Computing and Financial Management (BCFM) cannot be combined with:

- Accounting and Financial Management, Bachelor of
- Sustainability and Financial Management, Bachelor of
- Computer Science, Bachelor of
- The Bachelor of Accounting and Financial Management cannot be combined with:
- Sustainability and Financial Management, Bachelor of
- Computing and Financial Management, Bachelor of

In addition to existing restrictions, whereby the BAFM cannot be combined with:

- Arts and Business;
- Management Studies Minor or Diploma;
- Any stand-alone major

Faculty of Arts

BA Breadth Requirements – New subject codes

2. Motion: That Senate approve the following revision to the BA Breadth Requirements for the Faculty of Arts, effective 1 September 2023.

Background and Rational: The Speech Communication (SPCOM) subject code is changing to Communication Studies (COMMST), to align with the plan title changes made in recent years. The Health Humanities (HHUM) subject code is being proposed at UGAG #6. Since the content expands beyond humanities in the traditional sense, the Arts Academic Regulations committee (in consultation with St. Jerome's University) recommends including HHUM courses in the Transdisciplinary Studies category.

Proposed changes: Replace SPCOM with COMMST in Fine, Performing and Communication Arts category, and add HHUM subject code to Transdisciplinary Studies category.

Current calendar text: https://ugradcalendar.uwaterloo.ca/page/ARTS-BA-Breadth-Requirements

Proposed calendar text: (bold = new; strikethrough = deleted)

All Bachelor of Arts (BA) students must meet the BA Breadth Requirements:

Requirement	Units	Subject Codes
Fine, Performing, and	0.5 unit	COMMST , DAC, FINE, MUSIC, SPCOM, THPERF, VCULT
Communication Arts		
Humanities	1.0 unit	CLAS, ENGL, HIST, MEDVL, PHIL, RS
Languages and Cultures	1.0 unit	ARABIC, ASL, CHINA, CI, CROAT, DUTCH, EASIA, FR, GER,
		GRK, ITAL, ITALST, JAPAN, JS, KOREA, LAT, MOHAWK,
		PORT, REES, RUSS, SI, SPAN. See Note 4 below.
Social Sciences	2.0 units	ANTH, ECON, PSCI, PSYCH, SDS, SOC. See Note 2 below.
Transdisciplinary Studies	0.5 unit	AFM, APPLS, ARBUS, ARTS, BLKST, BUS, CDNST, CMW,
		GBDA, GSJ, HHUM, HRM, HRTS, HUMSC, INDG, INDENT,
		INTST, LS, MENN, MGMT, PACS, SFM, SMF, SOCWK. Also
		any course taken in another University of Waterloo
		faculty. See Notes 1 and 5 below.

FOR INFORMATION

MINOR PLAN & CURRICULAR MODIFICATIONS

Council approved the following on behalf of Senate:

- minor plan changes for the Faculty of Arts (accounting and finance, communication arts, English language and literature, fine arts, sociology and legal studies); Faculty of Mathematics (actuarial science, biostatistics, statistics)
- new courses for the Faculty of Arts (accounting and finance, classical studies, economics, Germanic
 and Slavic studies, religious studies, sociology and legal studies, St. Jerome's university); Faculty of
 Mathematics (actuarial science)
- course changes for the Faculty of Arts (accounting and finance, communication arts, economics, English language and literature, Germanic and Slavic studies, political science, psychology, sociology and legal studies, St. Jerome's university); Faculty of Mathematics (actuarial science, statistics)
- course inactivations for the Faculty of Arts (philosophy, political science, St. Jerome's university)
- subject code changes for the Faculty of Arts (communications art)

/twk

David DeVidi Associate Vice-President, Academic This page intentionally left blank.

TENURE AND PROMOTION OF FACULTY MEMBERS

This report provides a summary of the 2021/22 tenure and promotion cycle carried out under <u>Policy 77</u> <u>— Tenure and Promotion</u>. The following individuals were awarded tenure and/or promoted, effective 1 July 2022 and are reported to Senate for information in accordance with Section 6. of the policy.

Tenure

Tenure provides institutional support for faculty members' academic freedom. This enables them to pursue and disseminate knowledge and the attainment of understanding through their scholarship and teaching, all in an atmosphere in which free inquiry and discussion are fostered. Tenure provides faculty members with an environment conducive to their long-term scholarly work, and the University is assured of a continuing group of teachers and scholars committed to the University, around which it can plan and from whom it can draw its academic leadership.

Promotions

When assistant professors are granted tenure, they are also promoted to the rank of associate professor. Promotions of associate professors to the rank of professor recognizes a high order of achievement in their scholarship and teaching, and satisfactory performance in their service. A continuous program of scholarship with positive peer review by nationally and internationally recognized scholars is essential for promotion to professor.

Timing

A faculty member holding a second probationary-term appointment is entitled to formal consideration for tenure, which normally occurs during the second year of the second probationary term. However, the candidate may choose to postpone consideration until the third year.

Process

Tenure and Promotion Committees at the department, Faculty, and University levels consider applications and make recommendations to the next level. The University Tenure and Promotion Committee makes recommendations to the president on tenure and promotion cases, and on the comparability of standards across the University. The president considers the recommendations and renders decisions.

FOR INFORMATION

Awarded Tenure and Promoted to Associate Professor:

Samer Al-Kiswany, David R. Cheriton School of Computer Science Martine August, School of Planning
Ashok Chaurasia, School of Public Health Sciences
Alec Cram, School of Accounting and Finance
Daniel Cockayne, Geography and Environmental Management
David Correa, School of Architecture
Mark Crowley, Electrical and Computer Engineering
Michaela Devries-Aboud, Kinesiology and Health Sciences
Mario Ghossoub, Statistics and Actuarial Science
Sergey Gorbunov, David R. Cheriton School of Computer Science

Heather Hall, School of Environment, Enterprise and Development

Sherilyn Houle, School of Pharmacy

Barbara A. Katzenback, Biology

Tizazu Mekonnen, Chemical Engineering

Leia Minaker, School of Planning

Christine Muschik, Physics and Astronomy

Tu Nguyen, School of Accounting and Finance

Nicole Nolette, French Studies

Jeremy Pittman, School of Planning

Michael Reimer, Electrical and Computer Engineering

David Rozotto, Spanish and Latin American Studies

Semih Salihoglu, David R. Cheriton School of Computer Science

William Slofstra, Pure Mathematics

Derek Stacey, Economics

Hannah Tait Neufeld, School of Public Health Sciences

Mihaela Vlasea, Mechanical and Mechatronics Engineering

Michael Wallace, Statistics and Actuarial Science

Jerry Wang, Pure Mathematics

Lan Wei, Electrical and Computer Engineering

Awarded Tenure:

Brian Doucet, School of Planning

David Gosset, Combinatorics and Optimization

Yuri Leonenko, Earth and Environmental Sciences

Douglas Stebila, Combinatorics and Optimization

Shunde Yin, Civil and Environmental Engineering

Promoted to Professor:

Niayesh Afshordi, Physics and Astronomy

Lois Andison, Fine Arts

Jonathan Baugh, Chemistry

Tim Brecht, David R. Cheriton School of Computer Science

Amelia Clarke, School of Environment, Enterprise and Development

Stanko Dimitrov, Management Sciences

Adrian Gerlich, Mechanical and Mechatronics Engineering

Arie Gurfinkel, Electrical and Computer Engineering

Mark Hancock, Management Sciences

Daniel Henstra, Political Science

Florian Kerschbaum, David R. Cheriton School of Computer Science

Mohammad Kohandel, Applied Mathematics

Wentang Kuo, Pure Mathematics

Ondřej Lhoták, David R. Cheriton School of Computer Science

Ian Milligan, History

Monica Maly, Kinesiology and Health Sciences

Markus Moos, School of Planning

Marina Mourtzakis, Kinesiology and Health Sciences

Lennart Nacke, Stratford School of Interaction Design and Business

Abigail Scholer, Psychology

James Skidmore, Germanic and Slavic Studies

Stephen Smith, Electrical and Computer Engineering

Theophanis Stratopoulos, School of Accounting and Finance

Olga Vechtomova, Management Sciences

Ruodu Wang, Statistics and Actuarial Science

Karen Yeats, Combinatorics and Optimization

Steven Young, School of Environment, Enterprise and Development



MEMORANDUM September 19, 2022

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 thirty three 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 Ozsu (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; John Hirdes (public health sciences) and Robert Mann (physics and astronomy) in 2022.

The nomination and selection process is available at https://uwaterloo.ca/provost/university-professors and is reproduced below for your information.

Please ensure that nomination material is submitted to my office before the December break to ProvostOffice-General@uwaterloo.ca

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.

Nomination and 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 TO SENATE FROM THE FACULTIES 19 September 2022

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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 page¹.

¹ https://uwaterloo.ca/secretariat/sites/ca.secretariat/files/uploads/files/all faculties september 2022 0.pdf

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COU Academic Colleagues April and May 2022 Meetings Report

The Council of Ontario Universities has been focused on advocacy to the Ontario Government as a key priority for most of 2021-2022. The Academic Colleagues have continued to focus on EDI in the Canadian academic space. Additionally, COU Academic Colleagues meetings have included a substantial element of peer-to-peer updates on how our institutions are managing the ongoing pandemic.

1. Advocacy to Government in key areas of concern

Institutional Autonomy and Financial Sustainability

The aftermath of Laurentian University's insolvency declaration in February 2021 has contributed to ongoing concerns with respect to government interference in collegial governance. Prior to the 2021 restructuring, the Laurentian University Federation consisted of Thornloe University, Huntington University and the University of Sudbury. Laurentian University received the government grant for all four institutions, and redistributed shares to the three federated universities. Since the termination of the agreement, the three federated institutions have become standalone entities. Furthermore, in April 2021, the Ontario Government's Bill 276 splintered previously federated institutions Northern Ontario School of Medicine (NOSM) and l'Université de Hearst from Laurentian, resulting in NOSM – previously affiliated with both Laurentian in Sudbury and Lakehead in Thunder Bay – as Canada's first independent school of medicine. None of the previously federated institutions had representation at COU in 2021-2022. NOSM and l'Université de Hearst have applied for COU membership for July 2022, though neither currently meets the criteria for COU membership as per the COU Constitution. Both institutions currently benefit from COU shared services through their previous affiliations with Laurentian and Lakehed, and maintaining this access is considered beneficial to the institutions, their students, and the Ontario university sector to maintain their access to COU shared services, including Quality Council. As a result, the COU Executive Heads (the University Presidents) voted on April 6, 2022 that both institutions be granted provisional membership as of July 1, 2022. Provisional membership will provide the two institutions with continued access to COU Shared Services, but not full membership of the Council (as either Executive Heads or Academic Colleagues, though COU plans to conduct a review of the COU Constitution in terms of membership eligibility and membership categories.

The Academic Colleague from Laurentian University has provided periodic updates on faculty morale post cuts. He noted that faculty were asked to teach outside their areas of expertise to compensate for fired colleagues (e.g. a chemistry prof asked to teach environmental science courses) and that still-employed younger faculty were often looking to move elsewhere. Student numbers are down significantly; the Ontario Universities Application Centre (OUAC) data has Laurentian applicants for 2022 entry down 43% from the previous year.

Given the top-down institutional restructuring set out in Bill 276, COU has ongoing concerns regarding institutional autonomy. COU President Steve Orsini stresses that government funding accounts for only one third of Ontario universities' revenue, yet the current Ontario government is asserting control in all aspects of institutional operations. One key area of concern remains financial sustainability. Operating grants have been frozen for three years, resulting in a 21% reduction in real per student grant since 2006-2007. Domestic tuition has been frozen over the same time period following a 10% cut, with only

minor adjustments to out-of-province tuition recently. This continues to place pressure on recruiting higher-fee international students to meet funding shortfalls. On April 29, Executive Heads endorsed the creation of a COU cross-functional working group on international education. The mandate of the group will be to conduct research, review key issues, and develop policy and advocacy options around the quality, supports, and outcomes of international education in Ontario for member input and review. The group would report to Ontario Council of Academic Vice Presidents (OCAV, i.e. the Provosts of Ontario's Universities), who will in turn bring initiatives forward to Executive Heads.

The Ontario government renewed the tuition freeze for 2022-23 for Ontario students, with an allowable 5% increase (up from 3% the previous year) for out of province domestic students. Ontario Universities currently exist without multi-year financial predictability, and COU continues to emphasize the need for this.

COU continues to advocate to government, including emphasizing data on the resilience of university graduates, their job-readiness, employment rates, and the need for a future-ready workforce. The government has been more receptive to messaging on skilled trades than the importance of universities, though Ontario universities continue to see increased domestic applications. President Orsini stressed that skills shortages exist in all areas of the economy; Ontario universities could expand by 53K spaces sector wide as next 10 years will need >920,000 university graduates (almost as much as skilled trades). Ontario has increasingly open to private career colleges to meet this skills shortage, but these operate without Quality Council oversight and recent highly publicized issues with private career colleges do not build confidence in the ability of this avenue to adequately address the skills shortage.

Strengthening and maintaining public postsecondary education in Ontario (private institutions)

There has been a proliferation of private institutions, including private career colleges and private universities offering degree-level education, in Ontario, since the early 2000s. There are currently six private institutions which have been granted ministerial consent to use "university" and offer degree-level education in Ontario:

- Two Canadian-based private institutions (Yorkville University; International Business University).
- Two US-based private institutions (Niagara University; Northeastern University).
- Two Canadian-based Christian institutions (Redeemer University; Tyndale University).

There are also eight public universities from other jurisdictions (five from other Canadian provinces, and one each from the United States, Ireland, and Germany), as well as 17 of Ontario's 24 publicly-assisted colleges, that have ministerial consent to offer degree-level education in Ontario. In addition, there are a number of private institutions which have pending applications for ministerial consent: Digital Humanities Degree Project (May 2021); Global University Systems / University of Niagara Falls (June 2021); and, Westcliff University (December 2021).

There is concern that the government is creating a lot of very small institutions (e.g., Hearst & NOSM) that will not be sustainable and will end up undermining stability. COU is working to find ways to engage colleges on joint advocacy to defend the public education sector.

College Degree-Granting Expansion (courtesy of Cecilia Brain)

- On April 11, MCU announced the government's decision regarding the expansion of publicly assisted colleges' mandates to offer three-year applied bachelor degrees, which was initially introduced as part of the Fall 2021 Red Tape Bill: Supporting People and Businesses Act.
- This provision, which is effective immediately, includes a number of restrictions on college three-year degree granting:
 - o There will be no additional funded spaces provided to colleges within existing funding corridors.
 - o There will be no additional operating grant funding to support expansion of three-year degrees.
 - There will be an increase in degree cap limits for all colleges by five percentage points.

 This means that ITALS (Institutes of Applied Technology and Learning -- Humber, Seneca, Sheridan, and Conestoga) now have a 20% cap on all degree-level program activity and all other colleges have a 10% degree cap limit (calculated as a proportion of programs).
 - o Previously the four-year degree-granting cap was set at 15% for the ITALS and 5% for all other colleges.
 - o Each proposed three-year degree, including any conversions of advanced diplomas to degrees, must meet the Ontario Qualifications Framework, must undergo a PEQAB review, and be approved by the Minister.
 - o Three-year degrees must be:
 - in an applied area of study;
 - career-oriented; and
 - distinct from university degrees.
 - Program tuition must conform to the Tuition and Ancillary Fee Minister's Binding Policy Directive.
 - The Minister's memo did not grant colleges the authority to grant applied master's degrees.
 - The university sector currently has the opportunity to comment on new college degree applications that are submitted to PEQAB. Given the sector's interest in Ontario's postsecondary quality standards, COU will confirm the details of the review process for these new programs with MCU and will, in keeping with present practice, continue to flag any new PEQAB applications to OCAV.

 HEQCO has released a report finding little evidence of cost savings of three-year degree program delivery at the college level (compared to four-year baccalaureate degrees at universities).

Strategic Mandate Agreements (SMA3) (text courtesy of Cecilia Brain)

On February 25 the Ministry sent a memo announcing that the Ministry will delay the coupling to performance-based funding by another year (to 2023-24); and that will assess the sector's readiness for activation in Year 4 (2023-24) at a planned system-wide portion of 10% increasing to 25% in Year 5 (2024-25). COU lobbied for the postponing of the coupling of metrics to funding, as the pandemic will have a negative long-term effect on more than half of the metrics.

On April 4, 2022, MCU shared with universities the criteria and guidelines related to the SMA3. This follows a government decision to forego using the Education and Skills Online (ESO) assessment as the standardized measuring tool and to provide more flexibility to institutions by allowing them to create and post their own institution-specific specific measures in SMA3 Year 3. MCU set up the following timelines:

- a. **Phase I: Refinement of Institutional Proposals (Spring-Fall 2022):** Institutions to submit and draft proposals and narratives by August 5, 2022, ahead of the Year 3 Annual Evaluation. The ministry will then review and schedule a check-in with each institution, if needed, in September-October 2022 to provide guidance.
- b. Phase II: Data Collection and Posting (Winter-Summer 2023): As part of Stage 1 of the Year 3 Annual Evaluation process, the ministry will pre-populate the workbooks to include approved metric selections and related data and information with institutions in early December 2022. Institutions will have the opportunity to review the workbooks and finalize metric information and data by February 2023. Public posting of the metric narrative and data source will be implemented in Summer 2023, as part of the SMA3 Year 3 Ontario.ca website updates.

2. Equity, Diversity and Inclusion; De-Colonisation

The COU Academic Colleagues have taken the opportunity to learn from leaders in EDI and De-Colonisation via periodic presentations and resulting discussion since Spring 2020. Recent meetings included presentations from Dr. Candace Brunette-Debassige on decolonizing the academy and Dr. Denise Baxter, Lakehead Vice-Provost, Indigenous Initiatives on indigenous ancestry verification. The latter is focused on the question of "who claims you", and includes indigenous academics, indigenous lawyers and indigenous community members.

The Ontario Universities Registrars Association OURA is working with the Ontario Universities Application Centre (OUAC) to consider and propose changes to the shared OUAC undergraduate application form to enable the collection of equity data. Options are also being explored for how an institution's equity data may be best shared with the institution.

OCAV expressed support for the initiative at their February 23 meeting.

• Implementation is targeted for Fall 2022 for 101 (high school entry) and 105 (non-high-school entry) applications.

3. Covid-Related Issues

Waterloo is broadly consistent with other institutions with respect to vaccination and masking requirements, including the announced removal and subsequent reversal of the decision of masking requirements. Many but not all Ontario universities are returning to in-person convocations, several of these including Waterloo planning legacy convocations for those who only convocated online in 2020 and 2021. Waterloo's return to in-person instruction is in line with many other universities, though these range from much more conservative approaches (e.g. Carleton) to more aggressive in-person plans (Western). Some academic colleagues report choice in instructional mode, others work in environments much like ours.

COU's COVID-19 Reference Group has been active for the past 18 months addressing operational, academic, advocacy, legal and other sector issues related to COVID. The group had its last meeting in April and will shift into a smaller cross-functional COVID Advisory Group to advise Executive Heads, COU and government with respect to any issues that arise related to COVID-19 on an ad hoc basis.

Johanna Wandel COU Academic Colleage, 2019-2022