

**University of Waterloo
BOARD OF GOVERNORS
Tuesday 4 February 2020**

Meeting
1:30 p.m.
Needles Hall, Room 3407

**Note: directions/parking information for external members to follow.
Please convey regrets to Emily Schroeder at 519-888-4567, ext. 32749 or eschroeder@uwaterloo.ca.**

Time	<u>MEETING</u>	Page	Action
	OPEN SESSION		
1:30	1. Conflict of Interest Declaration	Oral	Declaration
	2. Remarks from the Chair	Oral	Information
	3. Agenda/Additional Agenda Items	Oral	Input
1:40	<u>Consent Agenda</u> Motion: To approve or receive for information by consent items 4-8 below.		
	4. Minutes of the 29 October 2019 Meeting	4	Decision
	5. Report of the President		
	a. Honorary Degrees and Convocation Speakers	12	Call for Nominations
	b. Recognition and Commendation	13	Information
	c. Sabbatical and Administrative Leaves and Administrative Appointments	19	Decision/Information
	6. Report of the Vice-President, Administration & Finance		
	a. Incidental Fees	23	Decision
	b. Residence Fees 2020-2021	26	Decision
	7. Reports from Committees		
	a. Finance & Investment	28	Information
	b. Pension & Benefits	29	Information
	8. Accountability Status Reports		
	a. Consolidated Undergraduate and Graduate Academic Reviews	30	Information
	b. Undergraduate and Graduate Recruitment and Admissions	32	Information

	OPEN SESSION	Page	Action
	<u>Regular Agenda</u>		
1:45	9. Business Arising from the Minutes		
1:50	10. Presentation – Armen Bakirtzian, Chief Executive Officer and Co-Founder of Intellijoint Surgical Inc.	Oral	Information
2:10	11. Report of the President		
2:20	a. President's Update	36	Information
	b. Strategic Plan – Implementation/Framework	42	Information/Discussion
2:40	12. Report of the Vice-President, Academic & Provost		
	a. Strategic Mandate Agreement Update	Oral	Information
	b. Operating Budget: 2019-20 Update/ Planning for 2020-2021	53	Presentation/Information
	c. Tuition Fee Setting	Oral	Presentation/Information
3:00	BREAK		
	13. Reports from Committees		
3:10	a. Audit & Risk	55	Decision
3:15	b. Building & Properties	58	Decision/Information
3:25	c. Finance & Investment	63	Decision
3:35	d. Governance	67	Information/Discussion
3:45	e. Pension & Benefits	68	Decision
3:55	14. Other Business		
	CONFIDENTIAL SESSION		
4:00	15. Conflict of Interest Declaration	Oral	Declaration
	<u>Consent Agenda</u>		
	Motion: To approve or receive for information by consent items 16-17 below.		
	16. Minutes of the 29 October 2019 Meeting	8	Decision
	17. Report of the President		
	a. New Appointment with Tenure	72	Decision
	<u>Regular Agenda</u>		
4:05	18. Business Arising from the Minutes		
4:10	19. Report of the President		
	a. National Quantum Strategy	Oral	Information
	b. KPIs	To be distributed	Information

	CONFIDENTIAL SESSION	Page	Action
4:20	20. Reports from Committees a. Governance	To be distributed	Decision
4:30	21. Other Business		
	<i>IN-CAMERA SESSION</i>		
4:35	22. Conflict of Interest Declaration	Oral	Declaration
4:40	23. Minutes of the 29 October 2019 Meeting	10	Decision
4:45	24. Business Arising from the Minutes		
4:50	25. Other Business		
4:55	26. Next Meeting: Tuesday 7 April 2020 at 1:30 p.m.		
5:00	27. Adjournment		

KJJ/ees
28 January 2020

Karen Jack
University Secretary

University of Waterloo
BOARD OF GOVERNORS
Minutes of the Tuesday 29 October 2019 Meeting

Present: Nyla Ahmad, Upkar Arora**, Michael Ashmore, Jagdeep Bachher**, Peter Barr, Michael Beauchemin, Anne Bordeleau**, Paul Fieguth, Cindy Forbes (chair), George Freeman, Murray Gamble, Tony Giovinazzo, Robert Gorbet, Feridun Hamdullahpur, Ava Hill, Russell Hiscock**, Karen Jack (secretary), Dave Jaworsky, Sheryl Kennedy, Sabrina Khandakar, Linda Ogechi Iheme**, William Pristanski, Karen Redman, John Saabas**, Max Salman**, James Schlegel, Mark Seasons, Jeremy Steffler, Maya Venters

Guests: Christiana Alkiviades, Jean Andrey, Suman Armitage, Sandra Banks, Alison Boyd, Bruce Campbell, Aldo Caputo, Charmaine Dean, David DeVidi, Mike Grivicic, Sarah Hadley, Michelle Hollis, Lee Hornberger, Frances Houston, Dennis Huber, Ross Johnston, Andrea Kelman, Jennifer Kieffer, Robert Lemieux, Lili Liu, Derek Madge, Nick Manning, Kevin McKay, Kirsten Müller, Cathy Newell Kelly, Diana Parry, Leanne Perreault, Alice Raynard, Chris Read, Ian Rowlands, James Rush, Beth Sandore Namachchivaya, Karl Schuett, Emily Schroeder, Daniela Seskar-Hencic, Joanne Shoveller, Allan Starr, Mike Stork, Pearl Sullivan, Sherri Sutherland, Mat Thijssen, Susan Tighe, Sean Thomas, David Timms, David Tubbs, Stephen Watt, Richard Wikkerink, Jennifer Woodside

Regrets: Dominic Barton, Shannon Dea, Martha George, Neil Randall, Marisha Roman, Berry Vrbanovic, Kate Windsor

**joined by telephone

OPEN SESSION

1. CONFLICT OF INTEREST

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

2. REMARKS FROM THE CHAIR

Following the land acknowledgement, the chair welcomed members to the meeting. She announced Kathy Bardswick's resignation due to competing commitments and introduced and welcomed Tony Giovinazzo, the newest Lieutenant Governor in Council member. The chair thanked Pearl Sullivan, dean of engineering, for hosting Board members prior to the meeting for a tour of new engineering facilities and lunch. She also reminded governors about the annual President's Reception immediately following the meeting and of the coming dinner in January 2020.

The chair expressed her thanks to the Board for the excellent discussion about the strategic plan at its gathering on 24 September and noted that the plan proposed for approval at today's meeting reflects how the University incorporated the Board's feedback.

3. AGENDA/ADDITIONAL AGENDA ITEMS

The chair advised that a few typos in the agenda package will be corrected after the meeting, and that a new item was added – Item 14, Report of the Vice-President, University Relations.

The Board heard a motion to approve the agenda as amended.

Seasons and Steffler. Carried unanimously.

Consent Agenda

The Board heard a motion to approve and/or receive for information by consent items 4-8 below.

Gorbet and Redman.

4. MINUTES OF THE 4 JUNE 2019 MEETING

The Board approved the minutes of the meeting as distributed.

5. REPORT OF THE PRESIDENT

Promotion to Professor. The Board received the report for information.

Sabbatical and Administrative Leaves and Administrative Appointments. The Board heard a motion to approve the sabbatical and administrative leaves as presented in the report. The Board received the remainder of the report for information.

Recognition and Commendation. The Board received the report for information.

6. REPORT OF THE VICE-PRESIDENT, ADMINISTRATION & FINANCE

Incidental Fee Changes. The Board heard motions to approve the Student Refugee Program (SRP) fee as presented in the report.

The Board received the remainder of the report for information.

7. REPORTS FROM COMMITTEES

Building & Properties. The Board heard a motion to approve the granting of an approximately 310 m² (0.08 acres) easement to Waterloo North Hydro for the installation of a third point of electrical supply to service the south campus.

The Board received the remainder of the report for information.

Executive. The Board received the report for information.

Finance & Investment. The Board received the report for information.

Pension & Benefits. The Board received the report for information.

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

Undergraduate/Graduate Admissions Update. The Board received the report for information.

The question was called and the motion carried.

Regular Agenda

9. BUSINESS ARISING FROM THE MINUTES

There was no business arising.

10. REPORT OF THE PRESIDENT

President's Update. The president briefly spoke to various matters, including: new senior administrators and members; Royal Society of Canada updates; admissions and faculty hiring data; a government relations update; the Innovation Summit held earlier in the month; an update on the Committee on Student Mental Health; recent achievements (Excellence Canada, rankings).

In response to questions: the regrettable overlap of dates of the School of Architecture's 40th anniversary celebrations in Rome and this Board meeting prevented senior administration from attending the events in Rome, and a description of the ways the University acknowledged the anniversary; that the 3% decrease in undergraduate applications is being monitored, and clarity that there has not been a similar reduction in the number of offers to well-qualified applicants; the importance of observing international numbers across intake and through the whole cycle; potential growth in the future of American applicants and enrollments.

Strategic Plan 2020-2025. The chair again thanked members for the helpful discussion and thoughtful feedback re: the draft plan in September, and indicated that the Board's input, and feedback from the University's Senate have led to changes to the plan as provided with the agenda materials. Speaking to his slides, Hamdullahpur advised of: underlying facts which are foundational to the plan; recent changes made in light of feedback received; the plan's approval process to this point. He offered an expression of thanks to the plan's contributors, and in particular the leadership role played by Daniela Seskar-Hencic.

The Board heard a motion to adopt the 2020-2025 strategic plan as presented.

Hamdullahpur and Freeman.

In discussion: many expressions of thanks for the way in which feedback has been incorporated; the Board's past approval of a fund to assist in launching startups, and advice that more work is to be done on this front which the Board will have a chance to consider; the University's approach to business academic programming; kudos for the thoroughness of the process of development of the plan and the breadth of consultation undertaken; confirmation that both undergraduate and graduate students will be engaged meaningfully in the plan's implementation.

The question was called and the motion carried unanimously. A round of applause followed. Hamdullahpur spoke to next steps re: implementation and advised that the Board will receive an update on this front in February.

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

Student Experience Update. The provost shared: the goals of the review; the group's approach; observations and recommendations; relevant initiatives, and next steps. In discussion: clarity that engagement with students re: housing matters are included in the discussions; efforts the University is undertaking with respect to international students; recognition that rapid growth has had a role in some areas in which the University is striving to do better; existing communication and engagement channels and new considerations and resource allocations.

Strategic Mandate Agreement Update. The provost provided an update on the current status of the strategic mandate agreement. Speaking to his slides, Rush advised re: the timeline; an overview of the government's funding; metric evaluation and implementation.

12. REPORT OF THE VICE-PRESIDENT, ADVANCEMENT

Campaign Planning Committee Final Report and Recommendations. The vice-president, advancement invited Mike Stork, chair of the Campaign Planning Committee, to address the Board. Stork briefly commented on the process undertaken to date and expressed thanks to the entire committee for its efforts.

Shoveller provided an update on campaign planning recommendations. She spoke to: the campaign's requirements; the vision; creating the framework; what is needed by the world from the University and its graduates; desired outcomes and commitments; relationships; next steps and execution. In discussion, members heard about work being done in conjunction with the Faculties.

13. REPORT OF THE VICE-PRESIDENT, ADMINISTRATION & FINANCE

Update on Becoming a Signatory to the UN Principles for Responsible Investment (UNPRI). The vice-president, administration & finance spoke to his written report provided to the Board for information. In discussion: how this activity will affect ongoing and future investments; the support of both the Pension & Benefits and Finance & Investment committees; the rigour and commitment articulated in the University becoming a signatory; recognition of the evolving conversation and solutions on this front worldwide; expressions of support; requests for the University to do more at

all levels; the activities of the President's Advisory Committee on Environmental Sustainability and pending concrete actions which will be announced soon; rough estimates of the University's investments in fossil fuel (~3.5%) and the complexities of changing investment managers to completely divest at this time, but that conversations re: fully divesting will continue to be explored by the Finance & Investment committee; the need for the Board to ensure responsible fiduciary management for all of the University's constituents. The president acknowledged the students who attended the meeting and he noted their thoughtful provision of their concerns to the University and the Board. He reiterated the University's commitment to continue actively to engage with those members of the community who seek to move these efforts forward.

14. REPORT OF THE VICE-PRESIDENT, UNIVERSITY RELATIONS

The vice-president, university relations updated the Board on recent communications and marketing initiatives. She spoke to: the "Beyond" campaign (platform + impact themes + audience, objectives, brand awareness and storytelling, paid media, intersection with the Innovation Summit and beyond, progress, media impact, reputation impact, what's next: update the Global Impact Report in light of the Strategic Plan, review and update the campaign and align it with the advancement campaign, participate in the international strategic review). In discussion: the increasing focus on digital activities; an expression of support for the methodology, and a suggestion that even more be done nationally and internationally; kudos on tremendous progress in the last few years and encouragement to continue with the campaign; an observation of the interconnectedness of the three next steps.

15. REPORTS FROM COMMITTEES

Audit & Risk. The Board heard a motion to reappoint Ernst & Young as the University's external auditors for the fiscal year ending 30 April 2020.

Gamble and Pristanski. Carried unanimously.

Pension & Benefits. The Board heard a motion to approve amendment 5 to the University of Waterloo Pension Plan for Faculty and Staff, as described in Attachment #1 and effective May 1, 2018.

Barr and Gamble. Carried unanimously.

16. OTHER BUSINESS

There was no other business.

The Board convened in confidential session.

16 November 2019

Karen Jack
University Secretary

CONFIDENTIAL SESSION

The confidential minutes have been removed.

The confidential minutes have been removed.

***IN-CAMERA* SESSION**

The *in-camera* minutes have been removed.

The *in-camera* minutes have been removed.



To: Board of Governors

From: Feridun Hamdullahpur, president and vice-chancellor

Date: 4 February 2020

Subject: **Call for Nominations for Honorary Degrees**

An honorary degree is the highest honour conferred by the University. Through the conferring of honorary degrees, the University of Waterloo seeks to recognize outstanding achievement, whether academic or through service to society. These achievements are celebrated at Convocation where they inspire those in attendance and, in particular, our newly graduating students.

Guidelines for the awarding of honorary degrees, including selection guidelines, procedures, considerations to make in assessing a candidate's qualifications, and details on what to submit in a nomination package, can be found on the website for the Senate Nominating Committee for Honorary Degrees (<https://uwaterloo.ca/secretariat/committees-and-councils/honorary-degrees-committee/guidelines-awarding-honorary-degrees>). You are also welcome to contact the committee secretary, Rebecca Wickens (rebecca.wickens@uwaterloo.ca) for information and assistance.

We invite you to consider nominating a worthy candidate for this honour. Please note, the University embraces and appreciates diversity and wants to ensure a diverse pool of candidates. With the community's input we can continue to maintain a substantial pool of deserving individuals whose achievements the University would be delighted to celebrate and honour.

Thank you in advance for your contribution to this important tradition.

University of Waterloo
BOARD OF GOVERNORS
Report of the President
4 February 2020

FOR INFORMATION

Recognition and Commendation

The Association for Computing Machinery has named Professor **Florian Kerschbaum** a Distinguished Member. He joins 62 individuals globally who have received this prestigious recognition in 2019 for outstanding scientific contributions. ACM Distinguished Members are responsible for an extraordinary array of achievements, reflecting many areas of research and practice in the field of computing and information technology. Professor Kerschbaum, who is also the executive director of Waterloo's Cybersecurity and Privacy Institute, has developed and helped deploy several application-specific methods for searching and computing on encrypted data. He has developed a comprehensive set of searchable encryption algorithms for database operations. Over his career, Dr. Kerschbaum's work has resulted in 49 US patents to date. Since 2017 he has been an associate professor at the Cheriton School of Computer Science and since 2018 has served as the inaugural director of Waterloo's Cybersecurity and Privacy Institute. Before his faculty appointment at Waterloo, he had been with SAP in Germany for 11 years. Professor Kerschbaum is the tenth faculty member at the Cheriton School of Computer Science to be recognized as a Distinguished Member by ACM, following Professors Jo Atlee (2016), Charles Clarke (2015), Don Cowan (2010), Mark Giesbrecht (2013), Ian Goldberg (2017), Ihab Ilyas (2014), Anna Lubiwi (2009), Kenneth Salem (2017), and Jeffrey Shallit (2008).

(adapted from the *Cheriton School of Computer Science News*, 30 October 2019)

Three members of **Centre for Ocular Research and Education (CORE)** research team were inducted as Fellows of the American Academy of Optometry (FAAO). **Alison Ng, Chau-Minh Phan,** and **Hendrik Walther** were honoured at the third World Congress of Optometry held in Orlando, Florida, from October 23-27, 2019. To obtain a fellowship from the Academy and maintain it, individuals are evaluated against high standards of professional competence. These standards include those who have accredited themselves and optometry by their contributions to optometry or vision science. Having the status of FAAO indicates that the optometrist, scientist, or other qualified person have met the rigorous qualifications for fellowship.

(adapted from the *Daily Bulletin*, 5 November 2019)

The **University of Waterloo** has achieved Gold certification in **Excellence Canada's Excellence, Innovation and Wellness (EIW)** program, which recognizes the University for its exceptional organizational and workplace practices. Waterloo was officially awarded Gold at the Excellence Canada Summit, which took place on November 5, 2019 in Toronto. While other Canadian universities have achieved department or unit-level certification, Waterloo is the first university to achieve certification across an entire post-secondary institution. The University's achievement is a result of the collective effort of many employees, including 20 Advisory Committee members, 50 Working Group members, and over 2,000 others who participated in focus groups, information sessions, department-level certifications, and surveys since the initiative began. The EIW program provides a framework for continuous improvement

that emphasizes innovation and healthy workplace practices, with a focus in five key areas: leadership, planning, customers (service), people, and processes. For more information, [visit the University's Excellence Canada website](#).

(adapted from the *Daily Bulletin*, 7 November 2019)

Professor **John McPhee** (systems design engineering) was presented with this year's **Engineering Medal: Engineering Excellence from Professional Engineers Ontario** (PEO) at its annual gala held earlier this month in Mississauga. McPhee was recognized for his innovative work into the modeling, simulation and design of dynamic physical systems. "What I'm most proud of, after my three children of course, is probably the developments we've done in graph-theoretical modelling and the fundamental ideas that we've discovered but also implemented in practical form that engineers in industry can easily use," he said. The impact of McPhee's research has been influential. He pioneered the use of linear graph theory and symbolic computing to model dynamic systems, providing a powerful systems-level design methodology that allows engineers to model and simulate the impact of individual components on overall performance of multi-domain systems (such as hybrid electric vehicles) within a single design package. McPhee, Canada Research Chair in System Dynamics and a Waterloo Engineering alumnus, said that the keys to his career success have been an interest in learning and discovering new ideas. McPhee offers two pieces of advice to students after they graduate and start building their careers. "First is to never stop learning," he said. "And the second is to make sure that you are able to enjoy working in a team. Because I think the best advances are made as a team as opposed to individuals."

(adapted from the *Engineering News*, 21 November 2019)

On November 20, 2019, the **Concept \$5K Finals** competition (previously known as the Velocity Fund Finals \$5K) was hosted in the Student Life Centre at the University of Waterloo and drew in an audience of over two hundred. Nine finalists took to the stage to pitch and compete for one of four Concept \$5K Grants. The competition is held three times a year, and students from any Faculty who want to build an early-stage startup can enter. The winners were:

- **CodeGEM:** CodeGEM is developing a feedback management system to quantify code improvements and promote better feedback. CodeGEM has had 20+ users install their system and will use the \$5,000 to continue market validation. (Team members: **Stephanie Mills**, **Ian Kemp**, and **Kaylyn Lau**, all from management engineering)
- **Flowy:** Flowy is building AI-powered digital transformation tools to commoditize frictionless automation. They currently have two demos in the pipeline and a letter of intent. Flowy will use the \$5,000 to refine their software and implement their first pilot in 2020. (Team members: **Neil Liu**, computer science, **Kevin Cheng**, mathematics, and **David Zhao**, accounting and financial management)
- **Ribbit:** Ribbit aims to create the world's first fully autonomous commercial airline service. Ribbit will use the \$5,000 to validate its software on an actual flight marker, and in the future plan to buy a recreational plane to retrofit. (Team members: **Jeremy Wang**, PhD of mechanical engineering, and **Carl Pigeon**, master of aerospace engineering, University of Toronto)

- **Scope:** Scope is building lenses with electronically tunable optical power. Scope will put the \$5,000 towards advanced prototyping materials and testing. In 2020 they aim to have a zooming system complete and to file their patents. (Team members: **Fernando Pena, Zhenle Cao, Ishan Mishra, Alisha Bhanji, and Holden Beggs**, all from nanotechnology engineering)

(adapted from the *Concept News*, 21 November 2019)

This fall, 253 University of Waterloo student-athletes were honoured for their academic achievements, each receiving the **Academic All-Canadians by Fairfax Awards**. The sum of these achievements is the best in the University's history and tops Ontario says Roly Webster, director of athletics and recreation. Amongst the recipients is varsity runner and fifth-year biochemistry student **Stephanie Ryall**, earning an average of 97.8 per cent in fourth year. Ryall trains daily, running about 100 kilometres a week, including a 20-kilometre run on Sundays. Following Ryall's graduation in spring 2020, the young athlete hopes to pursue an MD-PhD program. **MacKenzie** and **Kennedy Strong**, twin brothers, were also honoured with Fairfax awards. MacKenzie's average was 97.5 per cent, while Kennedy checked in at 98.83 per cent. Both are in their second-year of chemical engineering and remain active varsity baseball players, MacKenzie, a centre fielder, and Kennedy, a pitcher. The twins considered an education south of the border, but were both influenced to stay in Canada because of Waterloo's strong reputation. Overall, 80 per cent of Warriors have averages above 70 per cent, making Waterloo athletes all-stars, all around.

(adapted from the *Waterloo Warriors News*, 27 November 2019)

On November 8-9, 2019, **Jeremy Wang, Sunny Li, and Seldi Shembitraku**, a team of 5A Mathematics Business and Accounting BBA/BMath double degree students, participated in the **McGill International Portfolio Challenge (MIPC)** in Montreal. The third edition of the MIPC case competition was focused on sustainability issues. Even though our team did not make it to the list of five finalists, the team should be proud to be among the 25 semi-finalists. Semi-finalists were chosen from roughly 90 team applications submitted from the best universities throughout the world, and competition was intense. This was the first time the University of Waterloo participated in MIPC and the experience should be useful for future participants.

(adapted from the *Mathematics Business and Accounting News*, 13 November 2019)

A management engineering Capstone Design project that explored the need for pay-and-display parking machines in Toronto took top prize in an international competition. **Milan Preet Kaur**, a recent management engineering graduate, presented her team's Capstone project at the 2019 **Institute for Operations Research and Management Sciences (INFORMS) Undergraduate Operations Research Prize Competition**, which took place at the organization's annual meeting in Seattle. Team members used optimization models to re-evaluate the need for pay-and-display machines throughout Toronto after a drastic increase in mobile payments since the city's parking authority introduced a mobile-pay app in 2016. The team's solution involved developing a data analysis tool that consolidates multiple large-scale datasets on historical parking transactions and a mathematical optimization methodology that finds the optimal number and locations of parking payment options while minimizing operational and maintenance costs. Waterloo's project was one of six to be presented at the INFORMS annual meeting. The other five were

from the U.S. (University of Michigan, Northwestern University and University of California at Berkeley), Germany (Karlsruhe Institute of Technology) and Turkey (TOBB University of Economics and Technology).

(adapted from the *Daily Bulletin*, 9 December 2019)

Professor **Blair Feltmate** has been named to the Ontario government's **Advisory Panel on Climate Change**. The Honorable Jeff Yurek, minister of the environment, conservation and parks, made the announcement on November 28. The advisory panel on climate change, which includes Paul Kovacs, founder of the Institute for Catastrophic Loss Reduction at Western University as the chair and Lynette Mader, manager of provincial operations for Ontario for Ducks Unlimited Canada, as the vice-chair, consists of experts on climate change resiliency who have experience in a variety of sectors, including the not-for-profit, agriculture and insurance sectors. Professor Feltmate is the head of the Intact Centre on Climate Change Adaptation at Waterloo. The centre focuses on cost-effective ways to help minimize risks posed by extreme weather. Feltmate also chairs the development of two flood adaptation standards for the Canadian Standards Association and is the chair of the Government of Canada Expert Panel on Climate Adaptation and Resilience Results.

(adapted from the *Daily Bulletin*, 12 December 2019)

The **University of Waterloo** has been named one of Waterloo Area's Top Employers. This year's list of Waterloo Area's Top Employers showcases the organizations that lead their industries in creating forward-thinking workplaces and progressive HR policies. The [University was cited for](#) its broad charitable focus and volunteer opportunities, the work of its Healthy Workplace Committee, and its support of its retirees through pensions, health benefits, and retirement assistance programs. Now in its thirteenth year, Waterloo Area's Top Employers recognizes employers in the Kitchener-Waterloo and Guelph area that lead their industries in offering exceptional places to work. Employers were evaluated by the editors at Canada's Top 100 Employers using the same criteria as the national competition: physical workplace; work atmosphere and social; health, financial and family benefits; vacation and time off; employee communications; performance management; training and skills development; and community involvement.

(adapted from the *Daily Bulletin*, 13 December 2019)

On December 28, Her Excellency the Right Honourable **Julie Payette**, governor general of Canada announced 120 new appointments to the Order of Canada. The Order of Canada is one of the highest honours in Canada. It recognizes those individuals whose service shapes our society; whose innovations ignite our imaginations and whose compassion unites our communities. The following Waterloo faculty members and alumni were appointed for outstanding contributions in their respective fields and for enriching the lives of others.

Companion of the Order of Canada

Donna Strickland is a professor in the Department of Physics and Astronomy. She was awarded the 2018 Nobel Prize in Physics for her invention of chirped pulse amplification. It has several applications, including the cutting of a patient's cornea during laser eye surgery. Professor Strickland is being recognized for her work in high-intensity laser physics.

Members of the Order of Canada

Anne Dagg has had a distinguished career in the field of animal biology and has been a tireless advocate for gender equality in academia. She pioneered the study of animal behaviour in the wild of Africa and is credited with being the first person to study wild giraffes. Dagg worked as a part-time lecturer at Waterloo Lutheran University in anatomy and physiology from 1962 to 1965, and then as an anatomy demonstrator at the University of Waterloo in 1966. In 1967, she received her PhD from the University of Waterloo.

Professor Emeritus **Stuart McGill** was a professor in Waterloo's Department of Kinesiology for 32 years. His laboratory and experimental research clinic investigated issues related to the causal mechanisms of back pain, how to rehabilitate those with back-pain and enhance injury resilience and performance. He is the Chief Scientific Officer for BackFitPro Inc., a resource centre with evidence-based information to help prevent and rehabilitate back pain.

Paul Born (BA, 1986) is co-founder and co-CEO of the Tamarack Institute, a non-profit organization that develops and supports collaborative strategies that engage citizens and institutions in solving major community issues. Based at Conrad Grebel University College, the Tamarack Institute conducts training and coaching sessions for communities globally on poverty reduction, creating better communities, tackling health problems, or improving emergency management.

Eric D. Friesen (BA, English, 1967, Conrad Grebel University College) is recognized for contributing to the public appreciation of classical music as a radio broadcaster, writer and speaker.

Cathy Levy (BA, Dance Honours, 1994) is recognized for her contributions to the performing arts as a producer and dance advocate.

Officers of the Order of Canada

John J. Clague (Honorary DSc, 2017) is recognized for his national contributions to environmental earth sciences and for his impact on the study of natural hazards, such as earthquakes, tsunamis, landslides and floods.

Debra Pepler (PhD, Psychology, 1979) is recognized for her innovative, community-based research on social issues involving children and youth, which has changed the way psychologists study bullying.

(adapted from the *Daily Bulletin*, 8 January and 17 January 2020)

On January 15, 2020, Graduate Studies and Postdoctoral Affairs hosted its second annual **GRADflix Showcase**, a red-carpet event featuring the 23 best one-minute videos made by graduate students to describe their research. After a short deliberation, a judging panel comprising Ryan Antooa (Marketing and Strategic Initiatives), Clare Bermingham (Writing and Communication Centre), Gina Hickman (Human Rights, Equity and Inclusion Office), Camelia Nunez (Concept, imagined by Velocity) and Chris McIntyre (Waterloo Artificial Intelligence Institute) decided which four videos were most deserving of the top prizes. The audience decided the People's Choice Award winner. All of this year's GRADflix videos can now be [viewed online](#).

The winners are:

- 1st place - \$750 prize: **Sadaf Faisal** (School of Pharmacy) for her video [Use of smart technology for medication management](#)
- 2nd place - \$500 prize: **Muhammad Saad** (Electrical & Computer Engineering) for his video [Price prediction with machine learning](#)
- 3rd place - \$250 prize: **Michelle Anagnostou** (Geography & Environmental Management) for her video [Crime convergence and the illegal wildlife trade](#)
- 4th place and People's Choice - \$500 combined: **Megan Schmidt** (Geography & Environmental Management), for her video [#GenerationRestoration: Peatlands and greenhouse gases](#)

(adapted from the *Daily Bulletin*, 17 January 2020)

University of Waterloo
BOARD OF GOVERNORS
Report of the President
February 4, 2020

FOR APPROVAL

1. Sabbatical and Administrative Leaves

The University of Waterloo Policy 3 – Sabbatical and Other Leaves for Faculty Members [excerpts below, full text available at: <http://uwaterloo.ca/secretariat-general-counsel/policies-procedures-guidelines/policy-3>] sets out the purpose of leaves for faculty members as well as the requirements/responsibilities of faculty who are granted such leave.

The granting of a leave . . . depends on the University's assessment of the value of such leave to the institution as well as to the individual, and on whether teaching and other responsibilities of the applicant can be adequately provided for in her/his absence. A faculty member who is granted a sabbatical or other leave is expected to return to duties in the University for at least one year and upon return will be expected to submit a brief report to the Department Chair regarding scholarly activities while on leave.

The purpose of a sabbatical leave is to contribute to professional development, enabling members to keep abreast of emerging developments in their particular fields and enhancing their effectiveness as teachers, researchers and scholars. Such leaves also help to prevent the development of closed or parochial environments by making it possible for faculty members to travel to differing locales where special research equipment may be available or specific discipline advances have been accomplished. Sabbaticals provide an opportunity for intellectual growth and enrichment as well as for scholarly renewal and reassessment.

. . . the granting of sabbatical leave is contingent upon the faculty member's department being able to make the necessary arrangements to accommodate such an absence, and also upon the financial resources of the University in any given year. Should problems arise in any of the above, it may be necessary to postpone individual requests until such time as all the conditions can be satisfied.

- **Sabbatical Leaves**

Cockayne, Daniel, Geography and Environmental Management, September 1, 2020 to February 28, 2021 at 100% salary

I will continue a research project on the relationship between sexuality and work. This will include visits to archives in Toronto, New York City, and Ithaca, and also involve writing a SSHRC Insight Grant in the area of economic geography to be submitted in October 2021. I will write two papers based on this research.

Cohen, Robin, Computer Science, January 1, 2021 to December 31, 2021 at 98.2% salary

Within the computer science subfield of artificial intelligence, I plan to do research on intelligent agents for improving online social networks and on trust modeling, with various collaborators including Moffatt (McGill University) and Bentahar (Concordia University).

Culham, Richard, Mechanical and Mechatronics Engineering, July 1, 2020 to December 31, 2020 at 100% salary

I will work to develop practical, e-based teaching resources to support online course content for MME 309: Introduction to Thermodynamics and Heat Transfer and MME 354: Thermodynamics 2. The teaching modules will provide graphical and analytical reinforcement of core content as it relates to practical examples encountered in engineering applications.

Dea, Shannon, Philosophy, September 1, 2020 to August 31, 2021 at 85% salary

I will write a scholarly monograph based on my current SSHRC funded project, Academic Freedom In a Non-Ideal World. In the book, I will develop a new model of academic freedom focused on 21st century challenges in the higher education sector, such as state and corporate interference, the increase in precarious academic work, and discrimination against minoritized scholars.

Feng, Ben, Statistics and Actuarial Science, May 1, 2020 to October 31, 2020 at 100% salary

My research focuses on: 1) Monte Carlo simulation design and analysis, especially in financial and actuarial applications such as the design, pricing and quantitative risk management of complex financial and insurance products; 2) predictive analytics methods in management science and operations research applications. For example, applying machine learning methods to automate and expedite decision making processes in large corporations. I will visit collaborators in the City University of Hong Kong, the University of Melbourne and Northwestern University to work on projects related to my NSERC Discovery Grants Program titled “Efficiently Reusing Monte Carlo Simulation Output in Repeated Experiments for Financial and Actuarial Applications”.

Giangregorio, Lora, Kinesiology, September 1, 2020 to August 31, 2021 at 93.3% salary

My research aims to enhance physical activity participation and reduce fracture risk in older adults. I plan on 1) writing a) manuscripts from SPOR/CIHR-funded multicentre feasibility trial of an exercise and nutrition intervention in older adults; next phase grant writing, b) monograph; 2) finalize guidelines a) Canada’s Physical Activity Guidelines, b) Osteoporosis Canada Guidelines; 3) projects a) launch CIHR-funded multicentre trial.

Gorbet, Rob, Knowledge Integration, September 1, 2020 to December 31, 2021 at 100% salary

I intend to focus on the research, design and production of several new collaborative interactive sculptural installations with the SSHRC-funded Living Architecture Systems Group, in addition to developing a new independent body of technology-mediated artwork. The latter will be done via a series of workshops with Grade 11 and 12 students, including them in the creative and problem-solving process, and I will study the impact of these experiences on the students.

Hall, Peter, Public Health and Health Systems, September 1, 2020 to August 31, 2021 at 98.9% salary

My research program uses social neuroscience methods to improve chronic disease prevention and detection, in clinical and population-level contexts. I will have an opportunity to complete two book projects, one involving clinical therapeutic and diagnostic applications of transcranial magnetic stimulation (TMS), and the other a monograph pertaining to the neuroscience of primary prevention. A primary focus of my leave will be the development of a research proposal to examine rTMS as a diagnostic tool in relation to diseases that involve cognitive dysfunction affecting the prefrontal cortex of the brain.

Joseph, Jamie, Pharmacy, May 1, 2020 to October 31, 2020 at 100% salary

I plan to obtain advanced training in multivariate analysis, GC/MS, and other metabolic assay critical to my research program. I am also planning on developing a new line of research in the lab to obtain a second CIHR grant. This new line of study will be transdisciplinary and will first involve Dr. Maxwell and I developing a mouse model of frailty. This model will then be used to test new treatment options for frailty.

Kuzniar, Alice, Germanic and Slavic Studies, July 1, 2020 to December 31, 2020 at 85% salary

I plan to make progress on Homeopathy and the Poetic Modernity of Annette von Droste-Hülshoff, awarded in May 2019, a SSHRC Insight Grant. I will use this funding to travel to archives and libraries in Germany and work with three collaborators in Germany on the project.

Sabbatical and Administrative Leaves – February 4, 2020

Niechwiej-Szwedo, Ewa, Kinesiology, September 1, 2020 to August 31, 2021 at 100% salary

My research focuses on discovering the fundamental mechanisms involved in the central nervous system control of eye and hand movements across the lifespan. I plan to pursue: 1) writing manuscripts to disseminate results from completed studies; 2) conduct new collaborative research at the Hospital for Sick Children in Toronto; 3) set up a new research program in my lab at UW to investigate the consequences of brain injury in aging individuals.

Rao, Praveen, Pharmacy, May 1, 2020 to April 30, 2021 at 100% salary

I plan to develop an international team of researchers and conduct research to understand the mechanisms of a brain disorder called as frontotemporal dementia, which has no approved therapies. The goal is to design small molecules and peptides as novel therapies. Research findings will be used to seek grants from national and international agencies, dissemination and knowledge translation.

Schulenberg, Jennifer, Sociology and Legal Studies, March 1, 2020 to August 31, 2020 at 100% salary

“Policing innovation: An investigation of targeted interventions and responses to youth crime” is a SSHRC-funded national study investigating the operation and impact of police youth specialization models. The results from surveys, interviews, and participant observation can position Canadian police services as international leaders with empirical evidence on what works, for whom, and under what circumstances.

Scott, Steffanie, Geography and Environmental Management, March 1, 2020 to August 31, 2020 at 85% salary

My sabbatical leave will be spent in Waterloo, with one trip to China, where I will be conducting fieldwork for my SSHRC-funded research on Chinese case studies connecting agroecology and the Sustainable Development Goals.

Simon, Leonardo, Chemical Engineering, September 1, 2020 to February 28, 2021 at 100% salary

I will work on research in the areas of polymer science and engineering, nanocomposites, sustainable materials and bioproducts for applications in automotive, packaging, 3d-printing and advanced manufacturing, as well as aspects of knowledge transfer and the role of university in innovation and entrepreneurship. I will further improve a graduate course named Nanocomposites. I will spend time on experimental and theoretical aspects of my research, supervision of graduate students, networking with research laboratories in Canada and abroad and research interactions with the industrial sector.

van Beek, Peter, Computer Science, September 1, 2021 to August 31, 2022 at 94.7% salary

I plan to continue my research on Bayesian networks, a widely used probabilistic graphical model with applications in knowledge discovery and prediction. The focus of my work will be on the machine learning of Bayesian networks from data.

Yeow, John, Systems Design Engineering, September 1, 2020 to August 31, 2021 at 85% salary

I will focus my sabbatical on building the world's first Fluence Field Modulated Computed Tomography and integrating flexible 2D Capacitive Micromachined Ultrasound Transducers into catheters, and endoscopes. I will also strengthen my collaborations by visiting research groups at National University of Singapore, the Chinese Academy of Sciences, National Taiwan University of Science and Technology, and City University of Hong Kong.

- **Due to an oversight, these sabbaticals were not communicated to the Board at the appropriate time; approval by the Board is being sought retroactively.**

Haines, Lacey, Optometry, January 1, 2020 to June 30, 2020 at 100% salary

I will generate manuscripts for publication relating to my PhD work on optical coherence tomography imaging for keratoconic cross-linking surgery, as well as my clinical work with specialty contact lenses. I

will advance our project on three dimensional augmented reality for educational optics with WOVS collaborator Dr. Natalie Hutchings and pursue collaborative relationship with Dr. Jason Marsack at University of Houston to investigate custom corrections for irregular corneas.

Hayes, Geoffrey, History, January 1, 2020 to December 31, 2020 at 91.9% salary

Current discussions about gendered violence, mental health and soldiers' dependents in the Canadian military have a long history. My research explores morale within the Canadian Army between 1939 and 1945. Facing a morale 'crisis' by 1942, army officials responded with suggestion boxes and films, later detailed surveys and social workers. But soldiers' letters and court martials reveal that many Canadian men had trouble reconciling their military and civilian lives.

- **Sabbatical Changes**

Douglas, Peter, Chemical Engineering, July 1, 2020 to June 30, 2022 at 100% salary changed to March 1, 2020 to February 28, 2022 at 100% salary

I plan to work with my graduate students and industrial partners catching up on research on modelling, control and optimisation of CCS (Carbon Capture and Storage) systems. I am currently co-supervising two PhD and two MASc students.

FOR INFORMATION

2. Administrative Appointments

Boutaba, Raouf, appointment as Director, School of Computer Science, Faculty of Mathematics, July 1, 2020 to June 30, 2024

Case, Lori, appointment as Associate Dean, Co-operative Education and Life Long Learning, Faculty of Mathematics, July 1, 2020 to June 30, 2023

Davison, Dan, appointment as Associate Dean, Undergraduate Studies, Faculty of Engineering, January 1, 2020 to December 31, 2022

Esselment, Anna, appointment as Associate Dean, Graduate Studies, Faculty of Arts, July 1, 2020 to June 30, 2023

Hoey, Jesse, appointment as Associate Dean, Innovation and Entrepreneurship, Faculty of Mathematics, January 1, 2020 to June 30, 2022

Moos, Markus, appointment as Director, School of Planning, Faculty of Environment, July 1, 2020 to June 30, 2024

Nilsen, Elizabeth, appointment as Interim Associate Dean, Graduate Studies, Faculty of Arts, January 1, 2020 to June 30, 2020

Staines, Richard, re-appointment as Associate Dean, Research, Faculty of Applied Health Sciences, July 1, 2020 to June 30, 2022

Feridun Hamdullahpur
President and Vice-Chancellor

University of Waterloo
BOARD OF GOVERNORS
Report of the Vice-President, Administration & Finance
4 February 2020

FOR APPROVAL

Incidental Fees:

Student Services Fee

It is recommended that the compulsory Student Services Fee, assessed and collected each term from all full-time and part-time undergraduate and graduate students, be changed effective Spring term (May) 2020.

Undergraduate Full-time

	Proposed 20/21 Fee Per Term (\$) *	19/20 Fee Per Term (\$) *	Increase (%)
Accessible Transportation	0.29	1.27	(77.2)
Wellness	53.37	44.56	19.8
Student Success Office	18.52	16.85	9.9
Writing Centre	2.35	2.13	10.3
Athletics & Recreational Services	101.68	96.06	5.9
Centre for Career Action	22.49	20.13	11.7
Student Buildings **	4.93	-	-
Total	203.63	181.00	12.5

Graduate Full-time

	Proposed 20/21 Fee Per Term (\$) *	19/20 Fee Per Term (\$) *	Increase (%)
Accessible Transportation	0.29	1.27	(77.2)
Wellness	53.37	44.39	20.2
Student Success Office	12.18	11.40	6.8
Writing Centre	12.60	11.47	9.9
Athletics & Recreational Services	57.25	54.44	5.2
Centre for Career Action	22.49	20.03	12.3
Student Buildings **	4.93	-	-
Total	163.11	143.00	14.1

* Part-time fee is 30% of the full-time fee

** New fee to support the salary and wages incurred by WUSA in providing services within the SLC building

Background:

- the fee is developed in accordance with the Student Services Protocol approved by the Board of Governors in April 1994
- the majority of the members on the Student Services Advisory Committee are students; the committee unanimously recommended the fee changes

WUSA Administered Fee

It is recommended that the WUSA Administered Fee, assessed and collected each term from all on-campus undergraduate students be increased from a total of \$63.46 to \$78.33 for full-time students effective Spring term (May) 2020. The fee for part-time students is 30% of the full-time fee or \$23.50.

Fee Description	Fee Type	Proposed 20/21 Fee Per Term (\$)	19/20 Fee Per Term (\$)	Increase (%)
Events	Optional	6.30	5.58	12.9
Community-Building Services	Optional	2.89	2.15	34.4
Clubs	Optional	3.23	2.51	28.7
Advocacy - University	Optional	4.26	3.40	25.3
Advocacy - Government	Optional	7.68	6.46	18.9
Corporations Act Compliance	Compulsory	24.05	20.16	19.3
Academic Support	Compulsory	5.71	3.26	75.2
Health & Safety	Compulsory	19.92	17.72	12.4
Student Life Centre Facilities	Compulsory	4.29	2.22	93.2
Total		78.33	63.46	23.4

Background:

- the fee is itemized on the fee bill as 5 optional fees and 4 compulsory fees
- the adjustments are based on optional fee service levels
- increases are to cover increased salary costs related to WUSA Staffing Structure reorganization, staff compensation increases, executive salary increases and to support Federal Advocacy work
- increases were approved at WUSA's Annual General Meeting on October 22, 2019 or at the Student Council meeting on November 3, 2019 in accordance with the Federation of Students/WUSA's by-laws and policies

Enterprise, Opportunity, and Innovation Endowment Fund Fee

It is recommended that a new Enterprise, Opportunity, and Innovation (EOI) Endowment Fund fee be established through a voluntary student contribution of \$5.00 per term to support an existing endowment fund. The fee will be assessed and collected each term to all full-time and part-time, on-campus undergraduate students effective Spring term (May) 2020.

Background:

- the fee was approved at WUSA's Student Council meeting on November 3, 2019
- initially, 75% of the contributions will be directed to endowment principal, and 25% of the contributions will be directed to the expendable account
- 100% of the contributions will be directed to endowment principal in the subsequent term once the principal balance reaches \$2.5 million
- the principal balance in the existing endowment is \$696,834.82 and was originally created in 2002 with funds received from the sale of Clarica shares the Federation held as part of the student supplementary health plan
- this endowment will assist with startup costs of student projects, student-led entrepreneurship and start-ups; facilitate attendance at conferences, professional or academic development opportunities; and fund costs of unique one-time projects that benefit students across all Waterloo campuses
- currently, the fee is HST exempt and contributions will be eligible for a charitable gift receipt

Undergraduate Student Capital Program Fee

It is recommended that a new compulsory Capital Program Fund fee be assessed and collected from all on-campus undergraduate students per term effective Spring Term (May) 2020. The fee for full-time students is \$15.00 and for part-time students is 30% of the full-time fee or \$4.50 per term.

Background:

- the fee was approved at WUSA's Annual General Meeting on October 22, 2019 in accordance with the Federation of Students/WUSA's by-laws and policies
- the fee will fund capital maintenance, deferred maintenance, renewal, capital improvement and future student space expansions in the Student Life Centre as well as other student common spaces across campus
- currently, the fee is HST exempt

Dennis Huber
Vice-President, Administration & Finance

**Housing and Residences
2020/21 Residence Fees**

Student Villages

(includes Village 1, Ron Eydt Village & Mackenzie King Village)

Student Villages (Two-term fee)	2019/20 \$	2020/21 \$	Increase %	Monthly \$
Dorm Style:				
Single	6,553	6,697	2.2	838
Interconnecting	6,255	6,392	2.2	799
Double	5,879	6,008	2.2	751
Triple	4,703	4,806	2.2	601
Quad	3,821	3,905	2.2	489
Suite-Style:				
Single room (4-bedroom suite style)	7,823	7,995	2.2	1000
Recommendation:	That the Student Villages 2020/21 room rates are approved effective Fall 2020 term			

UW Place

UW Place (Two-term fee)	2019/20 \$	2020/21 \$	Increase %	Monthly \$
Suite Style:				
Double Room (Beck Hall)	6,174	6,310	2.2	789
Triple Room (Beck Hall)	4,939	5,048	2.2	631
Quad Room (Beck Hall)	4,013	4,101	2.2	513
Single Room (2-bedroom suite style)	7,069	7,224	2.2	903
Single Room (3- or 4-bedroom suite style)	6,691	6,837	2.2	855
Hybrid Dorm Style:				
Claudette Millar Hall - Single Room	7,188	7,346	2.2	919
Claudette Millar Hall - Double Room	6,851	7,001	2.2	876
Claudette Millar Hall - Triple Room	5,481	5,602	2.2	701
Claudette Millar Hall - Quad Room	4,453	4,551	2.2	569
Recommendation:	That the UW Place 2020/21 room rates are approved effective Fall 2020 term			

Columbia Lake Village

Columbia Lake Village (Two-term fee)	2019/20 \$	2020/21 \$	Increase %	Monthly \$
Single room (4-bedroom townhouse)	6,250	6,386	2.2	799
Recommendation:	That the Columbia Lake Village 2020/21 room rate is approved effective Fall 2020 term			

Minota Hagey

Minota Hagey (One-term fee)	2019/20 \$	2020/21 \$	Increase %	Monthly \$
Single room	3,416	3,492	2.2	873
Recommendation:	That the Minota Hagey 2020/21 room rate is approved effective Fall 2020 term			

Columbia Lake Village*Single Grad Residence*

Columbia Lake Village (One-term fee)	2019/20 \$	2020/21 \$	Increase %	Monthly \$
Single room (2-bedroom townhouse)	3,123	3,192	2.2	798
Recommendation:	That the Columbia Lake Village 2020/21 room rate is approved effective Fall 2020 term			

Columbia Lake Village*Family Residence*

Columbia Lake Village (Townhouse style – Rent per Month)	2019/20 \$	2020/21 \$	Increase %	Monthly \$
2-bedroom	1,306	1,335	2.2	1335
Recommendation:	That the Columbia Lake Village 2020/21 rental rate applicable to full-time University of Waterloo students is approved effective September 1, 2020.			

University of Waterloo
Board of Governors
FINANCE & INVESTMENT COMMITTEE
Report to the Board of Governors
4 February 2020

This report is submitted following the committee's meeting of 16 January 2020, for inclusion in the consent agenda.

FOR INFORMATION

1. General Oversight

Operating Budget. The committee received an update from the Vice-President, Academic & Provost on performance against the 2019-20 operating budget to date, and preliminary planning for the 2020-21 operating budget.

Strategic Plan: Following the direction provided at the October 2019 meeting of the Board of Governors, the committee commenced discussions on ways for the University to implement the objective of the 2020-25 Strategic Plan to "...Establish a fund to provide commercialization internships for students, protect intellectual property and launch startup ventures". These discussions are expected to be ongoing in 2020.

Exposure to Energy Sector: Following the direction provided at the October 2019 meeting of the Board of Governors, the committee has begun an initial review of the university's equity exposure to the energy sector across all investment funds and all active investment managers. This review will continue into 2020.

/mg

James Schlegel
Chair

University of Waterloo
PENSION & BENEFITS COMMITTEE
Report to the Board of Governors
4 February 2020

This report is submitted following the committee's meetings of 15 November 2019, 13 December 2019 and 17 January 2020, and is recommended for inclusion in the consent agenda.

FOR INFORMATION

1. General Oversight

The committee receives regular reports from the consulting actuary on legislative and policy changes anticipated and in force that impact public sector pensions, as well as changes implemented by other public sector pension plans. The committee discusses implications for the University's pension plan and takes the information into account when making decisions on matters including plan design, funding and administration.

During the reporting period, this included: ongoing updates on the jointly-sponsored university pension plan; regular updates from the working group discussed the holistic benefits offerings; report on the utilization of the employee and family assistance program.

2. Indexation of Pension Benefit and Contribution Limits

The maximum pension benefits payable through the Registered Pension Plan (RPP) is governed by the *Income Tax Act*. Each year, the limit is adjusted based on the Average Industrial Wage (AIW) increase. With adjustment for the 2.203% increase in the AIW, the maximum annual pension per year of pensionable service that can be paid under the registered pension plan will be \$3,092.22 in 2020.

The plan text for the Payroll Pension Plan (PPP) states that the maximum benefit payable through the PPP is also adjusted each year by the AIW increase. In addition to the RPP and PPP benefit limits, both plans include caps (i.e. \$3,200 for RPP and \$3,400 for PPP) that are set at the discretion of the committee. The PPP cap was reached in 2019 and so no change has been made in the normal course of the committee's work.

3. Indexing of Health and Dental Plan Maxima and Retiree Life Insurance Coverage

The committee agreed to adjust the benefits plan maxima and caps effective 1 January 2020 based on one year of inflation. The incremental annual cost of the increase is estimated at \$31,000. Retiree life insurance coverage was increased to \$5,700 to adjust for inflation over the past year.

/mg

Peter Barr
Chair

University of Waterloo
BOARD OF GOVERNORS
Report to the Board
4 February 2020

STATUS OF UNDERGRADUATE & GRADUATE ACADEMIC PROGRAMMING

The Associate Vice-President, Academic and Associate Vice-President, Graduate Studies and Postdoctoral Affairs report annually to the Board of Governors and to the [Ontario Universities Council on Quality Assurance \(Quality Council\)](#) on the results of academic reviews of existing programs, new programs and major modifications. These processes are carried out under [Waterloo's Institutional Quality Assurance Process \(IQAP\)](#).

Program Reviews

The following are Final Assessment Reports received by Senate for the September 2018 – August 2019 reporting period:

- [Chemistry, Biochemistry, Chemical Physics \(BSc\)](#)
- [International Development \(BES, minor, option\) and Development Practice \(MDP\)](#)
- [Mennonite Studies \(minor\)](#)
- [Social Development Studies \(BA\)](#)
- [Statistics, Statistics for Health, Actuarial Science, Mathematical Finance \(BMath\)](#)
- [Applied Mathematics \(MMath, PhD\)](#)
- [Statistics \(MMath, PhD\), Actuarial Science \(MActSc, MMath, PhD\), Biostatistics \(MMath\), Statistics – Biostatistics \(PhD\), Quantitative Finance \(MQF\)](#)
- [Business Administration and Computer Science \(BBA/BCS\)](#)
- [Biology \(BSc, MSc, PhD\), Biochemistry \(BSc\), Biomedical Sciences \(BSc\), Environmental Science \(BSc\)](#)
- [Math Teaching \(BMath\)](#)
- [Environment and Business \(BES, MEB\), Sustainability Management \(MES\), Economic Development and Innovation \(MEDI\)](#)
- [Global Governance \(MA\)](#)
- [Applied Mathematics, Combinatorics and Optimization, Computational Mathematics, Pure Math \(BMath\)](#)
- [English Language Institute \(EFAS and BASE certificate programs\)](#)
- [Architecture \(BAS, MArch\)](#)
- [Classical Studies \(BA, minor\), Classics \(BA\), Greek \(minor\), Latin \(minor\)](#)

All approved Final Assessment Reports are published publicly on the Academic Program Reviews website: <https://uwaterloo.ca/academic-program-reviews/cyclical-program-reviews/final-assessment-reports>

The following are the Two-Year Progress Reports received by Senate for the September 2018 – August 2019 reporting period:

- [Computational Mathematics \(MMath\)](#)
- [Computer Science \(BCS, BMath \(CS\), MMath, PhD\)](#)
- [Knowledge Integration \(BKI\)](#)
- [Society, Technology and Values \(Option\)](#)
- [Pure Mathematics \(MMath, PhD\)](#)
- [Mennonite Studies \(Minor\)](#)

All approved Two-Year Progress Reports are published publicly on the Academic Program Reviews website: <https://uwaterloo.ca/academic-program-reviews/cyclical-program-reviews/two-year-progress-reports>

New Programs

The following are the New Program Proposals received by Senate for the September 2018 – August 2019 reporting period:

- Data Science (MMath) – approved by Quality Council March 2019
- Data Science and Artificial Intelligence (MDSAI) – approved by Quality Council March 2019
- Advanced Pharmacy Practice (MPharm) – approved by Quality Council August 2019

Major Modifications

The annual report of Major Modifications to existing undergraduate and graduate programs was submitted to the Quality Council in July 2019.

INSTITUTIONAL QUALITY ASSURANCE PROCESS AUDIT

The University of Waterloo's IQAP was scheduled for its first formal audit by the Ontario Quality Council in the 2017-2018 academic year. The Final Report on the auditors' findings was received on September 24, 2018, and there were nine recommendations; a number of the issues identified by the auditors had already been noted by the Quality Assurance Office prior to the audit. The auditors' report is posted on the [Academic Program Reviews website](#).

Since the audit in 2018, the Quality Assurance Office has been working to address all of the audit recommendations. A One-Year Follow-Up Response was submitted to the Quality Council in October 2019, summarizing the implementation of each of the recommendations.

Many of the systemic issues identified in the audit (focusing mostly on 2013-2015) were rectified with the establishment of the Quality Assurance Office in 2016. The one remaining substantial change to existing practice called for by the audit is an increased role of the Faculty Deans in Program Reviews and New Program Proposals. This change will help raise awareness of the importance of the IQAP and continuous improvement at a decanal level with the ultimate goal of this flowing through to programs engaging in the Quality Assurance process in each of the Faculties. Such changes were discussed with Dean's Council in October 2019; processes have been implemented and will be written into the IQAP accordingly.

There were a number of changes to the IQAP envisaged prior to the audit that, coupled with the auditors' feedback on the IQAP, have resulted in a decision to rewrite this guiding document, a process that is in progress. Revisions are intended to bring the IQAP into alignment with the [Quality Assurance Framework](#), as well as making it a leaner, more agile, and user-friendly document for the members of the Waterloo community and external readers. Once complete, the revised IQAP will be vetted by Senate and if approved be forwarded to the Quality Council for ratification.

GENERAL OBSERVATIONS

Since it was established in 2016, the Quality Assurance Office has led efforts to improve the efficiency and effectiveness of Waterloo's continuous improvement processes. The Office's efforts in the next while will be turned more towards fostering a culture of continuous improvement that focuses on maximizing the quality of academic programming. Current efforts are directed particularly at improving communication regarding the purpose and scope of the IQAP, increasing engagement with the campus community, and building consistency in our language and approval processes.

**University of Waterloo
BOARD OF GOVERNORS
Report of the University Registrar
4 February 2020**

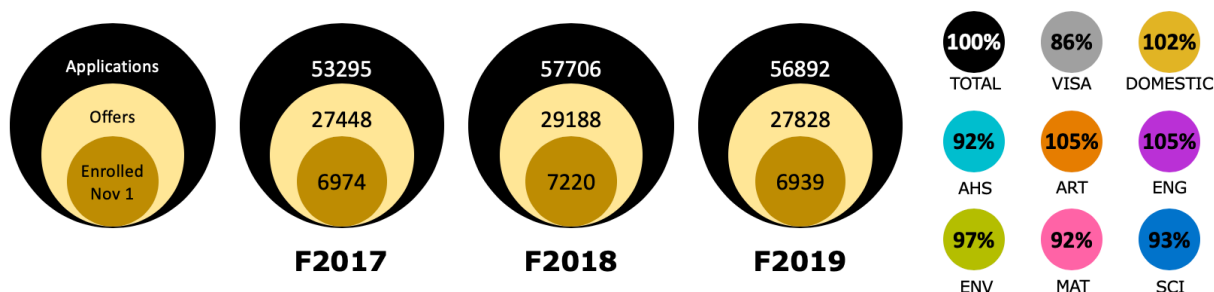
FOR INFORMATION

Undergraduate Recruitment and Admissions for Fall 2019

- a successful cycle – but very little tolerance for fluctuation of applicant pools in many programs
- competition for undergraduate students is intense and escalating
- overall entering average of first year full-time newly registered students was an impressive 89.7%
 - however, many programs admitted students at the 80% minimum to achieve targets
 - a record number of “alternate offers” were made to deflect students into specific programs
- diversity and quality of the applicant pool continue to bear close scrutiny

Achieving the University Target for New Admits

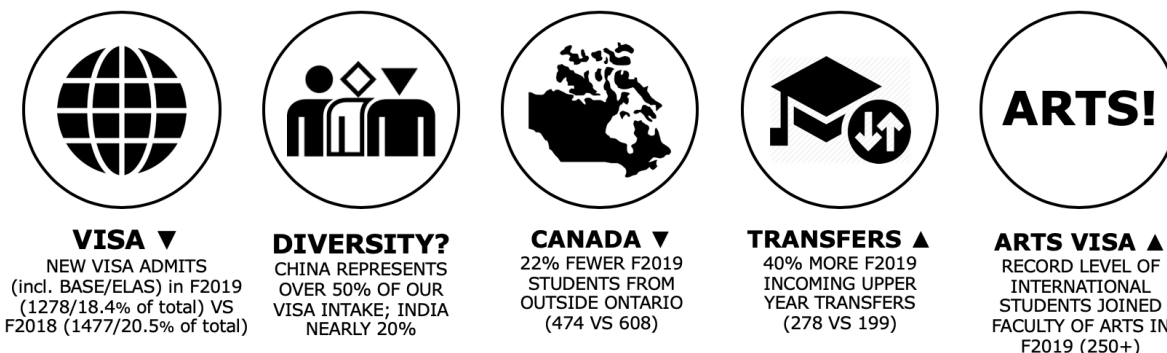
(new first-year, full-time undergraduates plus new BASE/ELAS language pathway students; excludes continuing students)



Admissions’ proactive role in identifying and addressing application fraud protects the integrity of our admissions processes and the quality of our incoming class.

Composition of the Incoming Class

Our first-year undergraduate class is mostly (~80%) students from Ontario. Our overall new student entering average of 89.7% is one of the most competitive among Canadian universities. The Faculty of Arts has seen tremendous growth in interest and enrollment from international students; Arts now has the second-largest number of incoming international students among all UWaterloo Faculties.



Recruitment and Confirmation

Recruitment activities continue to reflect a pursuit of diversity and quality for our incoming class. Development and growth of additional markets to reduce the impact and influence of any one source country among our international student base remains an ongoing priority. The residual impacts of Ontario's demographic decline, coupled with fierce competition for international students, mean that sustaining current levels of applications and admissions will require even greater effort and activity.

Recruitment and confirmation initiatives were approximately steady state compared to the F2018 cycle. The Registrar's Office continues to work synergistically with partners in all Faculties to grow the pool of qualified applicants, and to encourage students to confirm their Offer of Admission.



1200+
SCHOOL VISITS &
RECRUITMENT EVENTS



70,000+
LEADS CAPTURED
AND NURTURED
PRIOR TO THEIR
APPLICATION



KEY MARKETS:
CANADA, CHINA, INDIA,
USA, UK, HONG KONG,
MAURITIUS, TRINIDAD,
INDONESIA, AFRICA,
MIDDLE EAST



58,000+
CAMPUS VISITORS
@ TOURS AND
OPEN HOUSES



19 MILLION+
DIGITAL
RECRUITMENT
TOUCHPOINTS

Student Surveys

For Fall 2019, the Incoming Student Survey (ISS) and Non-Confirmed Applicant Study (NCA) were conducted as part of ongoing market research and analysis. This research informs the activities and messaging for undergraduate recruitment. The results suggest that undergraduate recruitment activities are successfully shaping both perceptions about UWaterloo and student decisions to attend.



REP #1
ACADEMIC REPUTATION
IS THE TOP REASON
STUDENTS ACCEPTED
THEIR OFFER (ISS)



CO-OP #2
CO-OP IS THE #2
REASON STUDENTS
ACCEPTED THEIR
OFFER (ISS)



TOP CONCERNS
ADJUSTING TO
WORKLOAD, FEELING
STRESSED, FINDING A
CO-OP JOB, NO TIME
FOR FUN (ISS/NCA)



TECH ▼
"TECH ONLY" IMAGE
STILL MATTERS BUT
NOW #5 REASON
(DOWN FROM #1)
AMONG DECLINERS
(NCA)



OUTREACH
OVER 60% OF
STUDENTS BECAME
INTERESTED IN
WATERLOO BEFORE
GRADE 12 (NCA/ISS)

Graduate Admissions Data – Winter 2020

Introduction

To provide Governors with information on the current enrollment levels for the University's graduate programs, the following enrollment data are provided as of Winter 2020. The current data (valid as of January 28, 2020) are compared to three year averages on this date to account for normal year-over-year fluctuations.

The University classifies its programs into three categories: Professional Master's programs, Research Master's programs and PhD programs. Professional programs tend to be course-based (i.e. not requiring a thesis or major research paper) and require fewer supervisory resources. The University also differentiates its incoming class based on immigration status – international or domestic – to be well-prepared to estimate the budgetary implications of the composition of graduate student enrollment.

Summary

The data suggest:

- Professional masters programs have increased enrollment in all Faculties which offer these programs and, in total, by 14% University wide;
- Growth in Professional Master's programs has been achieved in both domestic and international students;
- The University achieved a 3% growth in domestic, research master's students compared to the previous 3 years;
- The current enrollment among international, research master's students reflects a decrease of 3% from the previous 3 years;
- In total, the University's Master's programs have current enrollments that are 8% higher than the average of the values over the previous three years.
- The University currently has 2169 PhD students enrolled – 1,235 domestic – which reflects a 7% growth over the average of the previous three years.

Graduate Studies and Postdoctoral Affairs (GSPA) continues to work with Faculties and other campus partners to engage in strategic enrollment management – developing deep applicant pools, attracting and retaining very strong graduate students.

2020 Graduate Enrollment Data

	Professional Masters					
	Domestic		International		Total	
Faculty	Registered	% Change	Registered	% Change	Registered	% Change
Applied Health Sciences	398	9%	-	-100%	398	8%
Arts	392	8%	32	71%	424	11%
Engineering	375	12%	408	25%	783	18%
Environment	147	6%	17	42%	164	8%
Mathematics	273	27%	96	3%	369	20%
Science	-	-	-	-	-	-
University	1585	12%	553	22%	2138	14%

	Research Masters					
	Domestic		International		Total	
Faculty	Registered	% Change	Registered	% Change	Registered	% Change
Applied Health Sciences	137	-6%	10	-33%	147	-8%
Arts	236	22%	36	-15%	272	16%
Engineering	291	-7%	210	0%	501	-4%
Environment	159	-7%	62	8%	221	-3%
Mathematics	163	11%	170	9%	333	10%
Science	199	11%	100	-18%	299	-1%
University	1185	3%	588	-3%	1773	1%
Total Masters Professional + Research	2770	8%	1141	8%	3911	8%

	PhD					
	Domestic		International		Total	
Faculty	Registered	% Change	Registered	% Change	Registered	% Change
Applied Health Sciences	156	13%	31	29%	187	16%
Arts	274	8%	26	-28%	300	3%
Engineering	298	7%	448	-1%	746	2%
Environment	174	35%	46	1%	220	26%
Mathematics	164	1%	200	12%	364	6%
Science	169	8%	183	9%	352	9%
University	1235	10%	934	3%	2169	7%

Notes: All Registered data are from January 28, 2020; Change is based on current year compared to three previous years on this date.

PRESIDENT'S UPDATE TO THE BOARD OF GOVERNORS FEBRUARY 4, 2020

Dear Governors,

I am pleased to provide you with a summary of major achievements, initiatives and updates since our last meeting in October. A separate update providing a comparative dashboard on KPIs will also be presented for your information. I will be happy to discuss any items in further detail.

Achievements/Congratulations/Notable Events

- The University of Waterloo celebrates four people with strong links to Waterloo as they are among the newest appointees to the Order of Canada;
 - Professor Donna Strickland, Professor in the Faculty of Science,
 - Professor Stuart McGill, Professor in the Faculty of Applied Health Sciences,
 - Paul Born (BA '87), founder and co-Chief Executive Officer of the Tamarak Institute which is based at the Kindred Centre for Peace Advancement at Conrad Grebel University College,
 - Dr. Anne Innis Dagg (PhD '67), former professor, academic advisor and academic director of Waterloo's Independent Studies program
- Professor Rick Culham began his term as the interim Dean of Engineering on January 1, 2020. This appointment will run until June 30, 2020 at which time a new Dean of Engineering will begin their term.
- Adrien Côté was hired as Executive Director, Velocity, and began this role effective January 6, 2020.
- Jean Becker, Senior Director, Indigenous Initiatives began this inaugural role at Waterloo on January 13, 2020.
- Professor Kevin Hare began his term as the interim Dean of Mathematics for the period of January 21, 2020 to June 30, 2020. The search process for a new dean is underway with the appointment beginning on July 1, 2020.
- The University achieved Gold certification in the Excellence, Innovation and Wellness standards from Excellence Canada; the first university to do so; Waterloo was also named one of 2019 Canada's Healthy Workplace Month® Great Employers.
- A partnership with BlackBerry for a joint innovation lab with a focus on fast-tracking research and development to get products into the market. Working out of GEDI, BlackBerry will seek opportunities for students to work with top BlackBerry R&D and business leadership teams in research, workshops, and economic development sessions. The partnership will see senior representatives from BlackBerry's sales, product, R&D and leadership teams on campus interacting with groups like the Waterloo Centre for Automotive Research, students, and faculty.
- Rogers Communications announced a three-year, multimillion-dollar partnership agreement with Waterloo to advance 5G research in the Toronto-Waterloo tech corridor. Together, Rogers and Waterloo researchers will create the first 5G smart campus in central Canada and on 5G research in the areas of engineering, network design, applied mathematics and artificial intelligence. Rogers and the University will also build a 5G network on campus that will test network infrastructure, frequencies and applications in a real world Canadian environment. Establishing the first wave of research projects and construction of the smart campus will begin in early 2020.

- UBI Global, the Stockholm-based intelligence company known for high-quality intelligence, assessment and mapping of business incubation, released the top lists of business incubators and accelerators at the World Incubation Summit in November. Waterloo's Accelerator Centre was recognized as a World Top Five private business accelerator. Over 1500 accelerators and incubators located in more than 70 countries were included in the comprehensive study. The Accelerator Centre is Canada's only accelerator to place in the category. The ranking is based on demonstrated exceptional achievement in value for client startups, value for the local ecosystem, overall attractiveness as a program as a whole, and nurturing entrepreneurship and innovation.
- Toyota Motor Manufacturing Canada (TMMC) is partnering with the University to advance engineering education with a \$2.1 million investment to launch a unique undergraduate engineering innovation challenge and support a variety of student, research and outreach initiatives
- President Feridun Hamdullahpur and Associate Vice-President, Innovation Sanjeev Gill attended the 2020 World Economic Forum in Davos, Switzerland. The President spoke at the session *The Role of Global Universities in Promoting Sustainable Futures*.
- President Hamdullahpur will be receiving the Knight (Chevalier) order of the l'Ordre des Palmes Académiques ("Order of Academic Palms") on February 25 at the French Embassy in Ottawa. This is a national order bestowed by the French republic to distinguished Academics and figures in the world of culture and education.

Strategic Enrolment Management

Total headcount enrolment in fall 2019 was 40,906 and increased by 2.3% over fall 2018. Undergraduate enrolment increased 2.0% to 34,682 and graduate enrolment increased 3.9% to 6,224. Total undergraduate domestic and international headcount enrolment in fall 2019 was 1.5% and 4.9% higher than in fall 2018 respectively. Fall 2019 year-one new admits were 99% of target with Canadian fee-paying new admits at 102% of target and international new admits at 86% of target.

Strategic Mandate Agreement

Waterloo submitted to MCU on Dec 17th its initial draft of the SMA3 document one of the main required components of which was narrative on the 10 performance metrics.

Cooperative and Experiential Education

The co-op employment rate for 2019 finished at a new record-high for the University of 97.6%, ahead of the 2018 rate of 97.5%. 2019 represented a 3.8% increase in total work terms, with 22,292 co-op terms secured in 2019, up from 21,525 in 2018.

Human Rights, Equity and Inclusion (HREI)

Jean Becker started as our inaugural Senior Director of Indigenous Initiatives in January 2020.

Education and raising awareness is a key priority for HREI. To advance this work, HREI developed a new catalogue of training and workshops, which are available to all students, staff and faculty. We added multiple new areas of training to address gaps in knowledge and expressed need (Equity 101, Indigenous cultural trainings, anti-racism, and de-escalation) and developed an online catalogue and registration system.

Research Strategic Plan

An updated version of the Research Strategic Plan, a requirement of the Tri-Agency, is in its final stages of completion. Developed with extensive consultation with the university research community, including students, faculty and staff, the Research Strategic Plan highlights and prioritizes five key research strengths at Waterloo, as identified in the institutional plan published in fall 2019:

- Quantum science, nanotechnology, connectivity and telecommunications
- Water, energy and climate: sustainability, security, infrastructure
- Information technology and its impact, including intelligent systems, human–machine interfaces, cybersecurity, privacy and data science
- Robotics and advanced manufacturing
- Health technologies

Initiatives stemming from five high-level goals will guide the development of new initiatives in research at Waterloo to steward innovative research over the next five years. This plan is expected to be published in July 2020.

International Strategic Plan

With the approval of Waterloo's Strategic Plan in October 2019, a dedicated strategy for internationalization that dovetails into the institutional Strategic Plan is now in development. The internationalization strategy will be both reflective of Waterloo core strengths and aspirational in its intended outcomes.

University of Waterloo Economic Impact 2019

A 2019 study by Deloitte found that the University of Waterloo “is successfully contributing to innovation and entrepreneurship ... a critical issue for Canadian economic competitiveness.” Overall, Waterloo contributed almost \$3.2 billion to Canada's GDP in 2018-19.

The study also determined for the first time the net economic benefit of hiring co-op students for employers to be \$525 million per year. The impacts of Waterloo's entrepreneurship programs include the creation of over 7,500 jobs, over \$2.3 billion in revenue in the past decade, and an annual contribution of \$170 million to Canada's GDP.

Integrated Marketing and Communications Campaign to Support Economic Impact

The University is launching a multi-pronged campaign in 2020 to address key areas of differentiation articulated in the economic impact report. Targeting influence leaders, the campaign will centre on two key themes: the *Future of Talent* and the *Future of Business*. Similar to the focus and intensity of the campaign on HealthTech in 2019, this enhanced campaign will be carried out in two focused and connected phases. The goals are to:

- Assert Waterloo's leadership in creating economic impact for Canada through –
 - Co-operative education and experiential education (*Future of Talent* phase)
 - Entrepreneurial ecosystem from start-ups to scale-ups (*Future of Business* phase)
- Build awareness and support for Waterloo as the “go-to” global expert and best partner to help “scale WIL and experiential education” beyond Waterloo to the rest of Canada.
- Demonstrate Waterloo's unique and combined impact of co-op, IP policy/entrepreneurship together with academic excellence and research aligned with global challenges.

The University will host a *Waterloo Innovation Summit Speaker Series* in Ottawa on March 10, within the *Future of Talent* themes of economic impact of Waterloo co-op and scaling Waterloo WIL. In September, we will host the Waterloo Innovation Summit in Toronto, to explore what the *Future of Business* will look like with unprecedented technological progress and innovation underway.

Federal Government Developments

We are sharing the economic impacts of Waterloo and have already circulated the key points broadly with political and bureaucratic leaders. Our top three priorities for early 2020 include promoting the National Quantum Strategy developed by UWaterloo with Sherbrooke and UBC. We are also positioning Waterloo to be a strong partner for the Work Integrated Learning Innovation funding, and raising the profile of Waterloo Environment and Sustainability expertise.

Hosted by Waterloo's DM Champion Paul Thompson, the President and senior colleagues will lead a discussion on January 31st with six deputy ministers on the highlights of the strategic plan and economic impact.

Provincial Government Developments

Through our ongoing advocacy efforts with key ministers and MPPs we know there is convergence across several provincial priorities and strengths of Waterloo: a highly and well-skilled workforce, augmenting opportunities to commercialize research and technologies, as well as innovation in all aspects of health care.

Student Communications Strategy

University Relations is leading a pan-University initiative to develop a strategically integrated framework to guide our communication with students. Insights from this work as well as the framework for communication will be available later in 2020.

Working with outside strategic design agency, Bruce Mau Design, the project seeks to:

- improve the current undergraduate and graduate student experience by creating consistency across university-wide, student-focussed communications;
- establish more consistent journey across Waterloo's prospective student, current student and alumni communications;
- build a sense of belonging and pride in order to improve student satisfaction and loyalty with Waterloo; and,
- create and implement a consistent set of key performance indicators for student communication outcomes.

President's Community Impact Awards

The Community Impact award winners were Alison Boyd, Senior Director, Alumni Relations, for her volunteer work in the community, and Engineering student Mariko Shimoda for her efforts to connect University of Waterloo students to their community through organizations such as THEMUSEUM, and The Food Bank of Waterloo Region.

The University Champions awards went to the Waterloo Ravens Minor Hockey Association, for their nine-year partnership with University of Waterloo Warrior hockey teams, and the

Waterloo Public Library (John M. Harper branch) and Stork Family YMCA for their partnership with our Recreation and Leisure Studies' experiential learning program.

The university will host a series of community lectures on Waterloo thought leadership under the banner "Beyond the Headlines". Areas covered will include *Who is Defending Democracy* and *Is Data Privacy an Illusion*.

Capital Campaign - Winning in 2020

What does winning in 2020 mean?

5 "Waterloo Gold" Themes (titles still being refined)

1. Talent Development (student experience, campus environment, diversity)
2. Business Powerhouse
3. Research and Innovation for Global Challenges and Opportunities
4. Health
5. Sustainability

President's Focus

To mobilize key elements of the strategic plan through philanthropic investments from the most likely generous donors. Connect projects with donors and donors with projects.

1. Projects:

- A. Science Centre for Innovation (Theme 2)
- B. Ice Rink and running track (Theme 1)
- C. Exceptional Performance (AI, Cybersecurity, Quantum) (Theme 3)
- D. Women in STEM initiative (Theme 1)
- E. Digital business in Stratford (Theme 2)
- F. Health Sciences Campus (Theme 4)
- G. Velocity (Theme 2)
- H. School of Accounting and Finance (Theme 2)
- I. Exceptional Talent in Disciplinary Strengths (Theme 3)
- J. Centre for Math and Medicine (Theme 4)
- K. Accelerating Leadership in Entrepreneurship and Scaling (Theme 2)
- L. Health Graduate School (Theme 4)
- M. Climate resilience (Theme 5)
- N. Lifelong Learning (Theme 1)
- O. Global Health Initiative (Theme 4)

2. Prospective Donors:

- A. Top 30
- B. HNW, CEOs
- C. Volunteers

Volunteer Ecosystem

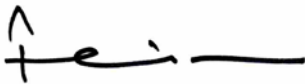
Having looked at other campaigns across the continent and testing a couple of possible chairs, we created an ecosystem approach, not using a single Campaign Chair as the focus but leveraging Honorary Chairs, Executive Champions and Change Makers to open doors, advocate and expand our networks.

- Fundraising: Annual performance, 7, 8, 9-figure focus, HNW, CEOs, foundations, build pipeline

Quarterly plan

- Q1: set up for success, volunteer recruitment and asks; early campaign asks; planned activities (i.e. San Francisco, Ottawa)
- Q2: Company CEO meetings, early intros by volunteers, foundation meetings, gift closures
- Q3: Focus on specific projects; HNW meetings; expanded volunteer intros; further gift closures; first volunteer conference
- Q4: Gift closures, announcements, plan for 2021/2022

This was a brief snapshot of the latest events and news summarized for your information. Happy to answer any questions that you may have.



Feridun Hamdullahpur
President and Vice-Chancellor

STRATEGIC PLAN 2020-2025

General Implementation Framework and Signature Commitments

January 2020



Implementation and accountability plan

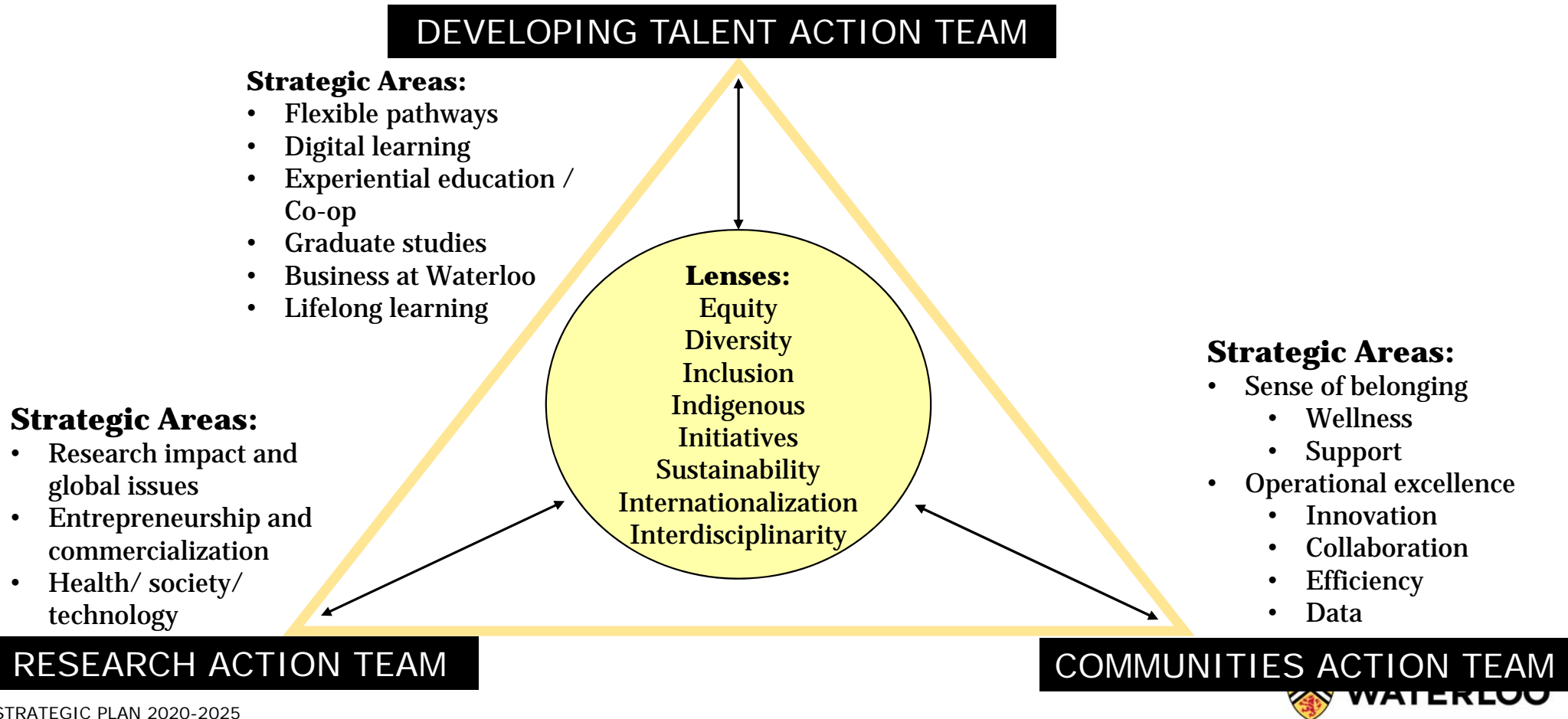
Oversight and structure

- Led by senior leadership
- Three Action Teams with connections across
- Strategic task forces to advise on interdisciplinarity, health initiative and innovation
- Accountability plan with initiatives, outcomes and measures

Principles

- Evidence-based
- Participatory
- Efficient
- Collaborative
- Focused on outcomes

Strategic Plan 2020-2025 Implementation Map



Signature Commitments



Expanded options in experiential learning

Empower students with more diverse learning experiences & flexible pathways

Global powerhouse for commercializing research and business growth

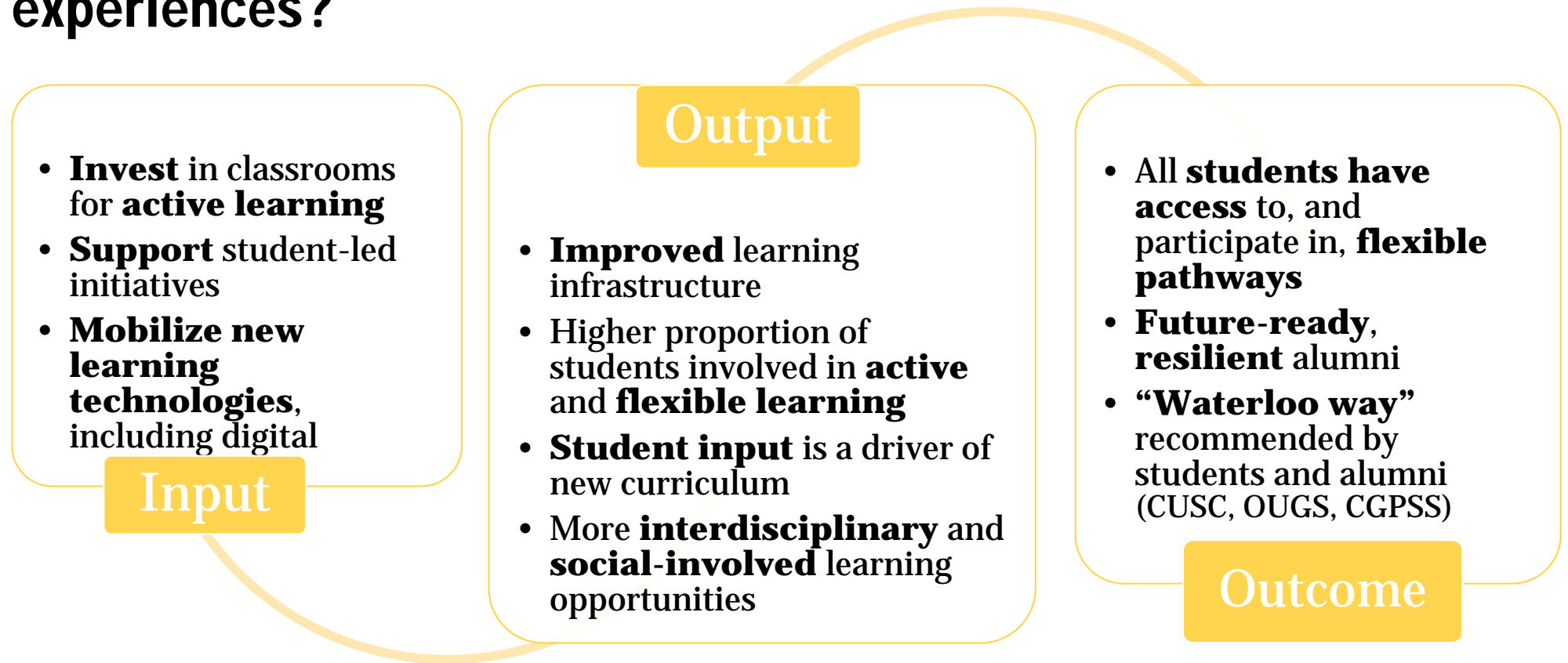
Dynamic framework for learning-integrated work

Align research with important global challenges

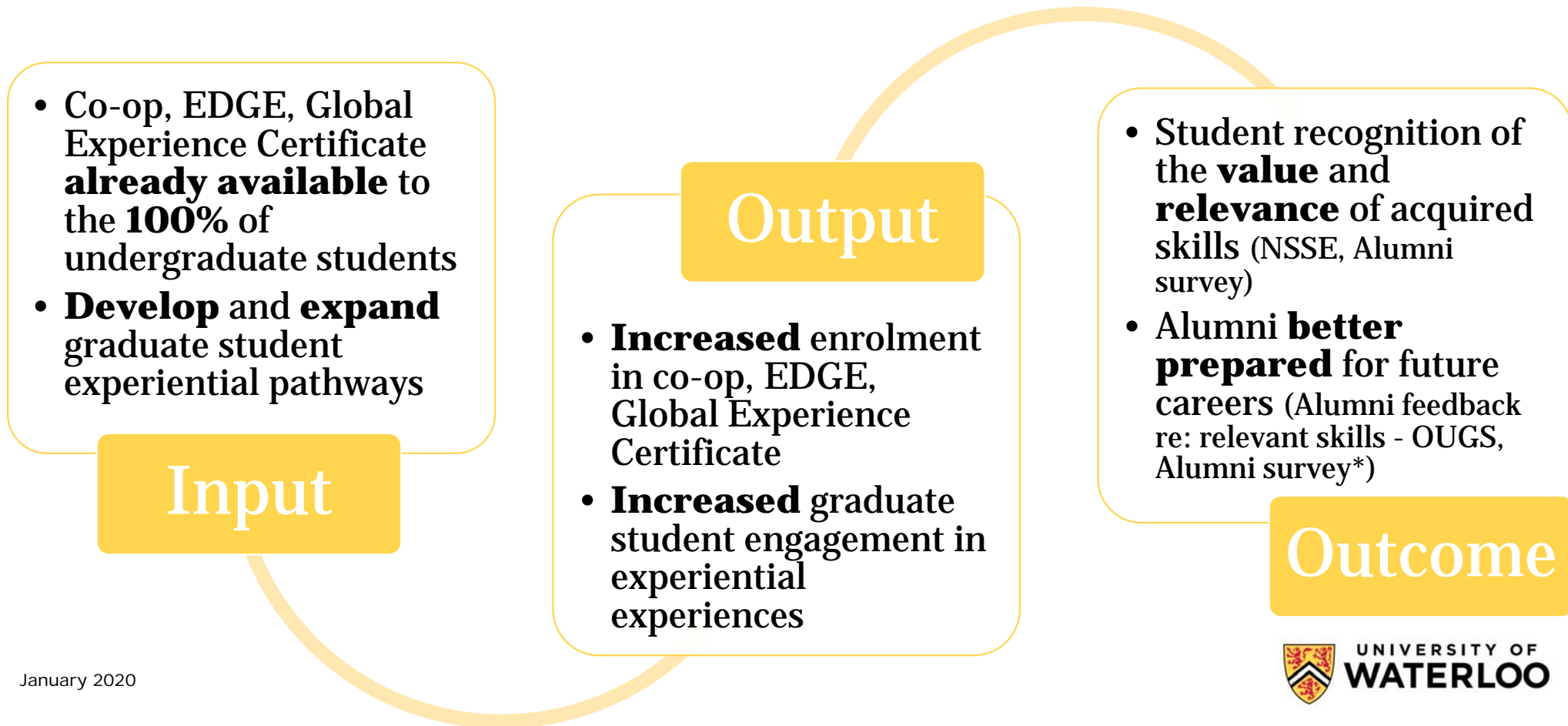
Lead at the interface of society, health and technology

Sustainable, supportive environment for living, learning, working and discovery

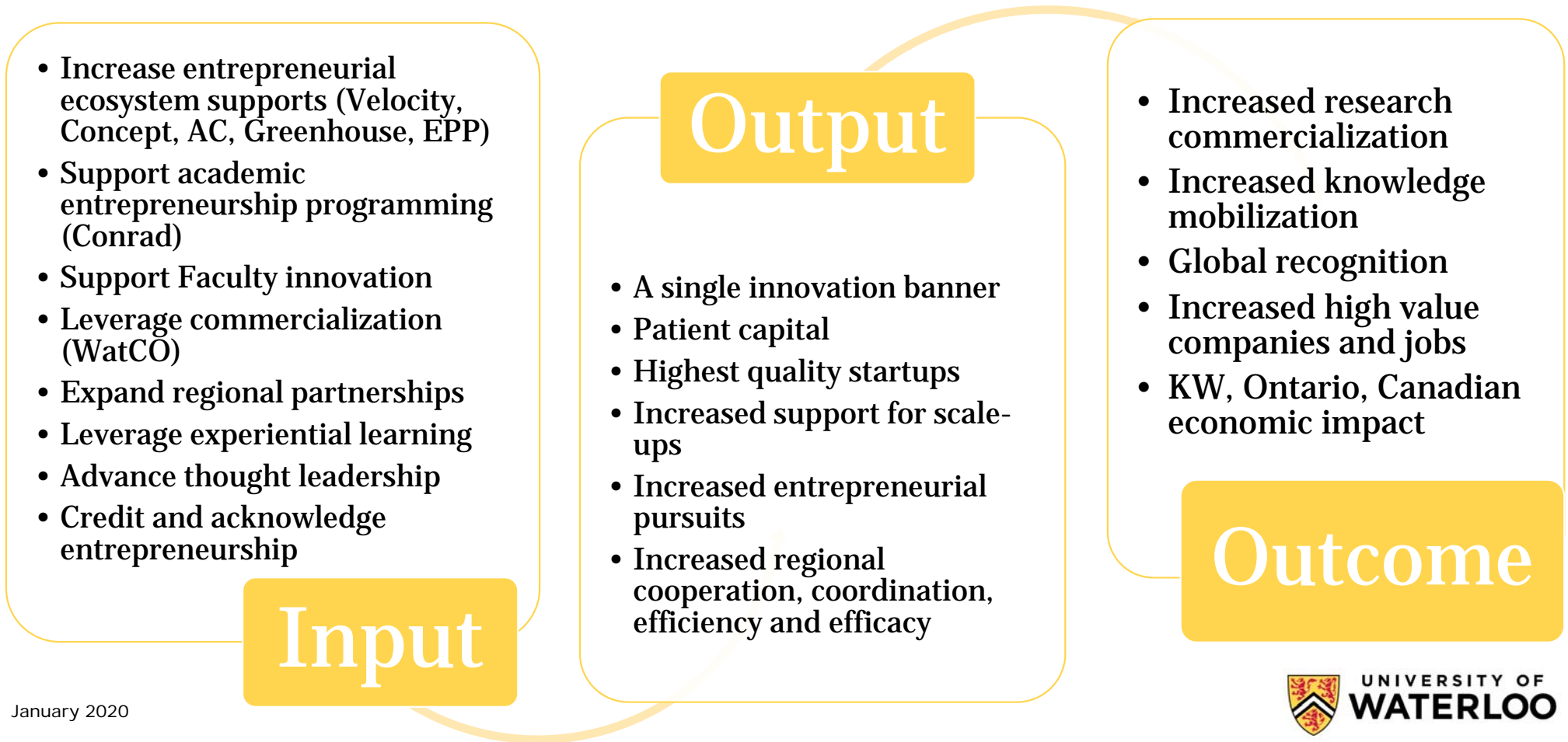
How do we empower students with more diverse learning experiences?



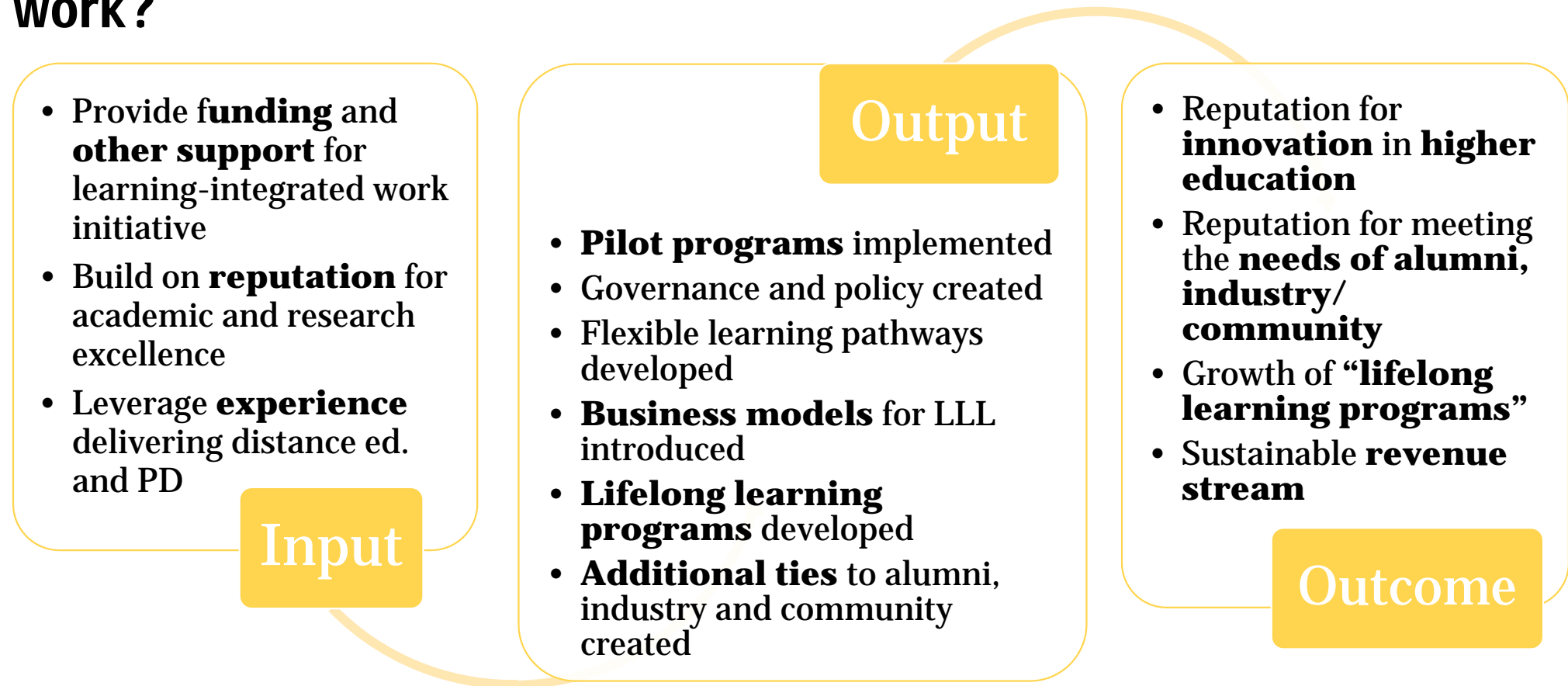
How do we expand options in experiential learning?



How do we become a global powerhouse in commercialization?

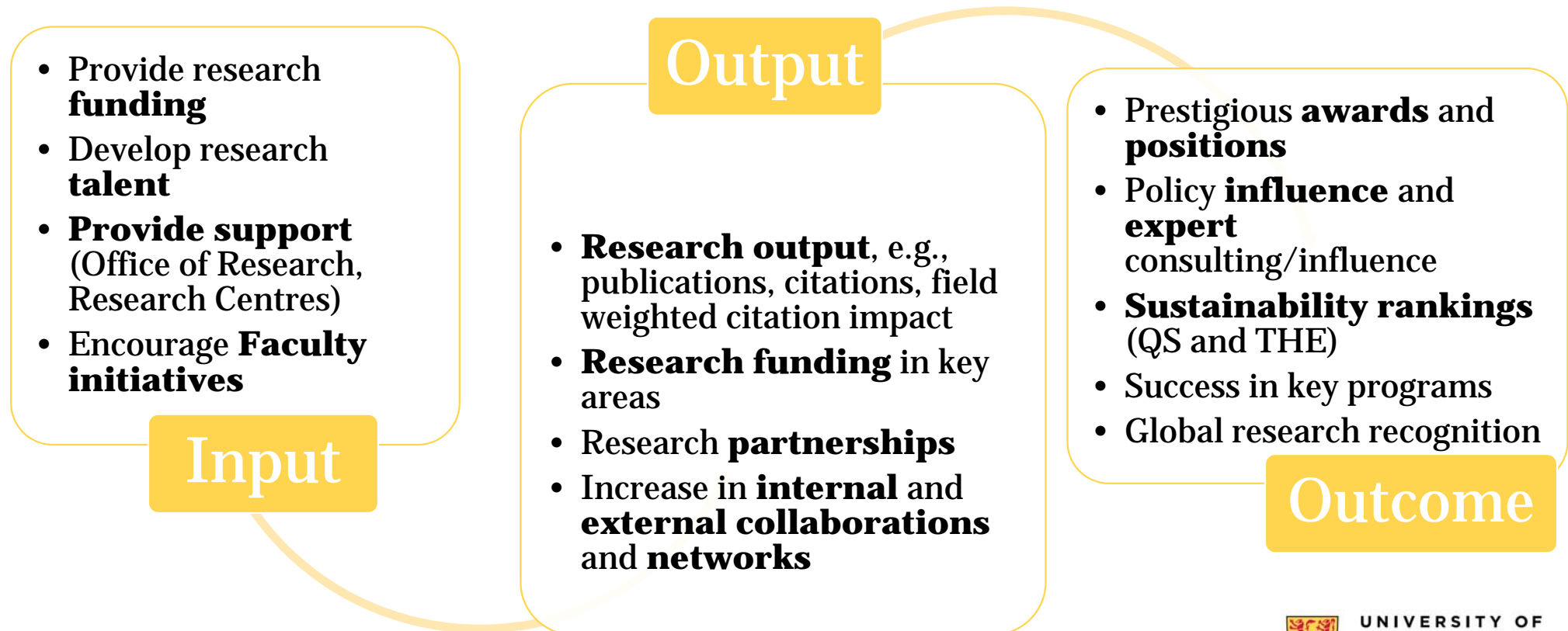


How do we deliver a dynamic framework for learning-integrated work?



January 2020

How do we align our research strengths with global challenges?



January 2020

How do we achieve a diverse, supportive and sustainable environment ?

- Implement:
 - student and employee **mental health initiatives**,
 - **sustainability strategy**,
 - **equity and Indigenous initiatives**,
 - **Okanagan Charter recommendations and wellness initiatives**
- Complete **CoSMH recommendations**
- Improve **operational efficiency and employee engagement**

Input / Output

Outcomes

- Improved **student satisfaction and engagement** (NSSE, CUSC, CGPSS)
- Improved **employee engagement**
- Goals of the **sustainability strategy** met
- Gold in STARS **sustainable campus** ratings
- Improved **sense of belonging and satisfaction** of equity seeking groups



SLRP January 2019

UNIVERSITY OF WATERLOO
2019/20 Operating Expense Budget

Board of Governors
February 4, 2020

	Estimated 2019/20		Estimated 2019/20		
	As at April 2, 2019	Increase / (Decrease)	As at February 4, 2020	% of Income	
	\$000	\$000	\$000		
EXPENSES					
Salary and Wages					
Current salaries and wages	449,818	4,980	454,798	57.4	Note 1
Benefits					
Current benefits	102,822	-	102,822	13.0	
Faculty professional expense reimbursement plan	2,688	-	2,688	0.3	
Parental leave supplement	2,000	-	2,000	0.3	
Total benefits	107,510	-	107,510	13.6	
Total salaries and benefits	557,328	4,980	562,308	70.9	
Student Support					
Graduate student support	8,831	-	8,831	1.1	
Graduate incentive fund	450	-	450	0.1	
Support for international graduate students	9,687	256	9,943	1.3	
Senate matching scholarships	160	-	160	0.0	
Tuition set aside	23,846	-	23,846	3.0	
Undergraduate scholarships/bursaries	11,580	-	11,580	1.5	
Total student support	54,554	256	54,810	6.9	
Other					
Accessibility fund for students with disabilities	1,051	-	1,051	0.1	
Insurance	2,000	-	2,000	0.3	
Library acquisitions	8,519	-	8,519	1.1	
Municipal taxes	2,800	-	2,800	0.4	
University Fund	37,115	(1,140)	35,975	4.5	Note 2
Utilities	22,825	-	22,825	2.9	
Total other	74,310	(1,140)	73,170	9.2	
Supplies and expenses - before budget reduction	125,996	(4,010)	121,986	15.4	Note 3
Academic Support (ASU) Ongoing Budget reduction	(4,200)	421	(3,779)	(0.5)	
Supplies and Expenses - after budget reduction	121,796	(3,589)	118,207	14.9	
Gross expenses	807,988	507	808,495	102.0	
Cost recoveries and chargeouts	(11,915)	195	(11,720)	(1.5)	
Additional ongoing contribution from Ancillary Enterprises	(1,000)	-	(1,000)	(0.1)	
Cost recoveries - after additional contribution	(12,915)	195	(12,720)	(1.6)	
Estimated net expenses	795,073	702	795,775	100.4	
Estimated income	790,512		792,356		
Excess income over expenses	(4,561)		(3,419)		
One-time contribution from Faculties	3,656		3,656		
Surplus (Unfunded deficit)	(905)		237		

Note 1: The net increase in salaries and wages is a result of reallocations of budget from supplies and expenses to salaries and wages.

Note 2: The net decrease in the University Fund is a result of reallocation of budget from the University Fund to supplies and expenses.

Note 3: The net decrease in supplies and expenses is a result of reallocations of budget between different expense categories and other miscellaneous adjustments.

UNIVERSITY OF WATERLOO
2019/20 Operating Income Budget

Board of Governors
February 4, 2020

	Estimated 2019/20		Estimated 2019/20	
	As at April 2, 2019	Increase / (Decrease)	As at February 4, 2020	
	\$000	\$000	\$000	
INCOME				
Operating Grant				
Enrolment	224,740	-	224,740	
Student Success and Differentiation	20,576	-	20,576	
Special Purpose	5,067	1	5,068	
International Student Recovery	(5,754)	(49)	(5,803)	
Graduate Expansion	4,936	(912)	4,024	Note 1
Transfers to AFIW	(13,910)	(68)	(13,978)	
	<u>235,655</u>	<u>(1,028)</u>	<u>234,627</u>	
Tuition				
Domestic - Undergraduate	228,697	2,543	231,240	Note 2
Domestic - Graduate	28,386	(36)	28,350	
International - Undergraduate	207,417	(1,926)	205,491	Note 3
International - Graduate	43,351	1,597	44,948	Note 4
Transfers to AFIW	(19,228)	(207)	(19,435)	
	<u>488,623</u>	<u>1,971</u>	<u>490,594</u>	
Other Revenue				
Co-op Recovery	22,239	269	22,508	
Student Services Fee	12,887	-	12,887	
Research Overhead	8,460	-	8,460	
Interest	9,600	-	9,600	
Services to AFIW	3,883	24	3,907	
Miscellaneous Income	9,165	608	9,773	Note 5
	<u>66,234</u>	<u>901</u>	<u>67,135</u>	
Total Income	<u>790,512</u>	<u>1,844</u>	<u>792,356</u>	

Note 1: The decrease in the Graduate Expansion grant revenue is mainly due to not reaching the forecasted domestic masters growth targets.

Note 2: The increase in Domestic Undergraduate tuition revenue is mainly due to increased undergraduate first year enrolment levels from forecast.

Note 3: The decrease in International Undergraduate tuition revenue is mainly due to decreased international undergraduate first year enrolment levels from forecast.

Note 4: The increase in International Graduate tuition revenue is mainly due to increased international masters enrolment levels from forecast.

Note 5: Miscellaneous income includes application fees, rental income and various other fees such as transcripts, verification letters, etc. The net increase relates to various items, the largest being an increase in rental income.

**University of Waterloo
AUDIT & RISK COMMITTEE
Report to the Board of Governors
4 February 2020**

This report is submitted following the committee's meeting of 3 October 2019 and the Governance Committee's meeting of 16 January 2020.

FOR APPROVAL

1. Modification of the Terms of Reference

Motion: That the Board of Governors approve the attached revisions to the terms of reference of the Audit & Risk Committee. See Attachment #1.

Background: With a view to comprehensiveness and alignment with other governing documents, the committee recommends the addition of a reference to "policy" in its responsibilities regarding monitoring compliance with legal requirements, and the addition of a bullet regarding reporting obligations in relation to the University's risk appetite statement. The committee also requested a specific reference to cyber and information security systems among the risk mitigation systems to be discussed with management on a regular basis. The proposed revision (see attached, marked-up version) was considered by the Governance Committee of the Board at its January 2020 meeting, and is now being brought forward for recommendation to the Board of Governors. (Note: **bold** = new text; ~~strikeout~~ = deleted text)

28 January 2020
/rmw

Murray Gamble
Chair

Attachment #1

AUDIT & RISK COMMITTEE – TERMS OF REFERENCE

With respect to the external auditors, the issuance of annual audited financial statements, and the internal auditors, to:

- review the external audit plan annually regarding the scope of the audit, and the costs
- appraise the overall approach to the external audit, and the related fees
- recommend annually to the board on the appointment / reappointment of external auditors and on the fees to be paid
- approve what services the external auditors provide in addition to the audit of the financial statements
- recommend the financial statements to the Board of Governors for approval
- approve annually the internal audit plan and report to the Board of Governors
- approve the appointment of internal auditors, as required
- ensure that auditors and financial officers have direct access to the committee regarding any concerns about matters they feel have not been satisfactorily handled by others, and that there are no unresolved issues between management and the auditors that could affect the audited financial statements
- meet directly with the auditors (both external and internal) in the absence of management, at every meeting at which the auditors are in attendance
- review contentious issues, including actual or anticipated litigation, with material financial impact
- review reports to management from the auditors and ensure that management has taken appropriate action
- report to the board as appropriate on the activities of the auditors and the adequacy of their activities
- retain or appoint, at the university's expense, such experts and advisors as it deems necessary to carry out its duties, provided that the committee shall advise the Governance Committee of such actions

To monitor the effectiveness of the university's internal controls and management information systems, including:

- that appropriate policies and procedures are in place for internal accounting, financial control, information technology and management information
- that appropriate processes are in place to address and comply with applicable statutory, regulatory **and** **policy** requirements, as appropriate
- reporting to the board annually on these matters

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To monitor the effectiveness of the university's risk management activities, including:

- monitoring the effectiveness of the university's risk management environment
- **receiving and considering reports on significant risks or exposures to the university and the management of these**
- **receiving and considering the annual report on the institutional-level risk appetite prepared by management**
- ensuring that a risk management system with appropriate procedures is in place to mitigate risk
- ensuring that an emergency response framework with appropriate procedures is in place in order to respond to emergencies
- discussing with administration, the internal auditors and the external auditors the university's major risk exposures (whether financial, operational, or otherwise), the adequacy and effectiveness of accounting and financial systems, **information/cyber security systems**, and the steps administration has taken to monitor and control such exposures

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- reviewing, at every meeting, the status of risk management initiatives and emerging issues that have the potential to impact the university's risk profile
- reporting to the board annually on risk management
- meeting with the risk officer in the absence of management, at least once annually
- ensuring that committee members receive appropriate orientation regarding the work of the committee, and that training to enhance financial literacy and best practices in risk management is made available to committee members as required

To assess annually the adequacy of the committee's terms of reference and to propose any needed amendments to the Governance Committee.

Approved by the Board of Governors, 5 April 1988.

Amended by the Board of Governors, 6 June 2006.

Amended by the Board of Governors, 27 October 2009.

Amended by the Board of Governors, 1 June 2010.

Amended by the Board of Governors, 3 June 2014.

Amended by the Board of Governors, 4 April 2017.

Amended by the Board of Governors, 3 April 2018

Amended by the Board of Governors, [...]

University of Waterloo
Board of Governors
BUILDING & PROPERTIES COMMITTEE
Report to the Board of Governors
4 February 2020

This report is submitted following the committee's meeting of 15 January 2020.

FOR DECISION

1. Terms of Reference

Motion: That the Board of Governors approve the following changes to the committee's terms of reference:

- Changes to the threshold amounts in the fourth paragraph of section 3 of the terms of reference: "To approve, on behalf of the board, construction projects between \$5,000,000 and \$10,000,000 and to make recommendations to the Board of Governors regarding construction projects exceeding \$10,000,000, including (without limitation) the appointment of architects and design consultants, the business plan and budget, the design, and the award of construction contracts."
[Note: Information on construction projects between \$3,000,000 and \$5,000,000 will continue to be provided to the committee and the committee's work plan will be updated accordingly.]
- Minor changes reflecting the change of the names of the two student associations in the membership section, and one apostrophe in the ultimate paragraph.

The proposed revision (see attached, marked-up version) is brought forward for approval by the Board of Governors. (Note: **bold** = new text; ~~strikeout~~ = deleted text)

Background:

At its October 2 meeting, the committee agreed to consider changes to the project approval thresholds included in its terms of reference given the current \$2,000,000 threshold is now applying to non-discretionary maintenance activities.

Listed below is a summary of the approval thresholds applied by other U6 (research-intensive) universities in Ontario.

University of Toronto	<ul style="list-style-type: none">- < \$5 million by University administration- \$5 million to \$20 million by Planning & Budget Committee and confirmed by Executive Committee of Governing Council- > \$20 million recommended by Planning & Budget Committee for approval of the Governing Council
Queen's University	<ul style="list-style-type: none">- < \$5 million by University administration- > \$5 million by Capital Assets & Finance Committee and Board of Trustees
McMaster University	<ul style="list-style-type: none">- < \$2 million by University administration- \$2 million to \$10 million by Planning & Resources Committee- > \$10 million by Board of Governors
Western University	<ul style="list-style-type: none">- < \$2.5 million by University administration- \$2.5 million to \$7.5 million by Property & Finance Committee- > \$7.5 million by Board of Governors

- University of Ottawa
 - <\$1 million by University administration
 - \$1 million to \$5 million by Executive Committee of Board
 - >\$5 million by Board of Governors
- University of Waterloo
 - <\$2 million by University administration
 - \$2 million to \$5 million by Building & Properties Committee
 - >\$5 million by the Board of Governors

FOR INFORMATION

2. Student Village 1 – Site Infrastructure

The committee approved a \$4,900,000 project for site work adjacent to Village 1 West and North Quads to:

1. Replace the existing sanitary sewer, storm sewer, and water-main serving these quads
2. Repair and waterproof the service tunnel serving V1
3. Improve the landscaping and surface pathways impacted by this work

Background:

A full investigation into the condition of the underground infrastructure serving Village 1 and Ron Eydt Village was completed in early 2019. This study concluded that much of the underground infrastructure is beyond its anticipated lifespan and in generally poor condition. The areas serving the North and West Quads of V1 are in the worst condition and students have already been displaced on a number of occasions because of sewer failure.

Investigations into the campus tunnel system have also been underway over the past 18 months, and have concluded that the tunnel serving V1 from Central Plant is in poor condition and sections of the tunnel (in particular where it passes under Ring Road) requires structural bracing and supports.

Landscaping in Village 1 has been previously identified as requiring repairs as well as being deficient relative to today’s accessibility and lighting standards. Feedback sessions conducted with current students also found a significant desire for better and more accessible outdoor spaces surrounding the residences.

WalterFedy Civil Engineering, along with Gillespie Building Consultants (GBC) Inc. and GSP Group Landscape Architects have prepared schematic designs and preliminary estimates detailing the extent of work and the impact.

The proposed project budget (\$000s) including net HST (3.41%) is:

Class D Construction Estimate	\$3,800
Construction Contingency	\$760
Consulting Fees	\$340
TOTAL PROJECT	\$4,900

The project funding is provided by the Housing Department, which operates as an ancillary (cost recovery) unit. Construction is expected to start in May 2020 and be complete by mid-August 2020.

3. General Oversight

The committee reviewed and accepted for information:

- the capital financing commitments associated with capital projects, and advises that these commitments fall within the University of Waterloo's board-approved debt policy
- the work plan of the committee
- the terms of reference of the committee
- university real estate holdings
- the campus master plan
- university compliance with all building codes, fire codes, safety regulations and statutory and regulatory provisions, as appropriate, in its building and properties program; no exceptions were reported.

/ar

Martha George
Chair

The proposed revision (see below, marked-up version) is brought forward for approval by the Board of Governors. (Note: bold = new text; strikeout = deleted text)

**University of Waterloo
Board of Governors
BUILDING & PROPERTIES COMMITTEE**

1. MEMBERSHIP

This committee shall consist of a maximum of nine members. Of those, at least five members shall be members of the board appointed to the board by the Lieutenant Governor in Council or elected by the board from the community-at-large, and one shall be a faculty member of the board.

One undergraduate student member of the board and one graduate student member of the board shall be members of the committee. If the presidents of the ~~Federation of Students~~ **Waterloo Undergraduate Student Association** and the Graduate Student Association – **UW** are members of the board, then they shall serve respectively as the undergraduate and graduate student members of the committee. Should the president of the **Waterloo Undergraduate Student Association** ~~Federation of Students~~ or the Graduate Student Association – **UW** be unwilling to serve on the committee or not be a member of the board, then the respective seat on the committee shall be filled by appointment from among student governors made by the president of the respective student ~~federation or~~ association.

It is expected that at least two members of the committee will have experience with capital construction and/or property development.

2. MEETINGS

The committee will meet at the call of the chair of the committee, but not less than four times annually.

The quorum for the transaction of business at any meeting of the committee shall be a majority of the members of the committee, present either in person, by teleconference or by videoconference, provided that not less than a majority of those constituting the quorum shall be members appointed to the board by the Lieutenant Governor in Council or elected by the board from the community-at-large.

3. TERMS OF REFERENCE

The committee is established for the following purposes:

To oversee campus planning and development activity in the context of the Campus Master Plan and prudent environmental sustainability practices, and not less than annually to perform a review of the Campus Master Plan in the context of the university strategic plan.

To make recommendations to the Board of Governors on campus planning and development initiatives, with due consideration to the impact on multi-campus sites, including (without limitation) the acquisition or disposal of land or buildings, the use of land, buildings and facilities, the siting of buildings and roads, and the review of all agreements to which the university is a party (including donor agreements and academic agreements) having impact on the acquisition, use and/or development of real property.

To approve on behalf of the board, construction projects between **\$5,000,000 and \$10,000,000** ~~\$2,000,000 and \$5,000,000~~ and to make recommendations to the Board of Governors regarding construction projects exceeding **\$10,000,000** ~~\$5,000,000~~, including (without limitation) the appointment of architects and design consultants, the business plan and budget, the design, and the award of construction contracts.

To ensure that the university has in place appropriate procedures for cost estimating, competitive tendering of bids, awarding of contracts, contract administration, cost control and payment to contractors for all site work, new construction, alterations and major repair.

To ensure that the university complies with all building codes, fire codes, safety regulations and statutory and regulatory provisions, as appropriate, in its building and properties program, and to review compliance annually.

To ensure that the university has appropriate maintenance programs in place for buildings and properties.

To review annually the status of capital construction projects, including status of accumulated debt and compliance with approved debt policy.

To report on its activities to the Board of Governors at least annually.

To assess annually the adequacy of the committee's terms of reference and to propose any needed amendments to the Governance Committee.

Approved by the Board of Governors, 6 June 2006

Amended by the Board of Governors, 1 April 2008

Amended by the Board of Governors, 27 October 2009

Amended by the Board of Governors, 2 April 2013

Amended by the Board of Governors, 1 April 2014

University of Waterloo
Board of Governors
FINANCE & INVESTMENT COMMITTEE
Report to the Board of Governors
4 February 2020

This report is submitted following the committee's meeting of 16 January 2020. This report is recommended for inclusion in the regular agenda.

The Vice-President, Academic & Provost will make a presentation on the recommended tuition changes at the Board of Governors meeting, on behalf of the committee.

RECOMMENDATION

1. Recommended Tuition Fee Changes, and Recommended Co-op Fee 2020/21

Motion: That the Board of Governors approve the 2020/21 tuition fee changes and the 2020/21 co-op fee, as described in Attachment #1 to this report.

Rationale: See Attachment #1 to this report.

/mg

James Schlegel
Chair

1. Recommended Tuition Rate Increases 2020/21

The Ministry of Colleges and Universities (MCU) (previously Ministry of Training, Colleges and Universities) released the most recent tuition framework on January 17, 2019, which provides requirements for domestic tuition rates up to and including the 2020/21 academic year. In its February 2019 meeting, the Board of Governors approved maintaining the domestic tuition rates for 2020/21 at the 2019/20 levels as required under this tuition framework. MCU has not given guidance for domestic tuition rates for years beyond 2020/21.

International tuition rates are not regulated by MCU. University of Waterloo's practice is to review and set international rates annually. The tuition rate increases proposed below have been developed through review of a number of factors that include:

- Operating costs to deliver high quality academic programs, including overall inflation
- Comparison with similar programs at other institutions within Ontario and beyond
- The value of a Waterloo degree, both overall and in specific program areas
- The continued high demand for Waterloo programs nationally and internationally

The resulting international tuition rate changes recommended for approval for the 2020/21 academic year are as follows:

Undergraduate

- Year 1, all programs, except Pharmacy	10.5% - 15.0%
- Upper years, all programs, except Pharmacy	5.0%
- Pharmacy - all years	0.0%

Graduate

- Research PhD programs	3.0%
- Research/Coursework Master programs	3.0%
- Coursework MEng/MMSc	15.0%
- Specifically identified Master and Diploma programs	3.0% - 15.0%
- Master of Mathematics for Teachers	0.0%

See attached schedules for details of specific undergraduate and graduate programs for domestic and international students for 2020/21. Tuition rates for International Undergraduate and Master programs include an amount to offset the MCU \$750/student International Student Recovery (ISR) and the \$75/student Grant-in-lieu of Taxes reduction.

2. Recommended Co-op Fee 2020/21

The Co-op Fee assessed to undergraduate students registered in co-operative education programs or to graduate students during a co-op term in selected programs is recommended to increase 0.7% from \$729/term to \$734/term effective Spring term 2020.

Schedule 1

RECOMMENDED TUITION RATE INCREASES FOR 2020/21

UNDERGRADUATE PROGRAMS		Domestic		International ³ First Year		International ³ Upper Years	
Tuition Rate Group		Rate Increase over Previous Fiscal Year	Maximum Tuition Per Term ⁴	Rate Increase over Previous Fiscal Year	Maximum Tuition Per Term ⁴	Rate Increase over Previous Fiscal Year	Maximum Tuition Per Term ⁴
■ Arts							
Arts ¹		0.0%	\$3,064	15.0%	\$19,328	5.0%	\$17,647
AFM/CFM/Math CA/Biotech CA ²		0.0%	\$7,519	N/A	N/A	5.0%	\$20,563
GBDA		0.0%	\$5,683	15.0%	\$21,487	5.0%	\$19,619
■ Applied Health Sciences							
Applied Health Sciences ¹		0.0%	\$3,064	15.0%	\$19,328	5.0%	\$17,647
■ Engineering							
Engineering Co-op		0.0%	\$6,985	12.0%	\$28,731	5.0%	\$26,935
Software Engineering		0.0%	\$6,985	12.0%	\$28,731	5.0%	\$26,935
Architecture		0.0%	\$4,570	15.0%	\$28,653	5.0%	\$26,161
■ Environment							
Environment ¹		0.0%	\$3,064	15.0%	\$19,416	5.0%	\$17,728
■ Math							
Computer Science/Data Science		0.0%	\$6,435	12.0%	\$28,731	5.0%	\$26,935
Mathematics ¹		0.0%	\$3,064	15.0%	\$20,925	5.0%	\$19,105
FARM		0.0%	\$4,783	15.0%	\$20,925	5.0%	\$19,105
BBA/Math Double-Degree		0.0%	\$4,272	15.0%	\$20,925	5.0%	\$19,105
BBA/CS Double-Degree		0.0%	\$6,435	12.0%	\$28,731	5.0%	\$26,935
■ Science							
Science ¹		0.0%	\$3,064	15.0%	\$20,208	5.0%	\$18,451
Pharmacy		0.0%	\$8,515	0.0%	\$30,720	0.0%	\$30,720
Optometry		0.0%	\$7,635	10.5%	\$30,270	5.0%	\$29,221

1 - Regulated programs are one domestic rate group, which includes enrollment to Arts, Mathematics, Science, Applied Health Sciences, and Environment; regular and co-op streams.

2 - Tuition reflected for AFM/CFM/Math CA/Biotech CA is the upper year (2A+) fee. Students in these programs pay first-year (1A/1B) fees for the Faculty (Arts, Math or Science) in which they are enrolled.

3 - Annual increases will take effect once during the fiscal year; term of increase (Spring, Fall, Winter) varies by program

4 - Students in co-operative education programs are assessed an additional Co-op fee in a specified number of terms based on program

RECOMMENDED TUITION RATE INCREASES FOR 2020/21

GRADUATE PROGRAMS

Tuition Rate Group	Fee Increase Term	Domestic		International	
		Rate Increase over Previous Fiscal Year	Tuition Per Term/ Course	Rate Increase over Previous Fiscal Year	Tuition Per Term/ Course
■ Research PhD	Spring	0.0%	\$2,254	3.0%	\$7,182
■ Research/Coursework Masters	Spring	0.0%	\$2,254	3.0%	\$7,254
■ Coursework MEng/MMSc	Spring	0.0%	\$2,762	15.0%	\$13,234
■ Professional Programs					
■ Arts					
Master of Taxation ^C	Spring	0.0%	\$2,767	15.0%	\$5,431
Master of Accounting ^F	Winter	0.0%	\$7,114	15.0%	\$20,679
Master of Public Service ^F	Fall	0.0%	\$5,588	15.0%	\$11,801
Master of Digital Experience Innovation	Fall	0.0%	\$5,372	15.0%	\$10,582
■ Applied Health Sciences					
Master of Health Informatics	Fall	0.0%	\$4,439	15.0%	\$10,440
Master of Public Health	Spring	0.0%	\$2,254	15.0%	\$9,764
Master of Health Evaluation	Spring	0.0%	\$2,254	15.0%	\$9,452
■ Engineering					
Master of Architecture	Spring	0.0%	\$2,634	15.0%	\$10,822
Master of Business, Entrepreneurship and Technology	Fall	0.0%	\$11,418	6.0%	\$19,560
Graduate Diploma in Business and Entrepreneurship ^P	Spring	0.0%	\$1,381	6.0%	\$6,099
Master of Management Sciences - MOT ^C	Spring	0.0%	\$3,947	5.0%	\$4,835
Master of Electric Power Engineering ^C	Spring	0.0%	\$3,452	3.0%	\$4,068
Graduate Diploma in Electric Power Engineering ^C	Spring	0.0%	\$2,762	15.0%	\$13,234
Graduate Diploma in Green Energy	Spring	0.0%	\$2,762	15.0%	\$13,234
■ Environment					
Master of Climate Change	Spring	0.0%	\$2,254	15.0%	\$9,452
Master of Development Practice	Fall	0.0%	\$2,416	3.0%	\$12,270
Master of Economic Development and Innovation	Spring	0.0%	\$2,254	15.0%	\$9,452
Master of Environment and Business ^C	Fall	0.0%	\$3,272	5.0%	\$4,007
Master of Planning ^P	Spring	0.0%	\$1,127	15.0%	\$4,726
Graduate Diploma in Planning ^P	Spring	0.0%	\$1,127	15.0%	\$4,726
Graduate Diploma in Climate Risk Management ^P	Spring	0.0%	\$1,127	15.0%	\$4,726
■ Mathematics					
Master of Actuarial Science ^F	Fall	0.0%	\$11,817	15.0%	\$15,853
Master of Quantitative Finance	Fall	0.0%	\$4,224	15.0%	\$5,668
Master of Data Science and Artificial Intelligence ^C	Fall	0.0%	\$3,000	15.0%	\$5,110
Master of Mathematics for Teachers ^C	Fall	0.0%	\$1,085	0.0%	\$1,085
■ Science					
Master of Pharmacy in Advanced Pharmacy Practice ^F	Fall	*	\$4,439	*	\$10,440
■ Colleges					
Master of Peace and Conflict Studies (CGU)	Spring	0.0%	\$2,254	15.0%	\$9,452
Master of Theological Studies (CGU) ^C / Master of Catholic Thought (SJU) ^C	Spring	0.0%	\$584	3.0%	\$688
Master of Social Work (REN/AHS)	Fall	0.0%	\$3,096	15.0%	\$10,392

F - only offered in full-time format. Tuition stated reflects full-time fee.

P - only offered in part-time format. Tuition stated reflects part-time fee.

C - charged on a per-course basis. Tuition stated reflects per course fee.

* - Master of Pharmacy in Advanced Pharmacy Practice is a new program for Fall 2020.

University of Waterloo
Board of Governors
GOVERNANCE COMMITTEE
Report to the Board of Governors
4 February 2020

This report is submitted to the Board of Governors following the meeting of the Governance Committee on 16 January 2020.

FOR INFORMATION

1. Board Orientation

The committee considered various ways orientation and re-orientation activities may occur this year. With respect to orientation, there was agreement that in light of the relatively low turnover, individual, or group sessions where appropriate, with incoming members by the President and the Secretary in advance of the June meeting will take place. With respect to re-orientation, options include:

- a session in the afternoon of the Monday preceding the April meeting of the Board, with a dinner to follow (and working space provided for out-of-town members the Tuesday morning of the April meeting); or,
- a session offered in the late Tuesday morning right before the April meeting, with a luncheon to follow; or,
- a dinner following the April meeting, during which re-orientation will occur.

Board members are invited to consider these options, or others, which will be discussed at the February meeting. If appropriate, a poll of governors re: options will take place following the meeting.

Cindy Forbes
Chair, Governance Committee

University of Waterloo
PENSION & BENEFITS COMMITTEE
Report to the Board of Governors
4 February 2020

This report is submitted following the committee's meetings of 15 November 2019, 13 December 2019 and 17 January 2020, for inclusion in the regular agenda.

FOR APPROVAL

1. Amendments to the University of Waterloo Pension Plan

Motion: That the Board of Governors approve the attached resolution Amendment No. 6, amending the University of Waterloo Pension Plan ("UW Pension Plan") to increase member contribution rates and to increase the pension cap, as described in this report.

Background and Detail on Plan Changes: Member contribution rates to the UW Pension Plan were last increased in 2013, along with changes to the future service benefit provisions. These changes created a 50/50 sharing of the cost of benefits being earned each year (current service cost) between members and the University. Since that time, the current service cost has increased as a result of [1] the decrease in interest rates and lower expected future investment returns, [2] the increase in the pension payment period as a result of improved longevity, and [3] new funding rules in Ontario. As a result, member contribution rates now only cover 43% of the total current service cost, with the University contributing the remaining 57%.

The Pension & Benefits Committee recommends an increase in member contribution rates as follows, phased in over a three-year period, to restore sharing of current service cost back to 50/50 once changes are fully phased-in:

Portion of Salary	Current contribution rate	Contribution Rate effective:		
		May 1, 2020	May 1, 2021	May 1, 2022
Less than 1x YMPE (Less than \$58,700 in 2020)	6.25%	6.95%	7.40%	7.80%
Between 1x and 2x YMPE (Between \$58,700 and \$117,400 in 2020)	8.95%	9.95%	10.60%	11.20%
Above 2x YMPE (Above \$117,400 in 2020)	9.95%	9.95%	10.60%	11.20%

YMPE = year's maximum pensionable earnings under the Canada Pension Plan

The UW Pension Plan currently places a pension cap of \$3,200 per year of pensionable service on the indexed maximum pension under the *Income Tax Act* (ITA). The pension cap has been periodically increased in the past by the Pension and Benefits Committee as the indexed ITA maximum pension approaches the cap. The ITA maximum pension stands at \$3,092 per year of pensionable service in 2020.

The Pension & Benefits Committee recommends increasing in the pension cap applied under the UW Pension Plan from \$3,200 to \$3,400 per year of pensionable service, as well as recommending that the pension cap be automatically increased each calendar year by one-third of the percentage increase in the Average Industrial Wage, with both changes effective 1 January 2021. The increase in the pension cap along with the escalation feature will result in a net increase of \$31 million to the calculated funding shortfall.

There will be no change to the Payroll Pension Plan which provides pension benefits above the ITA maximum pension, outside of the registered pension plan, up to \$3,400 per year of pensionable service. As a result, with the increase in the pension cap under the UW Pension Plan to \$3,400 per year of pensionable service, there will be no further benefits earned under the Payroll Pension Plan once the ITA maximum pension reaches \$3,400.

Rationale: The long-term funding objective for the University of Waterloo Pension Plan is for both members and the University to share the cost of benefits being earned on a 50/50 basis. However, if there is a funding shortfall on past benefits earned, the University is responsible for making the special payments required to fund that shortfall. Given the current level of the funding shortfall and the uncertainty around future investment returns, the P&B Committee and the University believe the funding strategy adopted in these recommendations is the most prudent course to follow to enhance the Pension Plan's long-term sustainability.

The total current service cost of the UW Pension Plan, including the prospective change to the cap, is 17.8% of salaries. In addition to the current service cost, the University makes special payments of 2.8% of salaries toward the present funding shortfall under the UW Pension Plan.

The recommended increases brings member contribution rates to 8.9% of salaries once fully phased-in. The University notional share of current service cost would decrease from 9.6% of salaries currently to 8.9% of salaries. This restores the 50/50 sharing of current service cost upon phase-in. Since the University's overall contributions will be maintained at current levels through the phase-in period, the notional 0.7% of salaries decrease in University contributions will be reallocated entirely toward the University's special payments in the UW Pension Plan. These payments will be effectively increased to 3.5% of salaries from 2.8% currently.

The Committee observes that the UW Pension Plan is very unusual in having a three-tier contribution formula for members. Contribution rates are typically structured in a two-tier formula using the YMPE threshold in the same way the benefit rate is structured below/above the YMPE. That was the structure of the contribution formula under the UW Pension Plan before 2008 when the third tier above 2x YMPE was introduced to address the increase in current service cost arising from an accelerated increase in the maximum pension under the ITA and the associated increases in the pension caps under the UW Pension Plan and Payroll Pension Plan. With the rate of increase in the ITA maximum pension to be moderated and the recommendation to transition out of the Payroll Pension Plan, the recommendation brings a return to a two-tiered member contribution formula in conjunction with the increase in member contributions.

Process and Consultations: In 2018, a subgroup of the Committee commenced initial discussions on pension funding and Plan design matters to address the observed drift in the sharing of current service cost, the ongoing handling of the pension cap, and how any Plan changes could foster the overall health of the Plan. These discussions were initiated in light of new funding rules being approved by the provincial regulator, and with the observation that many other comparator Ontario universities had made changes to their respective Plans. In 2019, Pension & Benefits Committee spent many months considering options and potential impacts of changes on Plan members and the health of the Plan, and with the assistance of the Plan's actuary Aon developed a draft recommendation in Fall 2019.

Prior to considering a formal recommendation for Plan changes, the Committee held five public information sessions on two different days over two weeks in December 2019 to inform members of the University community of the Plan changes under consideration, as well as impacts on members and the benefits to the Plan's overall funding strategy. The public information sessions were advertised via email and articles in the Daily Bulletin, and overall attendance across the five sessions was approximately 400. The committee also posted copies of the presentation slides and a video of one presentation to the committee's website for members of the community who may have been unable to attend the public sessions. Further, a web form to submit feedback was provided for community members to communicate their questions/comments on the prospective changes to the committee.

/mg

Peter Barr
Chair

**UNIVERSITY OF WATERLOO
PENSION PLAN FOR FACULTY AND STAFF**

Amendment No. 6

The Board of Governors of the University of Waterloo resolves that the University of Waterloo Pension Plan for Faculty and Staff (amended and restated effective January 1, 2011), Registration Number 0310565 (the “Plan”), is amended as follows:

1. Effective May 1, 2020, paragraph (a) (General) of Section 4.01 (Required Member Contributions) shall be deleted in its entirety and replaced with the following:

“(a) General

Subject to Section 4.01(b), (c), (d) and (e), each Member is required to contribute to the Plan by payroll deduction for each year (including a partial year) of participation in accordance with the following table:

Effective Date	Contribution Rate on Earnings	
	Not in Excess of Year's Maximum Pensionable Earnings (for that year)	Exceeds Year's Maximum Pensionable Earnings (for that year)
May 1, 2020	6.95%	9.95%
May 1, 2021	7.40%	10.60%
May 1, 2022	7.80%	11.20%

Notwithstanding the above, a Member shall not be required to contribute for any period while he or she is Totally Disabled.”

2. Effective May 1, 2020, paragraph (b) (Part-Time) of Section 4.01 (Required Member Contributions) shall be deleted in its entirety and replaced with the following:

“(b) Part-Time

A Member who is part-time shall contribute to the Plan by payroll deduction for each year (including a partial year) of participation in accordance with the following table:

Effective Date	Contribution Rate on Reduced Earnings	
	Not in Excess of Year's Maximum Pensionable Earnings (for that year)	Exceeds Year's Maximum Pensionable Earnings (for that year)
May 1, 2020	6.95%	9.95%
May 1, 2021	7.40%	10.60%
May 1, 2022	7.80%	11.20%

Notwithstanding the above, a Member shall not be required to contribute for any period while he or she is Totally Disabled.”

3. Effective May 1, 2020, a new row shall be added at the top of the chart in Section A.1.01 (Past Member Contribution Rates) of Appendix – Historical Provisions as follows:

Applicable Dates of Service	Contribution Rates		
	(A)	(B)	(C)
January 1, 2013 to April 30, 2020	6.25%	8.95%	9.95%

4. Effective January 1, 2021, a new definition for “Pension Cap” shall be added to the Plan as Section 2.22.1:

“2.22.1 **“Pension Cap”** means \$3,400 effective January 1, 2021, increased thereafter each calendar year commencing January 1, 2022 by one-third (1/3) of the percentage increase in the Average Industrial Wage, calculated on an annual basis. For purposes of this Section, “Average Industrial Wage” means the average industrial wage as published by Statistics Canada under the authority of the *Statistics Act* (Canada) for purposes of increasing the Year’s Maximum Pensionable Earnings and the maximum pension pursuant to the Income Tax Act.”

5. Effective January 1, 2021, subparagraph (i) of paragraph (a) (Maximum Pension) of Section 6.07 (Maximum Pension) shall be deleted in its entirety and replaced with the following:

“(i) the lesser of the Defined Benefit Limit for the year and the Pension Cap; and”

CERTIFICATION

I _____, Secretary to the Board of Governors of the University of Waterloo, do hereby certify under the seal of the University that the foregoing resolution was duly approved by the Board of Governors at a meeting held on the ____ day of _____, 2020.

Signature

Date