Date:  Monday 22 May 2018  
Time:  3:30 p.m.  
Place:  Needles Hall, room 3407

<table>
<thead>
<tr>
<th>Action</th>
<th>OPEN SESSION</th>
<th>Consent Agenda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decision</td>
<td>3:30</td>
<td><strong>Consent Agenda</strong></td>
</tr>
<tr>
<td>Information</td>
<td></td>
<td>Motion: To approve or receive for information by consent items 1-5 below.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1. Minutes of the 16 April 2018 Meeting</td>
</tr>
<tr>
<td>Information</td>
<td></td>
<td>2. Reports from Committees and Councils</td>
</tr>
<tr>
<td>Decision/Information</td>
<td></td>
<td>a. Graduate &amp; Research Council</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Nominating Committee for Honorary Degrees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>c. Undergraduate Council</td>
</tr>
<tr>
<td>Information</td>
<td></td>
<td>3. Report of the President</td>
</tr>
<tr>
<td></td>
<td></td>
<td>a. Recognition and Commendation</td>
</tr>
<tr>
<td>Information</td>
<td></td>
<td>4. Reports from the Faculties</td>
</tr>
<tr>
<td>Decision</td>
<td></td>
<td>5. COU Academic Colleague Appointment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Information</th>
<th>Regular Agenda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information</td>
<td>3:35</td>
</tr>
<tr>
<td>Information</td>
<td>3:40</td>
</tr>
<tr>
<td>Information</td>
<td>3:50</td>
</tr>
<tr>
<td>Decision</td>
<td></td>
</tr>
<tr>
<td>Decision</td>
<td></td>
</tr>
<tr>
<td>Decision</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Decision</td>
<td></td>
</tr>
<tr>
<td>Decision</td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td></td>
</tr>
<tr>
<td>Decision</td>
<td></td>
</tr>
<tr>
<td>Decision</td>
<td></td>
</tr>
<tr>
<td>Decision</td>
<td></td>
</tr>
<tr>
<td>Decision</td>
<td></td>
</tr>
<tr>
<td>Decision</td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>Item</td>
</tr>
<tr>
<td>-------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>5:15</td>
<td>16. Minutes of the 16 April 2018 Meeting</td>
</tr>
<tr>
<td>5:20</td>
<td>17. Business Arising from the Minutes</td>
</tr>
<tr>
<td>5:25</td>
<td>18. Report from the Chancellor Nominating Committee</td>
</tr>
<tr>
<td>5:30</td>
<td>19. Other Business</td>
</tr>
</tbody>
</table>

*to be distributed

15 May 2018

Karen Jack
University Secretary

KJJ/ees
Secretary to Senate
University of Waterloo
SENATE
Minutes of the Monday 16 April 2018 Meeting


Guests: Dianne Bader, Mary Lynn Benninger, Bruce Campbell, Aldo Caputo, Matthew Grant, Andrea Kelman, Derek Madge, Nick Manning, Diana Parry, Chris Read, Savannah Richardson, Ian Rowlands, Maxime Salman, Emily Schroeder, Daniela Seskar-Hencic, Allan Starr, Brandon Sweet, John Thompson, Maya Venters, Kathy Winter, Richard Wu


*regrets
**telephone

OPEN SESSION

CHAIR’S REMAKRS
The president advised members that the Graduate Student Association presentation is deferred in light of Bruce’s absence, and noted that the report from the Executive Committee is at members’ places. He thanked departing members for their service: Gordon Stubley, Johanna Wandel, Bruce Richter, Bernard Duncker, Jennifer Clapp, David DeVidi, Karim Karim, Greta Kroeker, David Porreca, David Perrin, Mavis Fenn, Robert Bruce, Samantha Hossack, Samantha Shortall, Antonio Brieva, Hannah Beckett, Alexander J. Wray, Mohammad Nasif, Andrew Clubine, Angela Pereira. A round of applause followed.

Consent Agenda

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

Dea and Clubine.

1. MINUTES OF THE 26 MARCH 2018 MEETING
Senate approved the minutes of the meeting.

2. REPORTS FROM COMMITTEES AND COUNCILS
   Graduate & Research Council. Senate received the report for information.

   Undergraduate Council.
Faculty of Applied Health Sciences, School of Public Health and Health Systems
Senate heard a motion to approve revisions to admission requirements for the Diploma in Gerontology, effective as of 1 September 2019.

Senate received the remainder of the report for information.

3. REPORT OF THE PRESIDENT
   Recognition and Commendation. Senate received the report for information.

4. REPORT OF THE VICE-PRESIDENT, ACADEMIC & PROVOST
   University Professor Designation. Senate received the report for information.

5. REPORT OF THE COUNCIL OF ONTARIO UNIVERSITIES ACADEMIC COLLEAGUE
   Senate received the report for information.

6. REPORTS FROM THE FACULTIES
   Senate received the reports for information.

In response to a request for involvement by Senate in the establishment of the third Strategic Mandate Agreement, the chair advised that it will be informed by the strategic plan which has faculty input, and the University will be constrained by government timing which will hopefully provide opportunity for discussion at Senate. A question was raised about the Fair Workplaces Act, and the provost confirmed the University will abide by it and is seeking clarification on some details with respect to equal pay. He agreed to look into whether there will be effects on sessional employment at Waterloo.

The question was called, and the motion carried unanimously.

Regular Agenda

7. BUSINESS ARISING FROM THE MINUTES
   There was no business arising.

8. PRESENTATIONS BY ASSOCIATION AND FEDERATION PRESIDENTS
   Bryan Tolson, president, Faculty Association of the University of Waterloo
   Tolson informed members about recent activity he has undertaken with OCUFA (lobbying at Parliament Hill and with local MPPs for a reinvestment in high-quality university education, the need for a faculty renewal strategy, and fairness for contract faculty). He provided data and considerations from the University of Waterloo perspective, particularly teaching and hiring figures and his concerns with respect to existing definitions and incomplete data re: sessionals. He advised that as of 2014/15, Waterloo is better in many respects than other institutions, but expressed his hope that improvements will be made to reporting, and that Senate will evaluate teaching and hiring activity regularly.

In discussion: thanks from several members for the review, the benefits in having professional lecture in some disciplines, a suggestion that the academic program review process might be a good place for units to describe their teaching complement and the reasons for its composition, and agreement from several members that more consideration be given to sessionals, including articulation of the parameters of their role and employment conditions.

Antonio Brieva, president, Federation of Students
Brieva provided Senators with a reminder of the Feds role, its services, commercial operations, and recent accomplishments (PAC-SMH, comprehensive co-op fee review, advocacy for predictable international student tuition, progress on fee transparency, ensured funding for new accessible
entrance to the coming student services centre in Needles Hall). Other activities have included: consideration of and involvement in improvements re: sexual violence initiatives, academic supports, support for marginalized students and wellness activities; advocacy activities at the provincial and federal level. He introduced the incoming executive and outlined likely activities they will undertake in the coming year.

After brief discussion, the chair thanked Brieva and his colleagues for their exceptional work on behalf of students.

9. REPORTS FROM COMMITTEES AND COUNCILS

Executive Committee. Senate heard that the deans, the chair of the heads of the affiliated and federated institutions of Waterloo, and the presidents of the Federation of Students and Graduate Student Association have recommended names of nominees as provided on the list of nominees. As well, in response to a request to faculty senators and graduate students to indicate their interest for serving on the Board of Governors (to fill four of the seven Board seats designated for faculty senators, and the two designated graduate student senator seats), a number of senators have expressed their willingness to serve as provided on the list of nominees. The deadline for expressions of interest was noon today and an electronic election for both faculty and graduate student representatives on Board will follow the meeting, as will any elections as a result of further nominations to Senate committees and councils and to the Board of Governors.

Senate heard a motion to acclaim the membership of Senate committees and councils and the Board of Governors (subject to Senate election results) as provided on the list of nominees.

Wray and Richter.

In discussion, Senator Dea asked whether all of Senate, instead of the deans, could be invited to recommend names and the secretary agreed to look into this practice. [Secretary’s note: subsequent to the meeting, the secretary was reminded that the practice of asking the deans for nominees began in 2012 as a result of a decision by the Senate Executive Committee.]

The question was called and the motion carried with 25 for, 11 against and ten abstentions.

Graduate & Research Council

Senate heard the following motions:

Faculty of Applied Health Sciences

Motion: To approve six new Type II graduate diplomas (Epidemiology, Work and Environment, Health Program Evaluation, Health Informatics, Health Promotion, and Global Health) within the School of Public Health and Health Systems (SPHHS), effective 1 September 2018, as presented in attachment 1.

Casello and Rush.

In response to a question about the assessment of teaching and learning outcomes, Casello respectfully indicated that he believes the quality assurance office has considered these issues.

The question was called and the motion carried unanimously.

Faculty of Engineering

Motion: To approve three new Type II graduate diplomas (Embedded Systems, Nanoelectronics,
and Robotics and Control) within the Master of Engineering (MEng) in Electrical and Computer Engineering, effective 1 May 2018, as presented in attachment 2.

Casello and Culham. Carried unanimously.

Faculty of Mathematics
Motion: To approve a co-operative education option in the existing Master of Mathematics (MMath) in Applied Mathematics, effective 1 January 2019, as presented in attachment 3.

Casello and Watt.

In response to a question, Diane Bader from co-op confirmed that graduate students are advised by the same individuals as undergraduate students. Members also heard how the Faculty of Mathematics manages enrollment targets and about the differentiation of skills between senior undergraduate and graduate students which is intended to ensure that these students are not in competition with one another.

The question was called and carried unanimously.

Undergraduate Council
Senate heard the following motions:

Faculty of Applied Health Sciences, Articulation Agreement
Motion: That Senate approve the proposed admission, progression and transfer credit requirements for the Honours Recreation and Leisure Studies plan as outlined in the attached articulation agreement with Mohawk College, effective 1 September 2019.

Coniglio and Rush. Carried unanimously.

Faculty of Arts, Women’s Studies
Motion: That Senate approve changes to the name, intended learning outcomes and curriculum for the Women’s Studies program and all plans which form a part thereof as outlined in attachment 2, effective 1 September 2019.

Coniglio and DeVidi.

In response to questions, DeVidi and Dea advised of some of the program’s history and current governance structure.

The question was called and the motion carried unanimously.

Faculty of Science

Senators considered the following motions together.

Honours Chemistry (Materials Chemistry Specialization)
Honours Co-operative Chemistry (Materials Chemistry Specialization)
Motion: That Senate approve the inactivation of Honours Chemistry (Materials Chemistry
Specialization) and Honours Co-operative Chemistry (Materials Chemistry Specialization), effective 1 September 2019.

**Honours Science and Business – Chemistry Specialization (Reg and Co-op)**  
**Honours Co-operative Science and Business – Earth Sciences Specialization (Co-op only)**  
**Honours Science and Business – Environmental Science Specialization (Reg and Co-op)**  
**Honours Co-operative Science and Business – Physics Specialization (Reg and Co-op)**  
**Motion:** That Senate approve the inactivation of Honours Science and Business – Chemistry Specialization (Reg and Co-op), Honours Co-operative Science and Business – Earth Sciences Specialization (Co-op only), Honours Science and Business – Environmental Science Specialization (Reg and Co-op) and Honours Co-operative Science and Business – Physics Specialization (Reg and Co-op), effective 1 September 2019.

Coniglio and Lemieux. Carried unanimously.

10. **REPORT OF THE PRESIDENT**
   The president spoke to the sad occasion of the death of one of the University’s students over the weekend and offered his condolences to his friends and family. He advised of recent travel he has undertaken on University business, spoke of the good news in the federal budget, and highlighted some other positive activities (co-op “triple crown” winner, Emily Pass; the launch of the Waterloo AI Institute; a partnership with Cisco on 5G technology; a National Defence investment of $2.7M in IQC).

11. **Q&A PERIOD WITH THE PRESIDENT**
   A question was asked about metrics associated with the Strategic Mandate Agreement and members heard that Waterloo is involved with development of those relating to experiential learning and employer feedback.

12. **REPORT OF THE VICE-PRESIDENT, ACADEMIC & PROVOST**
   There was no report.

13. **REPORT OF THE VICE-PRESIDENT, UNIVERSITY RESEARCH**
   Senate received the report for information.

14. **OTHER BUSINESS**
   In response to questions about the University’s closure due to the ice storm, members heard: the primary consideration is safety; an academic is involved in the decision as it is made by the Vice-President, Academic & Provost.

Senate convened in confidential session.

25 April 2018
Karen Jack  
University Secretary  
Secretary to Senate
CONFIDENTIAL SESSION

Confidential material has been removed.
Senate Graduate & Research Council met on 9 April 2018 and agreed to forward the following items to Senate for information as part of the consent agenda.

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

FOR INFORMATION

CURRICULAR SUBMISSIONS
On behalf of Senate, council approved new courses, course inactivation, and minor course revisions for the Faculty of Environment (environment, enterprise, and development; geography and environmental management), as well as a minor program revision for the Faculty of Mathematics (statistics and actuarial science).

GRADUATE AWARDS
On behalf of Senate, council approved the Nihar and Mina Bose Graduate Scholarship in Economics (endowment).

/kw  Jeff Casello  Charmaine Dean
Associate Vice-President, Graduate Studies and  Vice President, University Research
Postdoctoral Affairs
2018 SPRING CONVOCATION
List of Honorands with Biographies Attached

APPLIED HEALTH SCIENCES – Tuesday, 12 June 2018 at 10:00 a.m.
Sandra Black – Honorary Doctor of Science (S)

ENVIRONMENT – Tuesday, 12 June 2018 at 2:30 p.m.
David Miller – Honorary Doctor of Environmental Studies (S)

ARTS – Wednesday, 13 June 2018 at 10:00 a.m.
Speaker to be determined.

ARTS – Wednesday, 13 June 2018 at 2:30 p.m.
Setsuko Thurlow – Honorary Doctor of Laws (S)

ARTS – Wednesday, 13 June 2018 at 6:30 p.m.
Upkar Arora – invited guest speaker (S)

SCIENCE – Thursday, 14 June 2018 at 10:00 a.m.
Curtis Richardson – Honorary Doctor of Science (S)

SCIENCE – Thursday, 14 June 2018 at 2:30 p.m.
Jo Handelsman – Honorary Doctor of Science (S)
Bernard Glick – Distinguished Professor Emeritus

MATHEMATICS – Friday, 15 June 2018 at 10:00 a.m.
David McKay – Honorary Doctor of Mathematics (S)
Anand Pillay – Honorary Doctor of Mathematics

MATHEMATICS – Friday, 15 June 2018 at 2:30 p.m.
Robert Tibshirani – Honorary Doctor of Mathematics (S)
M. Tamer Özsu – University Professor

ENGINEERING – Saturday, 16 June 2018 at 10:00 a.m.
Dean Kamen – Honorary Doctor of Engineering (S)

ENGINEERING – Saturday, 16 June 2018 at 2:30 p.m.
Patrick G. Awuah, Jr. – Honorary Doctor of Engineering (S)

ENGINEERING – Saturday, 16 June 2018 at 6:30 p.m.
N/A

S = speaker
Sandra Black (DSc, Applied Health Sciences)
Sandra Black is a distinguished clinician scientist who is world-renowned for her work in the area of brain health. Her specific work in the area of dementia and stroke has been at the forefront of advances into diagnosis, clinical assessment and treatment. She has published more than 400 peer reviewed articles, with an H-index of 73 (Scopus) indicating the importance of her work to the rest of the field. Her work continues to transform fundamental understanding as well as clinical care among those with dementia and stroke. Her work in the area of brain health influences the activities of many researchers and clinicians linked to the University of Waterloo impacting approaches for prevention, diagnosis and treatment of brain disease. Her impact is also felt through the people that have had the honor of working with her over the last 30 years, including many from the University of Waterloo.

She has had an extensive training record having supervised 36 PDFs, 18 PhD, 15 MSc students along with many staff, undergraduate trainees and visiting scholars. Trainees in her lab go on to excel in their own careers due to the opportunities and experiences afforded to them. As a reflection of her standing she has given over 600 lectures with many being keynote presentations to major international and national meetings. She serves on numerous international and national advisory committees for Alzheimer's disease, dementia care, vascular aging and stroke. She has also served, or currently serves, on several editorial boards, as well as an exhaustive list of leadership and committee roles for international and national grant agencies, scientific agencies and clinical groups. As a measure of the impact of her contributions she has received many awards and recognitions including being named as Officer of the Order of Canada (2015), to the Order of Ontario (2011) and elected as a Fellow of the Royal Society of Canada (2012).

David Miller (DES, Environment)
David Miller is a civic and environmental leader in Canada, who has made lasting contributions to the interface between cities and environmental management in his roles as North America Regional Director and C40 Ambassador at C40 Cities Network, President and CEO of World Wildlife Fund - Canada, Mayor of the City of Toronto, Metro Toronto regional councillor, Toronto city councillor, and as a lawyer and public figure.

As Mayor of Toronto (2003-2010), Mr. Miller championed numerous environmental initiatives, including investments in public transit, a deep lake water cooling system for Toronto’s financial district, and city-led greenhouse gas emission programs that have been emulated globally. From 2008-2010, Mr. Miller also chaired the influential C40 Cities Climate Leadership Group, a collaboration of the world’s largest cities committed to combatting climate change. During his tenure as chair, Mr. Miller implemented the Climate Positive Development Program, which recognizes the world’s most ambitious low-carbon projects, and organized the Copenhagen Climate Summit for Mayors.

From 2013-2017, Mr. Miller was president and CEO of the World Wildlife Fund - Canada. Under Mr. Miller’s leadership, WWF - Canada led conservation efforts in Canada’s Arctic, protecting major freshwater and marine ecosystems in Canada and working to foster deeper connections between Canadians and nature. In October 2017, Mr. Miller returned to the C40 Cities Network as North America Regional Director and C40 Ambassador. In this role, Mr. Miller will advance a renewed drive for climate action in the U.S. and Canada led by cities, states/provinces, businesses and citizens.

Setsuko Thurlow (LLD, Conrad Grebel)
Setsuko Thurlow is a leading advocate for peace and nuclear disarmament. Since surviving the atomic bombing of Hiroshima at the age of 13, Ms. Thurlow has spent a lifetime advocating for a ban on nuclear weapons. While studying in the United States in the 1950’s, she actively opposed weapons testing in the south Pacific, despite receiving criticism and threats. After immigrating to Canada to study and practice as a social worker, she continued her advocacy regarding nuclear disarmament, founding the organization ‘Hiroshima Nagasaki Relived’, playing a central role in Hibakusha Stories Project, initiating Hiroshima Day in Toronto, and helping...
to establish the Peace Garden at Toronto City Hall. Thurlow has spoken in numerous international contexts, including the United Nations General Assembly, intergovernmental gatherings, and academic conferences. She has also been a leading figure in the International Campaign to Abolish Nuclear Weapons (ICAN) since its launch in 2007, and played a pivotal role in the adoption of the Treaty on the Prohibition of Nuclear Weapons by the United Nations last year.

Thurlow has received numerous awards and honours for her activism and service: she became a member of the Order of Canada in 2006; she received the Queen Elizabeth II Diamond Jubilee Award in 2012; the city of Hiroshima designated her a peace ambassador in 2014; the Arms Control association named her “arms control person of the year” for 2015; and she received the Nuclear Age Peace Foundation’s Distinguished Peace Leadership Award in 2015. She also represented ICAN when it was awarded the Nobel Peace Prize in 2017.

Upkar Arora – Invited Guest Speaker

Upkar Arora is the founder of Illumina Partners, a boutique advisory firm which has specialized in strategy, operations, M&A and finance since 2002. Through Illumina and companies such as Onex, Nortel, Trizec & Olympia & York, he has worked in senior capacities with some of Canada’s most successful entrepreneurs over the past thirty years, acquiring, building and advising companies in Canada, and globally. In 2014, Upkar founded Illumina Social Impact Partners to advise and invest in enterprises committed to social impact and generating positive, scalable and sustainable change in our communities. Upkar’s extensive board experience includes Chair of the Board of the McMichael Canadian Art Collection, Chair of the Canadian Arts Summit, Chair of the Advisory Council of Waterloo’s School of Accounting and Finance, Chair of the Advisory Board of Tok Transit and Director on the Boards of Institute for Canadian Citizenship and Metrolinx. Upkar is a FCPA, FCA and holds the ICD.D designation from the Institute of Corporate Directors. He graduated with a Master's degree from the UW's School of Accounting and Finance, where he also teaches. In 2015 he received the Outstanding Alumni Achievement Award to recognize his significant contribution to the university.

Curtis Richardson (DSc, Science)

Curtis Richardson is the John O. Blackburn Distinguished Professor in the Nicholas School of the Environment and Earth Sciences at Duke University. He earned his PhD in ecology from the University of Tennessee and shortly thereafter joined the faculty at Duke University where he has remained for most of his career. His research emphasizes phosphorus and metal biogeochemistry, and focuses on natural and restored wetlands as nutrient sinks and chemical transformers. He has addressed some of the most important wetland issues of our time, including long-term studies on the effects of nutrient phosphorus additions in wetlands in Michigan, Pocosin peatland losses in North Carolina, the restoration of the Everglades of Florida, and the globally endangered wetlands in southern Iraq. He has a long list of books, book chapters, and journal papers which speaks for itself: of note is the high number of papers in leading high-impact international journals, such as Science, Nature Climate Change, Ecological Applications, Restoration Ecology, PloSOne, Proceedings of the National Academy of Sciences, and Environmental Science and Technology. His recent book on “Methods in Biogeochemistry of Wetlands” will be a standard and required reading for all students for decades to come. His stature in the field is exemplified by his list of recognitions having received nearly all that exist for wetland scientists: he was elected President of the Society of Wetland Scientists, the world's largest society for wetland science, and eventually was given its Lifetime Achievement Award. As well he has been elected a Fellow three times, each by the American Association for the Advancement of Science, the Soil Science Society of America, and the Society of Wetland Scientists. Probably the most prestigious of all is his National Wetland Award for Science Research from the Environmental Law Institute, a large national non-governmental organization focused on bringing together government decision-makers, scientists, journalists, and business leaders. He is frequently called upon to serve as advisor to government in the United States and Europe.

Jo Handelsman (DSc, Science)

Jo Handelsman is Howard Hughes Medical Institute Professor and Frederick Phineas Rose Professor in the Department of Molecular, Cellular & Developmental Biology at Yale University. She earned her BS at Cornell
University (1979) and received a doctorate in molecular biology from the University of Wisconsin-Madison (1984).

Professor Handelsman is a leading researcher in the field of microbial metagenomics, particularly of environmental samples. Her publication record in leading journals in her field as well as Nature Reviews, Proceedings of the National Academy of Sciences and others, attests to her international profile in this area, as does her recent election as president of the American Society for Microbiology. She combines research excellence with strong teaching in science: at Yale, she established the Center for Scientific Teaching and has published widely on importance of education in science, including three books about teaching. In addition, she has served as co-director of the National Academies Summer Institutes on Undergraduate Education in Biology. Further, she has been very successful in promoting mentorship, especially of women in science. At Wisconsin and prior to joining on at Yale, she established the Women in Science and Engineering Leadership Institute, and subsequently served on the National Academies' panel that wrote the 2006 report Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering. As a result of her activities in education and mentorship, Professor Handelsman was appointed the first president of the Rosalind Franklin Society.

In 2009, Seed Magazine named her ‘Revolutionary Mind' in recognition of her unorthodox ideas. In 2011, she was one of 11 individuals selected by President Barack Obama to receive the Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring, and in 2012, Nature named her one of the “ten people who mattered this year” for her research on gender bias in science. In 2013, she was named associate director for science at the US Office of Science and Technology by President Obama. She recorded a welcome for the Biology 240 course "Fundamentals of Microbiology", which will be played in the first lecture of this large introductory course for years to come. Professor Handelsman embodies all that scientists strive for in the twenty-first century: not just world-class academic research, but enhancing and emphasizing the role of science in modern society through education, mentorship, and science policy.

Bernard Glick (Distinguished Professor Emeritus, Science)

Bernard Glick has established an international reputation as a leading figure in the study of microbial-plant interactions, and his work includes studies of bacteria that promote plant growth and stress resistance, as well as phytoremediation and microbial remediation. He has undertaken genomic and proteomic studies to understand the molecular activities that give rise to these actions. In addition to understanding the basic biology, his work has contributed to applications in the agriculture and energy industries.

He has more than 250 peer-reviewed publications: his classic review published in 1995 has more than 1,000 citations, and a 1998 paper on a model for ethylene concentration regulation by bacteria has been cited more than 600 times. Another 48 of his papers have been cited more than 100 times and his lifetime h-index is an impressive 61 with more than 14,000 citations. He has been invited to speak at major conferences and institutions worldwide as a leading expert in this area, and he quite literally wrote the book on “Molecular Biotechnology” with Pasternak, well before the molecular biology era. This book is now in its fourth edition and is in use internationally. He has graduated 26 MSc students and more than 20 PhD students, and many of his students have gone on to independent research careers. He has served as department chair from 2002 to 2008, and during his term he presided over significant growth of the department. He has always given the teaching responsibilities of the department the highest priority, and was instrumental in organizing the undergraduate curriculum.

David McKay (DMath, Mathematics)

David McKay, President and CEO of RBC Financial Group, is a champion for using leading technologies to create solutions for the financial services sector. McKay graduated from the University of Waterloo with a Bachelor of Mathematics (Math/Business, Information Systems) in 1987, and Master of Business Administration from the Richard Ivey School of Business at Western University in 1992. McKay spent co-op work terms at RBC during his undergraduate studies, which led to a full-time position when he graduated. He returned to RBC following completion of his MBA in 1992 and has since held progressively senior roles in Canada and Japan across multiple lines of business. From 2005-2008, McKay was the head of Personal Banking, then Executive
McKay’s career at RBC has been distinguished by his recognition of the need to invest in innovation and technology to evolve with changing customer needs. RBC became the first North American financial institution to bring person-to-person electronic money transfers to Facebook Messenger, and introduce RBC Secure Cloud, a mobile payments service which allows users to pay for purchases using their mobile devices while storing their information safely and securely. McKay is also leading RBC’s support for and partnerships with universities, start-ups and accelerators, particularly in transformational technologies such as artificial intelligence, cybersecurity and privacy, and blockchain. He has increased the resources for RBC Research, which now has approximately 80 AI experts performing fundamental and applied research, published in top conferences and journals. McKay has stated that the focus on experimenting with new technologies is a key part of RBC’s strategy to lead the financial services industry in areas such as securing client information, providing compelling new services and opportunities to clients, and addressing global banking issues such as money laundering.

Anand Pillay (DMath, Mathematics)
Anand Pillay is among the most important mathematical logicians alive today. He has been at the center of all the major developments in model theory and its applications for more than four decades. Anand Pillay is one of a small handful of people chiefly responsible for the growth of model theory into a dominant field, highly respected across mathematics for its depth and relevance to a surprisingly large number of areas.

Anand Pillay earned a Bachelor of Arts in mathematics and philosophy at Balliol College, Oxford (1973), followed by an M.Sc. in pure mathematics at King’s College, London (1974), and a Ph.D. at Bedford College, London (1978). He held postdoctoral and visiting appointments in Paris, Manchester and McGill, before joining the mathematics department at the University of Notre Dame in 1983. In 1996, he moved to the University of Illinois where he held the prestigious Swanlund Chair in mathematics for ten years. In 2005 he returned to England, to the University of Leeds, where he held both the European Union supported Marie Curie Chair until 2008, and the Chair of Mathematical Logic until 2013. Anand Pillay returned to the University of Notre Dame in 2013 when he accepted the William J. Hank Family Chair in the mathematics department.

He has written over 200 research articles and several books; his work has been cited over 2,000 times. He spoke at the International Congress of Mathematicians in Zurich in 1994, and was awarded the Humboldt Foundation Research Prize in 2001. He is a Fellow of the American Mathematical Society (2013), and has given several high profile lectures including the Tarski Lecture in Berkeley (2009), and the Gödel Lecture at the Association of Symbolic Logic European Meeting (2011). He has also served the mathematical community as an editor for prestigious journals, such as the Journals of the London Math Societies, Notre Dame Journal of Formal Logic, Journal of the American Mathematical Society, and Algebra & Number Theory.

Robert Tibshirani (DMath, Mathematics)
Dr. Robert Tibshirani is among the top statisticians today. He is one of the pioneers of modern statistical tools used for analysis of big data, and his work has shaped the future directions of theoretical and applied statistics in the areas of complex data sets, statistical learning, and classification. He has also made broad and important contributions to genetics, medicine, and public health.

Dr. Robert Tibshirani obtained an undergraduate statistics and computer science degree from the University of Waterloo (1979), a Masters Degree in statistics (1980) from the University of Toronto, and a Ph.D from Stanford University (1984). From 1985 to 1998, Tibshirani was a professor and NSERC University Research Fellow (1985-1994) at the University of Toronto; he is currently a professor at Stanford University in the Department of
Biomedical Data Sciences and Department of Statistics. Tibshirani is widely published including five books and over 240 research papers in tier-1 journals. His work is widely cited with 270,000 citations (according to Google Scholar), making him one of the most highly cited authors in the field of mathematical sciences.

For his exceptional contributions, Dr. Robert Tibshirani has received a number of prestigious awards and recognitions, including the J. Guggenheim Foundation Fellowship (1994), worldwide COPSS Award (1996), E.W.R. Steacie Memorial Fellowship (1997), CRM-SSC Prize (2000), IMS medallion lecturer (2007), and the Gold Medal of the Statistical Society of Canada (2012). He was elected a Fellow of the Royal Society of Canada in 2001 and to the National Academy of Sciences in 2012. He is a Fellow of the American Statistical Association and the Institute of Mathematical Statistics.

M. Tamer Özuş (University Professor, Mathematics)
Professor Özuş joined the David R. Cheriton School of Computer Science in 2000, following 16 years at the University of Alberta. In addition to being a prominent faculty member, he has served as both Director of the School and Associate Dean (Research) of the Faculty. Professor Özuş has focussed on big data problems — long before “big data” entered our lexicon. He is the co-author of a classical textbook on distributed and parallel data management and the Co-Editor-in-Chief of the *Encyclopedia of Database Systems*.

Prof. Özuş’s awards, honours and contributions are too numerous to list in full. He is a Fellow of the Royal Society of Canada, American Association for the Advancement of Science, Association for Computing Machinery, and Institute for Electrical and Electronics Engineers. He is an elected member of the Science Academy of Turkey, and a member of Sigma Xi. He was awarded the ACM SIGMOD Test-of-Time and Contributions Awards.

Professor Özuş’s career is also characterized by service to the academic community, serving on and chairing boards of many professional organizations, chairing the NSERC Computer Science Grant Selection Committee, and serving on the editorial boards of many publications, including as Founding Editor-in-Chief of *ACM Books Series* and Founding Series Editor of *Synthesis Lectures on Data Management*.

Dean Kamen (DEng, Engineering)
Dean Kamen is an inventor, an entrepreneur, and a tireless advocate for science and technology. His roles as inventor and advocate are intertwined—his own passion for technology and its practical uses has driven his personal determination to spread the word about technology's virtues and by so doing to change the culture of the United States. As an inventor, he holds more than 440 U.S. and foreign patents, many of them for innovative medical devices that have expanded the frontiers of health care worldwide. While still an undergraduate, he invented the first wearable infusion pump, which rapidly gained acceptance from such diverse medical specialties as oncology, neonatology, and endocrinology. In 1976, he founded his first medical device company, AutoSyringe, Inc., to manufacture and market the pumps. Then, working with leading diabetes researchers, he pioneered the design and adoption of the first portable insulin pump. Following the sale of AutoSyringe, Inc., he founded DEKA Research & Development Corporation to develop internally generated inventions as well as to provide research and development for major corporate clients. One of his proudest accomplishments is founding FIRST (For Inspiration and Recognition of Science and Technology), an organization dedicated to motivating the next generation to understand, use and enjoy science and technology. Founded in 1989, this year FIRST will serve more than 400,000 young people, ages 6 to 18, in more than 86 countries around the globe. Last year, high-school-aged participants were eligible to apply for more than $50 million in scholarships from over 200 leading colleges, universities, and corporations.

He has received many awards for his efforts. He was awarded the National Medal of Technology in 2000. Presented by President Clinton, this award was in recognition for inventions that have advanced medical care worldwide, and for innovative and imaginative leadership in awakening America to the excitement of science and technology. He was also awarded the Lemelson-MIT Prize in 2002, and was inducted into the National Inventors Hall of Fame in May 2005. He is a Fellow of the American Institute for Medical & Biological Engineering, and
has been a member of the National Academy of Engineering since 1997. In 2010, Dean hosted the Planet Green television series *Dean of Invention*.

**Patrick G. Awuah, Jr. (DEng, Engineering)**
Patrick Awuah is president and founder of Ashesi University in Ghana, which is a private, non-profit university. Prior to this role he had a very successful career at Microsoft in the United States; however, he set aside this remarkable success in favour of following his passion as he returned to his home country to apply himself toward founding and developing a strong new university.

Earning a BS in engineering and a BA in economics from Swarthmore College, and his MBA from the University of California, Berkeley, he spent eight years in program management and business systems at Microsoft Corporation where he contributed in areas of remote access technologies and worked to develop a network interface standard, among other successes at the company. He then set out to found Ashesi University in 2002, which today offers six degree programs in business and technical subjects with a focus on rigorous ethical principles and leadership. He has been awarded a MacArthur Fellowship, the McNulty Prize, and is a member of the Order of the Volta, one of Ghana’s highest awards. In 2014 he was recipient of the Elise and Walter A. Haas International Award, and in 2015 he was named one of the World’s 50 Greatest Leaders by Fortune.
Senate Undergraduate Council met on 10 April 2018 and agreed to forward the following items to Senate. Council recommends that these items be included for information or approval, as noted, in the consent agenda.

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

FOR APPROVAL

FACULTY REGULATION CHANGES
Faculty of Mathematics
1. Extended Withdrawals and Absences

Motion: That Senate approve the deletion of the section titled “First-year Withdrawal” under the section “Extended Absences and Withdrawals” effective 1 September 2019.

Background and Rationale:
The current policy can be found at: http://ugradcalendar.uwaterloo.ca/page/MATH-Math-Faculty-Policies.

Text with revisions inline (strikeout = deleted text; bold = new text):

...Extended Absences and Withdrawals
First-year Withdrawal
A first-year student who has never previously been registered at a degree-granting post-secondary institution will normally be permitted to withdraw from all of their courses without academic penalty until the last official day of lectures for their first term. These courses will continue to appear on the student’s academic record with a grade of WD. Even though a WD appears, these attempts will not impact a student’s academic progress. Such students may resume their studies after an absence of two terms (eight months). Students wishing to pursue this option should contact the Registrar’s Office.

Rationale for the proposed revisions: Given the change in the treatment of withdrawals (WDs), there is now little incentive for students to choose this option (up until the WD deadline, there is no longer an academic penalty to be waived). Furthermore, there is little evidence to suggest that the required two-term absence has had any significant benefit; among students who have exercised this option in the past six years, there have been very few successful returns to the Faculty (out of 50 students, four have either graduated from Math or are in good standing).
Faculty of Mathematics
2. Degree Requirements

Motion: That Senate approve the deletion of the maximum allowed units of course attempts in “Table I – Degree Requirements” effective 1 September 2019.

Background and Rationale:
The current policy can be found at: http://ugradcalendar.uwaterloo.ca/page/MATH-Degree-Requirements-for-Math-students.

Text with revisions inline (strikeout = deleted text; bold = new text):

…Table I - Degree Requirements
Legend
* The minimum co-op work-term course units for the Chartered Accountancy and Teaching plans are 2.0.
** WKRPT courses have a credit weight of 0.13 units. A student needs PD 11 (formerly PD 2) and three WKRPT courses to satisfy the ‘four work report’ requirement.
*** Students in Mathematical Studies plans are permitted up to 4.0 units of failed or excluded courses.
**** This requirement may be waived at the discretion of the student’s academic advisor.

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Four-Year Honours Plans</th>
<th>Double Degree Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Co-op</td>
<td>Regular</td>
</tr>
<tr>
<td>Minimum course units (excluding courses with the subject COOP, PD, and WKRPT)</td>
<td>20.0</td>
<td>20.0</td>
</tr>
<tr>
<td>Minimum COOP course units</td>
<td>2.5*</td>
<td>0</td>
</tr>
<tr>
<td>Minimum PD course units</td>
<td>2.5</td>
<td>0</td>
</tr>
<tr>
<td>Minimum WKRPT course units</td>
<td>0.39**</td>
<td>0</td>
</tr>
<tr>
<td>Minimum non-math units</td>
<td>5.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Minimum Cumulative Average (CAV)</td>
<td>60%</td>
<td>60%</td>
</tr>
<tr>
<td>Minimum Major Average (MAV)</td>
<td>65%</td>
<td>65%</td>
</tr>
<tr>
<td>All Applied Mathematics (AMATH) including Mathematical Physics, Combinatorics and Optimization (C&amp;O) including Mathematical Optimization (MO), Pure Mathematics (PMATH), and Statistics (STAT) plans</td>
<td>70%</td>
<td>70%</td>
</tr>
<tr>
<td>Mathematical Finance</td>
<td>60%</td>
<td>60%</td>
</tr>
<tr>
<td>In addition, a minimum special major average (SMAV) may apply. Please see the more comprehensive table of major averages.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum failed or excluded course units (excluding courses with the subject COOP, PD, and WKRPT)</td>
<td>2.0***</td>
<td>2.0***</td>
</tr>
<tr>
<td>Maximum unusable course attempts</td>
<td>5.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Maximum allowed units of course attempts (excluding courses with the subject COOP, PD, and WKRPT)</td>
<td>25</td>
<td>25</td>
</tr>
</tbody>
</table>
Senate Undergraduate Council  
22 May 2018, Report to Senate (Consent)  

page 3 of 26

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Four-Year Honours Plans</th>
<th>Double Degree Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum number of full-time terms</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Communication Skills</td>
<td>All degree candidates must satisfy a Communication Skills Requirement. See below.</td>
<td></td>
</tr>
</tbody>
</table>

Rationale for the proposed revisions: This rule has routinely been waived for students in good standing who simply want to take extra courses. It was also redundant, in the sense that its purpose is satisfied by the two requirements of (1) a minimum of 20.0 units to be successfully completed and (2) a maximum of 5.0 unusable attempts. Finally, now that WDs are no longer classified as unusable course attempts (but still classified as course attempts, to prevent students from taking the same course repeatedly), the rule is now, in fact, inconsistent with those two requirements.

Faculty of Mathematics
3. Academic Standing within the Faculty

Motion: That Senate approve the deletion of certain conditions related to the requirement to withdraw from the Faculty, as identified below, effective 1 September 2019.

Background and Rationale:
The current policy can be found at: http://ugradcalendar.uwaterloo.ca/page/MATH-Math-Faculty-Policies#standing.

Text with revisions inline (strikeout = deleted text; bold = new text):

…Academic Standing within the Faculty

This section specifies the rules that determine a student’s academic standing. A student’s standing determines whether a student is able to proceed in the Faculty or in their chosen plan, how many courses they are able to take in the next term, etc.

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Standing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any of the following:</td>
<td>Required to withdraw – may not continue in Faculty</td>
</tr>
<tr>
<td>• The student has more than 4.0 units of failed or excluded courses, or</td>
<td></td>
</tr>
<tr>
<td>• The student’s total unit value of unusable course attempts exceeds 5.0 units, or</td>
<td></td>
</tr>
<tr>
<td>• The student did not pass at least two courses in their first full-time 1A term, unless the one course passed is a math course with a grade of at least 60% and the Standings and Promotions (S&amp;P) Committee has approved the student to continue with their studies, or</td>
<td></td>
</tr>
<tr>
<td>• The student cannot earn a degree within the permitted maximum number of course attempts (this requirement may be waived at the discretion of the student’s academic advisor) (see Table 1), or</td>
<td></td>
</tr>
<tr>
<td>• In the opinion of Standings and Promotions Committee, the student is unlikely to profit from further study in the Faculty or is not making satisfactory progress toward fulfilling degree requirements.</td>
<td></td>
</tr>
</tbody>
</table>
Rationale for the proposed revisions: For the first deletion: since WDs no longer count as unusable course attempts, students who WD all of their courses before the WD deadline will be permitted to continue into the next term. S&P will continue to examine 1A performance, and may act under the last bullet above. For the second deletion: there is no longer a maximum number of course attempts permitted.

Faculty of Mathematics
4. Plan Combinations

Motion: That Senate approve the addition of the plans identified below to the section “Specific Invalid Multiple-Plan Combinations” effective 1 September 2019.

Background and Rationale:
The current policy can be found at: http://ugradcalendar.uwaterloo.ca/page/MATH-BCS-and-BMath-Academic-Plan-Combinations.

Text with revisions inline (strikeout = deleted text; bold = new text):

…Specific Invalid Multiple-Plan Combinations

<table>
<thead>
<tr>
<th>Plan</th>
<th>Cannot be Combined With</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Administration and BCS/BMath double degree plans</td>
<td>Any plan similar to one appearing on the student’s Laurier academic record transcript</td>
</tr>
<tr>
<td>BCS/Business Option or BMath (Computer Science)/Business Option</td>
<td>A minor or option in Economics, Human Resources Management, or Management Studies</td>
</tr>
<tr>
<td>BCS/Bioinformatics Option or BMath (CS) Bioinformatics</td>
<td>Any plan offered by the Biology Department</td>
</tr>
<tr>
<td>Applied Mathematics/Biology Option</td>
<td>Any plan offered by the Biology Department</td>
</tr>
<tr>
<td>BCS (Data Science)</td>
<td>The Artificial Intelligence Option</td>
</tr>
<tr>
<td>Applied Mathematics/Earth Sciences Option</td>
<td>Any plan offered by the Earth and Environmental Sciences Department</td>
</tr>
<tr>
<td>Applied Mathematics/Economics Option</td>
<td>Any plan offered by the Economics Department</td>
</tr>
<tr>
<td>Applied Mathematics/Physics Option</td>
<td>Any plan offered by the Physics and Astronomy Department</td>
</tr>
<tr>
<td>Mathematical Economics</td>
<td>Any other plan offered by the Economics Department</td>
</tr>
<tr>
<td><strong>Computer Science Joint (BCS or BMath)</strong></td>
<td>A Joint Statistics</td>
</tr>
<tr>
<td><strong>Computational Fine Arts Option</strong></td>
<td>Any plan offered by the Fine Arts Department</td>
</tr>
<tr>
<td>Computing Technology Option</td>
<td>Computer Science Minor or Information Technology Management</td>
</tr>
<tr>
<td>Mathematical Physics</td>
<td>Any other plan offered by the Physics and Astronomy Department</td>
</tr>
<tr>
<td>Mathematical Studies (with or without a Business Specialization)</td>
<td>Any other stand-alone or Math Joint plan</td>
</tr>
<tr>
<td>Mathematical Studies/Business Specialization</td>
<td>A Management Studies Option or Minor</td>
</tr>
<tr>
<td>Scientific Computation/Applied Mathematics</td>
<td>Any plan offered by Computational Mathematics</td>
</tr>
</tbody>
</table>
Rationale for proposed revisions: Due to substantial curricular overlap with Fine Arts, the Computational Fine Arts Option cannot be combined with any Fine Arts plans. The Data Science plan was created to replace the Joint Computer Science and Joint Statistics plan combination.

Registrar’s Office
5. Drop/Add Deadlines

Motion: That Senate approve the following additions to and deletions from the undergraduate calendar related to drop/add deadlines effective 1 September 2019.

Background and Rationale:

In order to recreate harmonized text in the undergraduate calendar with respect to drop/add dates, the following changes are proposed.

Add the following text to the section of the undergraduate calendar: University Policies, Guidelines, and Academic Regulations - > Courses

Drop/Add Deadlines

Normally, a student may add or swap a course through the 10th lecture day of the term and drop a course from the academic record through the 15th lecture day. A course dropped from the 16th lecture day through to the 50th lecture day will remain on the academic record with a grade of WD. A course dropped after the 50th lecture day will remain on the record with a grade of WF. Students cannot drop a course during the final examination period. These dates can be found in the Calendar of Events and Academic Deadlines.

Add and drop periods may be adjusted for courses shorter than the 12-week formal lecture period.

Revise the following Faculty-specific text in the undergraduate calendar:

Environment

Current text can be found at: http://ugradcalendar.uwaterloo.ca/page/ENV-Plans-SubPlans-Course-Enrolment-Grading.

Text with revisions in line (strikeout = deleted text; bold = new text):

…Information Pertaining to Courses, Enrolment, and Grades

The Calendar of Events and Academic Deadlines section is updated each academic year and provides important academic dates specific to each term. It is important that students refer to this section and speak with their advisor when considering course changes or withdrawals to ensure they have an understanding of any potential academic or financial consequences.

1. Dates are assigned each term that allow students to add and/or drop courses. Typically students have until the tenth day of lectures to add courses and the fifteenth day of lectures to drop courses. If a course is dropped within this time frame, the course will be completely removed from the student’s record with a 100% tuition refund.
2. Courses dropped during the Drop, Penalty 1 period are automatically assigned the grade WD (Withdrawn after the drop deadline, no credit granted). No numerical grade is associated with a WD.

3. Courses dropped during the Drop, Penalty 2 period are automatically assigned the grade WF (Withdraw/Failure, no credit granted). The grade WF is equivalent to 32% and will be calculated into term and cumulative averages.

4. Students may petition, because of special circumstances, for relief from the consequences of a late drop or withdrawal (see Examinations, Petitions and Grievances, and Academic Standing).

Science

Current text can be found at: [http://ugradcalendar.uwaterloo.ca/page/SCI-Adding-and-Dropping-Courses](http://ugradcalendar.uwaterloo.ca/page/SCI-Adding-and-Dropping-Courses).

Text with revisions in line (strikeout = deleted text; bold = new text):

Adding and Dropping Courses

1. Students wishing to add or drop courses should refer to the Calendar of Events and Academic Deadlines.

2. The ability to add courses during the first two weeks of the term is subject to specific course restrictions.

3. Students can petition for relief from the consequences of a late drop or withdrawal through the Science Petitions Committee.

Rationale for the proposed revisions:
By creating text for the “University Policies, Guidelines, and Academic Regulations” section of the undergraduate calendar, and removing similar text currently located in some Faculty sections, greater transparency is provided to students on how the drop and add dates are determined. Currently, the only information provided is about deadlines dates. All six faculties assented to this text.

ACADEMIC PLAN INACTIVATIONS

Faculty of Mathematics

Motion: That Senate approve the inactivation of the Health Informatics Option, effective 1 September 2019.

Background and Rationale: There has been low uptake of this option. Currently, there are six active students, and only five students have ever graduated with this option. The Faculty of Applied Health Sciences has been consulted and indicated that the inactivation will have no impact on the School of Public Health and Health Systems Health Informatics option.

FOR INFORMATION

ACADEMIC PROGRAM REVIEW REPORT

Final Assessment Report – Philosophy
Council approved the final assessment report for Philosophy on behalf of Senate, noting the quality of the program and progress made to date against the recommendations. See Attachment #1.

NEW UNDERGRADUATE AWARDS
Attachment #2 to this report contains a listing of newly-approved awards.
MINOR PLAN & CURRICULAR MODIFICATIONS
Council approved the following on behalf of Senate:

- minor plan changes for: applied health sciences (minor in medical physiology, minor in gerontology, option in aging studies, diploma in gerontology, accelerated master’s in the School of Public Health and Health Systems); arts (bachelor of accounting and financial management, specializations in fine arts, three-year general fine visual culture, Italian studies); mathematics and arts (computing and financial management); mathematics (bachelor of computer science, computational fine arts option, Chartered Financial Analyst specialization, mathematical economics); science (honours biomedical science); Renison (bachelor of social work).
- new courses for: co-operative education (PD course); arts (English language and literature, history, sociology and legal studies).
- course changes for: applied health sciences (School of Public Health and Health Systems); arts (School of Accounting and Finance, anthropology, dean of arts, gender and social justice, social development studies, social work, Spanish and Latin American studies, Italian studies); mathematics (commerce, computer science, mathematics, pure mathematics, statistics and actuarial sciences).
- course inactivations for: applied health sciences (School of Public Health and Health Systems); arts (School of Accounting and Finance); science (dean of science).

Mario Coniglio
Associate Vice-President, Academic

/rmw
Final Assessment Report  
Philosophy (BA, MA, PhD, Minor)  
July 2017

**Summary of the Program Review:**
In accordance with the University Institutional Quality Assurance Process (IQAP), this final assessment report provides a synthesis of the external evaluation and the internal response and assessments of the programs (BA, MA, PhD) delivered by the Department of Philosophy. Volume I of the self-study was submitted to the Associate Vice-President, Academic and Associate Vice-President, Graduate Studies and Postdoctoral Affairs in June 2016. The self-study presented the program descriptions and learning outcomes, an analytical assessment of these three programs, an undergraduate and graduate student survey, and the standard data package prepared by the Office of Institutional Analysis & Planning (IAP). The course outlines for all courses in the program were also appended. The CVs for each full-time faculty member in the program were included in self-study Volume II.

Two arm’s-length external reviewers were selected from Volume III of the self-study by the Associate Vice-President, Academic and Associate Vice-President, Graduate Studies and Postdoctoral Affairs: Dr. Moira Howes, Dean of Arts and Science, Trent University, and Dr. Colin Macleod, Department of Philosophy, University of Victoria. In addition, one internal university reviewer (Dr. Jonathan Witt, Biology) was also selected.

A site visit to the University took place on October 21 and 22, 2017. The visit included interviews with the Vice-President, Academic and Provost; Associate Vice-President, Graduate Studies and Postdoctoral Affairs; Dean of the Faculty of Arts; Faculty Associate Dean of Graduate Studies; Chair of the Department; the Liaison Librarian for Philosophy; faculty members, staff, and meetings with a group of current undergraduates as well as graduate students.

This final assessment report is based on information extracted, in many cases verbatim, from the self-study, the external reviewers’ report and the program response.

---

1 The Associate Provost, Graduate Studies title changed to Associate Vice-President, Graduate Studies and Postdoctoral Affairs as of June 2017.
July 2017
Program characteristics:

BA
The first offering of a Bachelor of Arts degree in Philosophy began in 1961, and in 1963 a Honours Bachelor of Arts degree was added. The Department offers an Honours, a Joint Honours, a Four-Year General, and a Three-Year General degree, along with a Minor. The Department is also home to the Cognitive Science program, which offers a Minor, and the Women’s Studies program, which offers the same range of degrees as the Philosophy program. Both the Cognitive Science program and the Women’s Studies program are currently reviewed separately from the Philosophy program.

MA and PhD
The Masters and PhD program both started at the same time in 1964. As the administrative home of Cognitive Science and the director of the Centre for Theoretical Neuroscience, it is also responsible for two graduate diplomas, one in Cognitive Science and one in Theoretical Neuroscience, which are currently reviewed separately from the Philosophy program. As of the Fall Term 2016, the Department began offering a PhD in Applied Philosophy.

Approved fields offered for graduate programs are (1) Ethics and Political Philosophy, (2) Language, Logic and Metaphysics, (3) Philosophy of Mind and Cognitive Science, and (4) Philosophy of Science and Mathematics.

Summary of strengths, challenges and opportunities based on self-study:

Undergraduate

Strengths
- The program has a strong commitment to ensuring high quality instruction in all of its undergraduate courses

- There is a wide range of high quality courses of interest to non-majors, both service courses required in other programs and courses that are popular electives

- The Department has a commitment to equity, both within the philosophy profession and more generally in academia and in society. The Department struck an equity task force including faculty and grad students in 2014/15 to identify equity issues that could be addressed at the Department level and implemented its recommendations

- The Department is home to two related named chairs, an endowed Chair in Scientific and Technological Literacy and a University funded chair in Science and Society; As a

July 2017
result, the Department is surely one of the strongest in the country in philosophical issues in science and society

- The program pioneered a pedagogically sound and cost-effective model for delivery of online courses; originally supported by a contract faculty position, once its value was established it was supported by a new permanent faculty position

**Challenges**

- There are relatively small number of majors, suggesting efforts are warranted to remove potential barriers for prospective students

- The Department is only able to offer a small number of 400-level courses each year, which is unfortunate for students wishing for greater choice (this was reflected in the student/alumni survey)

- The community among undergraduate students is not yet robust – work is needed to make that community visible and to increase a sense of cohort among undergraduate students

- Under the new resource allocation model (aka “activity based budgeting”), the Department’s health will be increasingly dependent on teaching activity, including service teaching

**Opportunities**

- The revised program structure gives the Department an opportunity to carve out an essential niche in the University – as provider of “Arts electives” that are plausibly viewed as an essential part of a well-rounded education for a student in various STEM disciplines (or indeed, for other disciplines in Arts)

- The revised program should enable the Department to increase the number of students doing combined majors and combining Philosophy with Arts and Business Co-op

- The move of Women’s Studies (WS) into the Philosophy Department creates opportunities to improve the student experience for students in both programs (e.g., joint activities between the two student societies, jointly sponsored visiting talks aimed at undergraduate students, etc.)

- There is opportunity for growth in both the Women’s Studies and Cognitive Science programs
- The Department is considering extending its online offerings so that an Honours degree will be available entirely online, rather than just the General degree

**Graduate**

**Strengths**
- The program provides a very high quality graduate education in Philosophy as witnessed by the awards the students win and the jobs they land, within and outside academia
- The program has productive scholars in a wide diversity of philosophical areas, thus providing students with many options for mentoring and supervision
- Philosophy is at the forefront of the effort to “Remake the Humanities PhD” by devoting more attention to the plurality of careers Philosophy students can successfully pursue, and is investing significant effort in preparing them for this
- The new Applied Philosophy PhD will be unique in Canada (and in certain respects, in the world)
- The external reviewers laud the pedagogical initiatives in the Department, suggesting that it will become “a disciplinary leader” thanks to its progressive curriculum, creative pedagogy, development of a successful model of peer review of teaching, and mentoring of graduate student instructors

**Challenges**
- There is relatively little course selection available for students in Philosophy’s graduate programs
- The current funding packages that are offered to students make it very hard to compete for the students. Some do not apply after they make a first inquiry about the level of support, but more serious students are often lost to other Departments with richer financial offers. Funding levels may also present a challenge for students who do enroll
- The Program has an increasing number of students requiring accommodation for health issues, especially mental health issues

July 2017
The Program’s highest research profile faculty member recently retired. The Department will need to hire well when it replaces him, and continue to provide opportunities for other faculty members to develop their profiles as researchers, to maintain the Department’s reputation for research.

**Opportunities**

- The creation of the Applied Philosophy PhD provides the Department with an opportunity to establish a unique profile in Canadian Philosophy departments.

- To create a culture in the Department where everyone is expected to carry their share of the load – in service, as teachers of both small and large classes, and as supervisors, and so to provide all department members with opportunities to establish significant research profiles.

- A serious commitment has been made to prepare graduate students, especially PhD students, for a range of jobs outside academia, since, as is typically in North American Humanities programs, only approximately 30% of PhD graduates will eventually land tenured appointments somewhere. The Department is a leader among Canadian Philosophy Departments in this regard.

**Summary of key findings from the external reviewers:**

The undergraduate and graduate programs offer a well-designed curriculum of high academic quality that meets the university’s strategic direction for outstanding academic programming. This excellence is achieved via an undergraduate curriculum that allows students to develop in-depth knowledge and methodologies in the major areas of philosophy and experience innovative courses and pedagogies that extend the reach of the discipline. Graduate courses, supervision, and research activities similarly support graduate students in the pursuit of scholarly excellence and professionalization.

Graduate students in this Department learn from leading edge researchers and are exposed to the latest findings, philosophical positions, and methods in the field. They also have sufficient opportunities to interact with well-established faculty from other universities over the course of their studies and thereby gain exposure to different ideas and approaches. Some of the research in the Department is also cross-disciplinary with the sciences which creates further opportunities for analyzing and contextualizing empirical data as well as learning about the problems of interest in other fields of study for which philosophy may provide illumination. Overall, the UW Department of Philosophy provides a rich educational context that well-serves its program goals and learning outcomes.

July 2017
Research in the Department is internationally recognized and contributes new content and methodology to the discipline. It is clear that the innovative research of faculty is behind many of the creative, high quality program offerings and pedagogical approaches offered in the Department.

Program response to external reviewer recommendations

Recommendations

1. To maintain its strengths in Philosophy and Cognitive Science, the external reviewers recommended that the university proceed with a replacement position for Prof. Thagard upon his retirement.

Response
The Department agrees that such a replacement is vitally important. However, the Department also recognizes that there are constant financial pressures on both the University and the Faculty of Arts, and that decisions about faculty replacement cannot be made in isolation from broader strategic considerations. The Department will work together with others, in the Faculty of Arts and more broadly across the University, on various program initiatives (for instance, the possibility of creating an Arts and Science program or of expanding the current minor in Cognitive Science into an honours program) to ensure that the addition of a philosopher of mind to the Department is also an important contribution to those program initiatives. In this way, meeting the Department’s need will also advance other strategic goals, such as attracting additional undergraduate students to the Faculty of Arts, as well.

2. The current graduate funding model is insufficient and the university should address this problem to ensure the continued health of the graduate programs.

Response
The Faculty of Arts and the Department are exploring all options internal to the Faculty and with central support to identify ways in which student funding can be made more competitive, with the longer term goal of improving student attraction and quality of life. The reviewers are quite correct that the health of the Department’s graduate programs depends on sensible adjustments to the way graduate funding (and in particular the initial offers, since actual funding often exceeds what we are in a position to offer up front) are determined for our students.
3. The Department should investigate the possibility of finding tutorial space for one or more of its first year courses.

Response
The issue of first year tutorials is one on which opinion in the Department is split. Some see pedagogical advantages for first year students and professional development opportunities for graduate students who would run the tutorials. Others see a loss of contact time between students and research faculty and, since teaching assistants (TAs) in Arts work 140 hours per term and are available only in courses with quite high enrollment, an inability to offer appropriate feedback on scaffolded assignments in sections of courses large enough to have TAs.

The Department will therefore endeavor to take an evidence-based approach to making a decision about whether to change some or all of our first year courses to a tutorial model. During the 2017-18 academic year, the Undergraduate Committee will strike a subcommittee to: (a) investigate the feasibility of acquiring reasonably scheduled times for tutorials for courses that have never had them to date; (b) consult with stakeholders, including the current graduate students in the department; (c) investigate, perhaps in consultation with the Centre for Teaching Excellence, what research exists about the pedagogical value of tutorials in first year courses and compare it to the research available on the value of marking-time intensive scaffolded assessments of the sort typical in the courses as currently taught. The subcommittee will report to the Department as a whole so a decision can be taken about whether we want to move towards tutorials for our first year courses.

4. Given increased attention to the value of experiential learning, the Department should consider modest developments in experiential education at the upper-year undergraduate level. Relationships that emerge from the new PhD in Applied Philosophy may be useful in supporting experiential learning opportunities at the undergraduate level. The Department might also consider whether a new course in the area of applied philosophy might be added to the undergraduate curriculum: graduate students in the Applied Philosophy program will be well-positioned to teach (or perhaps team-teach) a course in this area.

Response
In the self-study report, the Department flagged one Undergraduate Degree Learning Expectation (UDLE) as not obviously being met by current programs: the University of Waterloo-specific UDLE that each student should have “experiential or applied opportunities.” The Department recognized explicitly that we could tell a story about meeting the UDLE already (we offer, for instance, many courses in Applied Ethics and Philosophy of X for various values of X), but suggested that we would prefer to satisfy
this requirement in a more substantial way. We therefore strongly welcome this recommendation.

During 2017-18, once the current Undergraduate Chair returns from sabbatical, the Undergraduate Committee will carry out appropriate investigations and do the “considering” requested by the reviewers. Among other things, the Committee will investigate whether the experiential education initiatives we take might situate Philosophy students who are not registered in Arts and Business Co-op so that they can readily qualify for an EDGE certificate.

5. UW and the Department should consider alternatives to the current arrangement whereby the Waterloo Philosophy Department supports St. Jerome’s Philosophy Department when its enrolments decline. This arrangement does not clearly support the health of either program. More mutually beneficial arrangements should be explored.

Response
It may be worthwhile to clarify the issue. As things currently stand, on-campus departments that have analogue departments in the AFIW (Affiliated and Federated Institutions of Waterloo) are expected to keep a particular balance in teaching activity between the departments, with the balance seemingly having been negotiated many years ago. One way in which this is problematic is that if enrollments are growing in one department because, for instance, popular new courses are introduced, new faculty are hired, or there is an increase in the number of online courses which one department offers and the other does not, the department where teaching is increasing is expected to “hand over” some of its popular courses to keep the prescribed balance between the amount of teaching in the departments. This seems to be a textbook example of how a system can create unhelpful incentives, and is especially problematic as Faculty budgets are increasingly closely tied to teaching activity.

Once again, this is not a recommendation that can be carried out by the Department acting alone, as they are tied up with inter-institutional agreements between the University of Waterloo and the AFIW. We will bring these issues to the attention of the senior administration of the University.

6. The Department should review the processes it has in place for ensuring that Teaching Assistants have a clear understanding of their work responsibilities and the character of the employment agreement they have. It appears that there are currently some misunderstandings between graduate students and the Department about the terms of employment (e.g., whether, or the sense in which, teaching assistants are party to a
contract) and about how problems concerning the interpretation and adherence to the terms of employment are to be resolved.

**Response**

It is not clear that any process will entirely rule out misunderstanding. We want to begin by noting that the Department has for some time been making significant efforts to address precisely this sort of concern: Philosophy was one of the first departments on campus to insist that all TA assignments be governed by an agreement signed by the instructor and the TA; we have long had a TA Handbook that talks in some detail about expectations for TA work in the Department; and during the annual graduate student orientation sessions we do our best to make clear that the doors of the Chair and the Associate Chair for Graduate Studies are always open to TAs with concerns. However, we of course acknowledge that improved processes are always a good idea.

The Department has for some time been pursuing an initiative to develop a “Best Practices for Working with TAs” document. At our January 2017 department meeting a draft, based on consultations with sessional instructors and teaching assistants, was circulated, and it will be discussed by regular faculty at our February department meeting. As currently drafted, the document goes well beyond articulating formal terms of employment by clearly articulating departmental norms, and the current draft proposes a mechanism for TAs who might be nervous about complaining about an instructor they might one day need a letter of reference from to have their concerns heard without identifying them as the source of the concern. We hope to have a version of the document formally adopted by the end of 2017. (The Department is also aware that a systematic review of Policy 30, which governs the relationship between TAs and Instructors, is ongoing, and will update the document to ensure consistency with any changes to Policy 30 when the time comes.)

7. The Department should explore the possibility of helping the Undergraduate Philosophy Student Society create an annual student conference. There are many universities nearby so it should be possible to attract participation from students and faculty (as keynotes) from outside UW. The effort might help build the sense of community the Department seeks to cultivate and a modest one-day conference can be mounted relatively inexpensively.

**Response**

The Department has recently made it a priority to try to help its undergraduate student societies (the Philosophy Society and the Women’s Studies Society) thrive, while allowing them to maintain a significant degree of autonomy from the Department, since we view this as a way to improve the experience students have while studying here.
Among the ways we have done so is to encourage the current members of these societies to think about various initiatives they are interested in pursuing as a group, with an offer that the Department will resource the initiative as appropriate when we have the capacity to do so. In December 2016, shortly before we received the external reviewers’ report, there was a meeting of the executives of the two societies, the faculty advisors to the societies, and the Chair. At this meeting several initiatives were discussed. Each society chose one that would be its primary focus for the rest of the current academic year, and several joint events were planned for the remainder of the current year.

The primary goal for this year for the Philosophy Society is the launch of an online undergraduate journal, with the support of the Library. The Department will (indeed has already) suggested an undergraduate philosophy conference as a possibility for the future. Should the executive of PhilSoc decide that an annual conference is something they are interested in launching, the Department will support them so that it can be a success.
# Implementation Plan:

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Proposed Actions</th>
<th>Responsibility for Leading and Resourcing (if applicable) the Actions</th>
<th>Timeline for addressing Recommendations</th>
</tr>
</thead>
</table>
| 1. To maintain its strengths in Philosophy and Cognitive Science, we recommend that the university proceed with a replacement position for Prof. Thagard. | Investigate ways to ensure such a hire advances various priorities for Arts | Dean of Arts (resourcing) and Chair of Philosophy (program ideas) | Decision during 2017-18 academic year.  
[Update March ’18: the department will be advertising for a replacement in Fall 2018.] |
| 2. The current graduate funding model is insufficient and the university should address this problem to ensure the continued health of the graduate programs. | Department will work with AP Graduate Studies and Arts Grad Studies office to compare Waterloo packages to competitors, find ways to more clearly articulate likely actual levels of support in offer letters | Department Chair; Dean of Arts and Associate Provost, Grad Studies | By Fall 2017, for implementation for grad admissions round in Winter Term 2018; this has been an item of discussion among Arts Chairs and the Dean of Arts during Fall Term 2017.  
[Update March ’18: the funding package we are able to offer for Fall 2018 has been improved for domestic Master’s and PhD students] |
| 3. The Department should investigate the possibility of finding tutorial space for one or more of its first year courses. | Subcommittee of the Undergraduate Committee will do this as part of a broader | Associate Chair, Undergraduate | Investigation during 2017-18, with a decision by Spring 2018; Draft report presented at Department Senate Undergraduate Council  
22 May 2018, Report to Senate (Consent)  
July 2017
Given increased attention to the value of experiential learning, the Department should consider modest developments in experiential education at the upper-year undergraduate level. Relationships that emerge from the new PhD in Applied Philosophy may be useful in supporting experiential learning opportunities at the undergraduate level. The Department might also consider whether a new course in the area of applied philosophy might be added to the undergraduate curriculum: graduate students in the Applied Philosophy program will be given increased attention to the value of experiential learning, the Department should consider modest developments in experiential education at the upper-year undergraduate level. Relationships that emerge from the new PhD in Applied Philosophy may be useful in supporting experiential learning opportunities at the undergraduate level. The Department might also consider whether a new course in the area of applied philosophy might be added to the undergraduate curriculum: graduate students in the Applied Philosophy program will be investigative the advisability of first year tutorials, bringing the results to the Department for discussion and a decision meeting in December 2017. [Update Mar. ’18: The subcommittee recommended against a formal implementation of tutorials for our courses, but the department encourages instructors interested in small group instruction in large courses to “explore informal options for tutorial group sessions that do not involve changes to the Undergraduate Calendar or use of the centralized scheduling system.”]

Options will be investigated by the Department’s Undergraduate Committee

Associate Chair, Undergraduate

2017-18

[Update March ‘18: A subcommittee of the UG committee has met with representatives of the EDGE program, and gathered feedback from a focus group with philosophy undergrads. An EDGE-relevant course is likely to be proposed to the Department in Fall 2017]
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>well-positioned to teach (or perhaps team-teach) a course in this area.</strong></td>
<td><strong>Term for possible implementation in 2019.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>5</strong></td>
<td><strong>UW and the Department should consider alternatives to the current arrangement whereby the Waterloo Philosophy Department supports St. Jerome’s Philosophy Department when its enrolments decline. This arrangement does not clearly support the health of either program. More mutually beneficial arrangements should be explored.</strong></td>
<td><strong>The Department will draw these issues to the attention of senior administration</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Department Chair</strong></td>
<td><strong>Completed, Winter Term 2017 [That is: this is not a decision the Department can make, as it is a matter of inter-institutional agreement, but the Department has done what it can.]</strong></td>
</tr>
<tr>
<td><strong>6</strong></td>
<td><strong>The Department should review the processes it has in place for ensuring that Teaching Assistants have a clear understanding of their work responsibilities and the character of the employment agreement they have. It appears that there are currently some misunderstandings between graduate students and the Department about the terms of employment (e.g., whether, or the sense in which, teaching assistants are party to a contract) and about how problems concerning the interpretation and adherence to the terms of employment are to be resolved.</strong></td>
<td><strong>Complete the process to arrive at “Best Practices for Working with TAs” document, including further consultation will all stakeholder groups</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Department Chair</strong></td>
<td><strong>Draft to Department in Jan. 2017; discussions and consultations during Winter Term. As of December 2017, the Department is awaiting a response from the Philosophy Graduate Students Association to what we expect is a penultimate draft. [Update March ’18: we are still waiting for a response from the PGSA.]</strong></td>
</tr>
</tbody>
</table>

July 2017
7  The Department should explore the possibility of helping the Undergraduate Philosophy Student Society create an annual student conference. There are many universities nearby so it should be possible to attract participation from students and faculty (as keynotes) from outside UW. The effort might help build the sense of community the Department seeks to cultivate and a modest one-day conference can be mounted relatively inexpensively.

Continue to support worthwhile initiatives proposed by PhilSoc (and the Women’s Studies Society), while making them aware of this recommendation

Department Chair, student society liaison officers

This recommendation has been discussed with PhilSoc already; we will work together with them should a conference become one of their priorities and will draw the recommendation to the attention of future PhilSoc executives. [Update March ’18: A conference is not a priority for the current PhilSoc. The Department remains open to the possibility, but only if it is something the students decide is a priority.]

The Department Chair/Director, in consultation with the Dean of the Faculty shall be responsible for monitoring the Implementation Plan.
Date of next program review:  

Signature of Approval:

Chair/Director

Dean

Faculty Dean

AFIW Administrative Dean/Head (For AFIW programs only)

Associate Vice-President, Academic
(For undergraduate and augmented programs)

Associate Vice-President, Graduate Studies and Postdoctoral Affairs
(Formerly the Associate Provost, Graduate Studies)
(For Graduate and augmented programs)
NEW UNDERGRADUATE SCHOLARSHIPS, AWARDS, and BURSARIES

to be added to the UG Awards Database

- submitted for April 10, 2018 meeting of Senate UG Council -

ENTRANCE AWARDS

A.M. Snider Memorial Entrance Scholarship
A scholarship, valued at $1,500, will be awarded annually to a full-time undergraduate student enrolled in Year One of Civil or Mechanical Engineering. Preference will be given to students who are residents of Waterloo, St. Jacobs, or Elmira, Ontario. This fund is made possible by a donation from James Snider in honour of his grandfather.

Method of Financing: endowment

UPPER-YEAR AWARDS

Allan G. Arnold Engineering Undergraduate Bursary
A bursary, valued at $2,500, will be awarded annually to a full-time undergraduate student enrolled in the Faculty of Engineering who has a demonstrated financial need and a minimum overall average of 70%. To be considered, students must complete the Full-time Bursary application by February 15. This fund is made possible by a donation from The Allan and Cynthia Arnold Fund in memory of Allan G. Arnold.

Method of Financing: annual donation (four-year pledge)

Joseph T. Dyer Entrepreneurial Scholarship
A scholarship, valued at $2,500, is awarded annually to a full-time undergraduate student enrolled in Year Two, Three, or Four of any program in the David R. Cheriton School of Computer Science. Selection will be based on scholastic excellence (minimum 80% average) and a demonstrated passion for entrepreneurship and related extracurricular activities (e.g. completion of side business projects, participation in competitions, etc). Interested students should submit an application by October 1. This fund is made possible by a donation from alumnus Michael Egan (BMath ’74) in honour of his mentor, Jody Dyer, and the incredible influence he’s made on Mike’s life. The goal of this scholarship is to recognize and reward entrepreneurial-minded students who embody Jody’s core values of overcoming adversity, being innovative, and caring about social impact.

Method of Financing: annual donation (ten-year pledge)

Economical Insurance Information Technology Management Scholarship
One scholarship, valued at $3,000, will be awarded to an outstanding undergraduate student who is enrolled in Year Two or Three of Honours Mathematics/Business Administration with the Information Technology Management plan, or Honours Business Administration and Computer Science, Double-Degree, Co-op. Selection will be based on a combination of academic achievement (minimum cumulative average of 80%) and participation and demonstrated leadership in activities within the university or community. Interested students should apply by October 15. This fund is made possible by a donation from Economical Insurance.

Method of Financing: annual donation (five-year pledge)

Economical Insurance Scholarship for Systems Design Engineering
One scholarship, valued at $3,000, will be presented to an outstanding undergraduate student who is enrolled in third- or fourth-year of Systems Design Engineering. Selection will be based on a combination of academic achievement (minimum cumulative average of 80%) and participation and demonstrated leadership in activities within the university or community. Interested students should apply by October 1. This fund is made possible by a donation from Economical Insurance.

Method of Financing: annual donation (five-year pledge)
NEW UNDERGRADUATE SCHOLARSHIPS, AWARDS, and BURSARIES
to be added to the UG Awards Database
- submitted for April 10, 2018 meeting of Senate UG Council -

Lau Engineering Scholarship
A scholarship, valued at $2,000, will be awarded annually to a full-time undergraduate student enrolled in Year Two of Biomedical Engineering on the basis of academic achievement (minimum 80% cumulative average) at the end of Year One. This fund is made possible by a donation from Agatha and Eddie Lau, Waterloo Engineering alumni who strongly believe in supporting the next generation of engineers.

Method of Financing: one-time donation

Statistics and Actuarial Science Tribute Scholarship
A scholarship, valued at $2,000, will be awarded annually to a full-time undergraduate student enrolled in Year Two or Three of any program in the Department of Statistics and Actuarial Science. Selection is based on academic achievement (minimum 80% cumulative average) combined with a demonstrated involvement in extracurricular activities on campus and/or in the community. Interested students should submit an application by June 15 each year. This fund is made possible by a donation from alumnus Ping Yan (MMath '87, PhD '92). This scholarship is inspired by retired Professor Jerry Lawless as a tribute to the impact that he and his fellow faculty members in the Department of Statistics and Actuarial Science have had on Ping’s education and career.

Method of Financing: annual donation (five-year pledge)

ATHLETIC AWARDS

Patricia Bertoia Excellence Award
One award, valued at $3,000, is given to a student-athlete on the varsity football team. This award recognizes leadership, athletic talent, and contribution to Warriors Athletics and Recreation, their team, the school, and their community. This fund is supported by Chris Bertoia, in honour of his mother.

Method of Financing: annual donation and matching funds (five-year pledge)

Breen Family Women’s Athletic Excellence Award
One award, valued at $2,000, is given to a student-athlete on any women’s varsity team. This award recognizes a strong commitment to community service, volunteerism, and leadership within the University and broader community. This fund is supported by Cynthia and Shane Breen.

Method of Financing: annual donation and matching funds (five-year pledge)

Peter O.M. Erickson Award
One award valued at $2,000, or two awards valued at $1,000, are given to members of the varsity men’s or women’s ice hockey teams. This award recognizes athletic talent, academic success, and contribution to Warriors Athletics & Recreation, their team, and the school. This fund is supported by Waterloo alumnus Matthew Erickson and his wife Angie.

Method of Financing: annual donation and matching funds (five-year pledge)

Ho Student-Athlete Services & Intercollegiate Excellence Award
One award valued at $2,000, or two awards valued at $1,000, will be given to student-athletes who have made significant contributions to Warriors Athletics and Recreation in the past 12 months in an administrative or volunteer capacity. Preference will be given to varsity athletes who are members of the women’s ice hockey team, the women’s basketball team, or the field hockey team. This award recognizes strong leadership skills, initiative, community involvement, and overall contribution to Warriors Athletics and Recreation. This fund is supported by University of Waterloo alumnus and part-time Warriors public address announcer In-Ting Ho.

Method of Financing: annual donation and matching funds (five-year pledge)
NEW UNDERGRADUATE SCHOLARSHIPS, AWARDS, and BURSARIES
to be added to the UG Awards Database
- submitted for April 10, 2018 meeting of Senate UG Council -

Logan Family Athletic Excellence Awards
Four awards, valued at $4,500, are given annually: two to student-athletes on the varsity football team and two to student-athletes on the varsity women’s volleyball team. These awards recognize leadership, athletic talent, and contribution to Warriors Athletics and Recreation, their team, the school, and their community. This fund is supported by Waterloo and Warriors football alumnus Rob Logan and his family.

Method of Financing: annual donation and matching funds (three-year pledge)

O’Dell Associates Football Excellence Award
One award, valued at $4,500, is given to a member of the varsity football team, with preference to a student-athlete who is enrolled in the Faculty of Engineering. This award recognizes leadership, athletic talent, and contribution to Warriors Athletics and Recreation, their team, the school, and their community. This fund is supported by Waterloo and Warriors football alumnus Nathan Martin, a partner with C.W. O’Dell Associates.

Method of Financing: annual donation and matching funds (three-year pledge)

Paradigm Transportation Solutions Limited Football Excellence Awards
One or more awards, valued at up to $4,500, are given to members of the varsity football team, with preference to student-athletes enrolled in the Faculty of Engineering or the Faculty of Environment. These awards recognize athletic talent, academic success, and contribution to Warriors Athletics and Recreation, their team, and the school. This fund is supported by Paradigm Transportation Solutions Limited and Waterloo alumni Jim Mallett, Gene Chartier, and Stew Elkins.

Method of Financing: annual donation and matching funds (five-year pledge)

Voisin Family Football Excellence Award
Multiple awards, valued at up to $4,500 each, are given to members of the varsity football team. These awards recognize athletic talent, academic success, and contribution to Warriors Athletics and Recreation, their team, and the school. This fund is supported by Waterloo alumnus Michael “Mac” Voisin.

Method of Financing: annual donation and matching funds (two-year pledge)

INTERNATIONAL EXPERIENCE AWARDS

Jon C. Bennett Travel Bursary for Architectural Studies
A bursary, valued at up to $2,000, will be awarded annually to a full-time undergraduate student enrolled in Year Three or Four in the School of Architecture. This award is designated for students pursuing the Rome study program or an international co-op work opportunity. Candidates must have a minimum cumulative average of 75% and demonstrate financial need to participate in the experience. To be considered, students must submit the general University of Waterloo International Experience Award application by July 15th. This fund has been established by friends and family in memory of Jon Bennett. Jon travelled extensively with his family from an early age and had developed an intense interest in nature, and the language and art of other cultures. As an undergraduate Architecture student, Jon was able to use these experiences to develop as an artist and designer, and continue to add new experiences through work and study terms in Sao Paulo, Vancouver, Paris, and Rome.

Method of Financing: endowment
NEW UNDERGRADUATE SCHOLARSHIPS, AWARDS, and BURSARIES

to be added to the UG Awards Database

- submitted for April 10, 2018 meeting of Senate UG Council -

Ranjit Singh Dulai International Experience Award

An award, valued at $1,200, will be provided annually to a full-time undergraduate student enrolled in Year Two, Three, or Four of any program at the University of Waterloo who will be participating in an eligible international experience outside of Canada, such as a minimally paid or volunteer co-op work term, a volunteer placement, or an academic exchange. Candidates must have a minimum overall average of 75%. Preference will be given to students who have made a positive impact on their community and/or school through extracurricular or volunteer involvement. Interested students are to submit an application by July 15. This fund is made possible by a donation from Ranjit Singh Dulai to empower and support students in their endeavors to become globally literate and world ready through experiential learning and international study.

Method of Financing: endowment

David and Elizabeth Kerr International Experience Award

Up to five awards, normally valued at $1,000 each, are provided to undergraduate and graduate students registered full-time in any year in the Faculty of Arts (excluding the School of Accounting and Finance). Students must be participating in an eligible exchange/study abroad program, an eligible international co-op work term, an internship opportunity or be conducting research relevant to their program outside of Canada. Preference will be given to students with financial need for the term(s) abroad. Students should apply as soon as they are able to confirm the details of their intended experience by one of the following deadlines: July 15, November 15, or March 15. This fund is made possible by a donation from David and Elizabeth Kerr in support of Waterloo’s efforts to educate globally literate and world-ready graduates.

Method of Financing: one-time donation and matching funds
Recognition and Commendation

The President's Reception for Excellence in Teaching and Research took place on Tuesday 10 April 2018, honouring the faculty and graduate students who have received awards for research and teaching excellence this past year. Forty-three faculty and graduate students who won teaching awards and 119 who won research awards both internal and external to the University were celebrated.

The teaching award honourees included:

Derek Armitage; Mónica Barra; Michael Beazely; Sanjeev Bedi; Steven Bednarski; Hector Budman; Claudio Cañizares; Wayne Chang; Feng Chang; Frankie Condon; Douglas Cowan; Dan Davison; Richard Epp; Kaan Erkorkmaz; Myra Fernandes; Brian Forrest; Amanda Garcia; Carol Hulls; Alex Huyhn; Igor Ivkovic; David Jao; Ami Khajepour; Rosemary Killeen; Ken Klassen; Norman Klassen; Ron Kroeker; Elaine Lillie; David McKinnon; Houman Mehrabian; Mariam Mufti; Mohammed Nassar; Elena Neiterman; Edwin Ng; Rajinder Pal; Tejal Patel; Karin Schmidlin; Sherman Shen; Gordon Stubley; Lay Ling Tan; Chris Vigna; Mary Wells; Derek Wright; and Chad Wriglesworth.

The research award honourees included:

Nasser Mohieddin Abukhdeir; Howard Armitage; Chris Bachmann; Michal Bajesy; Nandita Basu; Hilary Bergsicker; Derek Besner; Jonathan Blay; David Blowes; Ramona Bobocel; Raouf Boutaba; Janusz Brzozowski; Sarah Burch; Zhongwei Chen; Richard J. Cook; Don Cowan; Andrew Doxey; Robin Duncan; Ehab El-Saadany; Myra Fernandes; Mark Ferro; Steven Fischer; Marianna Foldvari; Geoffrey Fong; Brian Forrest; Ian Goldberg; Guang Gong; Maura R. Grossman; Igor Grossmann; Frank Gu; Ralph Haas; Jasmin Habib; David Hammond; Mark Havitz; Eric Helleiner; Keith Hipel; Ric Holt; Scott Hopkins; Susan Horton; Philip Howarth; Richard Hughson; Lyndon Jones; Ivan Jurakic; Suzanne Kearns; Matthew Kennedy; Amir Khajepour; Na Young Kim; Sharon Kirkpatrick; Alice Kuzniar; Whitney Lackenbauer; Raymond Laflamme; Stanley Laiken; Lap Chi Lau; Scott Leatherdale; Xianguo Li; Juwenn Liu; Norbert Lutkenhaus; Colin MacLeod; Eduardo Martin-Martinez; Colleen Maxwell; Alan Macnaughton; Ashley Rose Mehlenbacher; Hossein Abouee Mehrizi; Guo-Xing Miao; Sushanta Mitra; David Moscovitch; Ron Mullin; J. Ian Munro; Linda Nazar; Vinh Nguyen; Nicole Nolette; Marcel Nooijen; Marcel O’Gorman; Tamer Özsu; Diana Parry; Janusz Pawliszyn; Guy Poirier; Adam Presslee; Michael Reimer; Jean Richardson; Candida Rifkind; Evan Risko; Peter Russell; Ken Salem; German Scaini; Winny Shen; Larry Smith; Ken Seng Tan; Andrew Trant; Daniel Vogel; Zhou Wang; Ruodu Wang; Linda Warley; Mary Wells; Joanne Wood; Michael Worswick; Alfred Yu; and Weihua Zhuang. (adapted from the Daily Bulletin, 9 April 2018)

On Friday 6 April 2018, the 2017 Co-op Student of the Year Awards took place in the Tatham Centre. The annual event highlights the co-op achievements of six winners, one from each Faculty. Faculty of Science winner Emily Pass also won the Co-operative Education and Work-Integrated Learning Canada and Education at Work Ontario (EWO) co-op student of the year awards for her work term at the University of Western Ontario’s Centre for Planetary and Space Exploration. “It’s incredibly humbling to hear about the accomplishments of the other students here and consider myself a peer,” Pass said after receiving her awards. “I’m incredibly proud to be a Waterloo co-op student.”
Aaron Buckley, the Faculty of Environment Co-op Student of the Year winner, received an honourable mention from EWO for his work at CH2M HILL.

The following are the recipients of the 2017 University of Waterloo Co-op Student of the Year Awards for their contributions to co-operative education and their community:

**Leah Drost – Health Studies (Faculty of Applied Health Sciences):** Working at Sunnybrook Health Sciences Centre, Drost made significant contributions to the medical field. Her research focused on post-surgery radiotherapy for cancer that had spread to the bone. It was a landmark study and was published in the medical journal *Radiotherapy and Oncology*. She presented her research to the Multinational Association for Supportive Care in Cancer in Washington, D.C.

**Matthew Condie – Economics (Faculty of Arts):** Condie entered HubHead Corp. as a marketing coordinator, but quickly assumed responsibilities at the director level two weeks into his co-op term. He expanded and reinvented the company’s social media presence through implementing customer-centric marketing strategies and creating client-focused content.

**Vincent Shadbolt – Biomedical Engineering (Faculty of Engineering):** Shadbolt managed all software and hardware launches for Motorola devices across Canada. At Motorola Mobility (a Lenovo Company), he was responsible for testing and introducing major IMS features (VoLTE, ViLTE and VoWifi) to be released for 2018 products. He collaborated with the company’s Chinese and Brazilian teams, learning Portuguese during his work term to help bridge major communication gaps.

**Aaron Buckley – Geography and Environmental Management (Faculty of Environment):** At CH2M HILL, Buckley managed a project that increased drinking water capacity by 30 per cent in a major North American city. He has also volunteered his consulting services to organizations such as the Waterloo Regional Police Service, making a difference in the local community.

**Jiajia Yin – Actuarial Science (Faculty of Mathematics):** While on a work term at Travelers Canada, Yin played a key role in developing a pricing sub-model project that will have a worldwide impact on profitability for the company. She presented her work to senior management, including the CEO and Vice Chairman of Travelers Canada. The company was so impressed with her work that they have hired her to work for them full-time after she graduates.

**Emily Pass – Physics and Astronomy (Faculty of Science):** Pass was a research assistant at the University of Western Ontario’s Centre for Planetary and Space Exploration. She successfully developed a data analysis pipeline for Colibri, a rapid-imaging astronomical experiment. She developed the pipeline from scratch—a year’s worth of work—completing it in six weeks. Her findings appear in a 13-page scientific paper in *Publications of the Astronomical Society of the Pacific*, a respected academic publication. Pass is also one of 270 Schulich Leaders in Canada. (adapted from the *Daily Bulletin*, 12 April 2018)
A. APPOINTMENTS

Tenured Appointment

McAINEY, Carrie, Associate Professor, and Schlegel Research Chair in Dementia, School of Public Health and Health Systems, July 1, 2018. Professor McAiney received her BA (Honours Psychology) (1990), her MA (1992) and PhD (1998) in Health Studies and Gerontology at the University of Waterloo. Dr. McAiney’s research focusses on designing, implementing and evaluating interventions to enhance the quality of life and care of older persons particularly those living with dementia and their caregivers. Dr. McAiney is a leader in the field of dementia and has conducted research across health care sectors including long-term care, primary care, community care, acute care, and tertiary care. Dr. McAiney’s expertise will contribute significantly to building the undergraduate and graduate programs in gerontology and aging, health, and well-being.

New Probationary-term Appointment

MEEHAN, Sean, Assistant Professor, Department of Kinesiology, July 1, 2018. Professor Meehan received his BA, (November 2002) and BSc (June 2002) at Queen’s University, his MSc (2005) at York University, and his PhD (2008) at the University of Waterloo. Dr. Meehan has been a faculty member in the School of Kinesiology at the University of Michigan since 2011. Dr. Meehan’s research ranges from brain states on motor control and learning to applied work in stroke individuals aimed at understanding the biological mechanisms underlying movement disorders. His research aligns strongly with the Motor Learning aspects and compliments the vision of the department.

Change in Appointment

NEITERMAN, Elena, conversion from Definite Term Lecturer to Continuing Lecturer, School of Public Health and Health Systems effective July 1, 2018.

Adjunct Appointments

Graduate Supervision

BABIAK, Kathy, Associate Professor, Department of Recreation and Leisure Studies, January 1, 2018 December 31, 2020.

TOMASONE, Jennifer, Assistant Professor, Department of Kinesiology, July 1, 2018 – June 30, 2021.

Graduate Supervision and Research

JOHNSTON, Terra, Lecturer, School of Public Health and Health Systems, April 1, 2018 – June 30, 2019.

Special Appointments

Undergraduate Instruction

BRISCOE, Carrie, Lecturer, Department of Recreation and Leisure Studies, May 1, 2018 – August 31, 2018.
Cousineau, Luc, Lecturer, Department of Recreation and Leisure Studies, May 1, 2018 – August 31, 2018.

Muldoon, Meghan, Lecturer, Department of Recreation and Leisure Studies, May 1, 2018 – August 31, 2018.

Graduate Instruction
Sharafoddini, Anis, Lecturer, School of Public Health and Health Systems, September 1, 2018 – December 31, 2018.

Postdoctoral Fellows Appointed as Research
Asadi, Houshyar, Department of Kinesiology, September 4, 2018- December 3, 2018.

Lambrahi, Irene, School of Public Health and Health Systems, May 1, 2018 to April 30, 2021.

Change in Postdoctoral Fellowship
Mohammed, Abdul Hai Zahid, School of Public Health and Health Systems, terminating May 31, 2018.

B. Administrative Reappointments
Hanning, Rhona, Associate Dean, Graduate Studies, Faculty of Applied Health Sciences, July 1, 2018 – June 30, 2020.

Staines, Richard, Associate Dean, Research, Faculty of Applied Health Sciences, May 1, 2018 – June 30, 2020.

C. Sabbaticals
For approval by the Board of Governors
McKillop, Ian, Associate Professor, School of Public Health and Health Systems, September 1, 2018 to August 31, 2019, one year at 100% salary.

Already approved by the Board of Governors
Skinner, Kelly, Assistant Professor, School of Public Health and Health Systems, November 1, 2018 to April 30, 2018, six months at 100% salary.

D. Retirement
Jessup, Linda, Continuing Lecturer, School of Public Health and Health Systems, July 31, 2018.

E. Resignation
Lee, Joon, Assistant Professor, School of Public Health and Health Systems, August 31, 2018.

Dean
Faculty of Applied Health Sciences
UNIVERSITY OF WATERLOO
REPORT OF THE DEAN OF THE FACULTY OF ARTS TO SENATE
May 22, 2018

FOR INFORMATION

A. APPOINTMENTS

Probationary Term Appointments

FAN, Lai-Tze, (BA 2008 York University, MA 2010, Wilfrid Laurier University, PhD 2016 York University), Assistant Professor, Department of English Language and Literature, December 1, 2018 to June 30, 2022. Dr. Fan is an active scholar, working in locative media, games design, media archaeology, and computational literary studies. She will teach in diverse areas including digital rhetoric, writing, and publication; the critical and creative digital humanities; digital archive and database creation; and media studies. She will add special strength to the Department of English's Experimental Digital Media (XDM) MA degree.

Continuing Lecturer Appointments

MESTA, Olivia, (BSc 1997 MSc 2000 Istanbul University, MSc 2004 MBA 2006 PhD 2008 University of Missouri-Columbia), Continuing Lecturer, Department of Economics, May 1, 2018.

Adjunct Appointments – Instruction

CALVERT, Alyssa, Lecturer, School of Accounting and Finance, May 1, 2018 to August 31, 2018.

PARK, Justin, Lecturer, School of Accounting and Finance, May 1, 2018 to August 31, 2018.

WANG, Bo, Lecturer, School of Accounting and Finance, May 1, 2018 to August 31, 2018.

WU, Brian, Lecturer, School of Accounting and Finance, May 1, 2018 to August 31, 2018.

Adjunct Appointments – Graduate Supervision

RYGIEL, Kim, Assistant Professor, Department of Sociology and Legal Studies, April 1, 2018 to March 31, 2021.

SCHRYER, Catherine, Professor, (Professor Emerita), Department of English Language and Literature, April 1, 2018 to March 31, 2020.

Adjunct Reappointments – Instruction

ALEKBEROV, Elshan, Lecturer, Department of Economics, May 1, 2018 to August 31, 2018.

ARNOLD, Brian, Lecturer, School of Accounting and Finance, May 1, 2018 to August 31, 2018.

CARVER, Matthew, Lecturer, Department of Fine Arts, May 1, 2018 to August 31, 2018.

D’AMATO, John, Lecturer, School of Accounting and Finance, May 1, 2018 to August 31, 2018.

DATARDINA, Malik, Lecturer, School of Accounting and Finance, May 1, 2018 to August 31, 2018.

DOLSON, Mark, Assistant Professor, Department of Anthropology, May 1, 2018 to August 31, 2018.

FATIMA, Nafeez, Lecturer, Department of Economics, May 1, 2018 to August 31, 2018.
GAMEZ, Hector, Lecturer, School of Accounting and Finance, May 1, 2018 to August 31, 2018.

HANCOCK, Michael, Lecturer, Department of English Language and Literature, May 1, 2018 to August 31, 2018.

HUNTER, Natalie, Lecturer, Department of Fine Arts, May 1, 2018 to August 31, 2018.

HUTTER, Daniel, Lecturer, Department of Classical Studies, May 1, 2018 to August 31, 2018.

KUMASE, Wokia, Lecturer, Department of Economics, May 1, 2018 to August 31, 2018.

LESICA, Josip, Lecturer, Department of Economics, May 1, 2018 to August 31, 2018.

LIN, David, Lecturer, School of Accounting and Finance, May 1, 2018 to August 31, 2018.

MANNING, Thomas, Lecturer, School of Accounting and Finance, May 1, 2018 to August 31, 2018.

MEINYKEVYCH, Viktoriya, Lecturer, Department of Germanic and Slavic Studies, May 1, 2018 to August 31, 2018.

MOISSEYKIN, Vlad, Lecturer, School of Accounting and Finance, May 1, 2018 to August 31, 2018.

NEEDHAM, Brent, Lecturer, Department of Political Science, May 1, 2018 to August 31, 2018.

NUNEZ, Camelia, Lecturer, Department of Economics, May 1, 2018 to August 31, 2018.

OZKARDAS, Ahmet, Lecturer, Department of Economics, May 1, 2018 to August 31, 2018.

PACEY, Dean, Lecturer, School of Accounting and Finance, May 1, 2018 to August 31, 2018.

RAJSIC, Predrag, Lecturer, Department of Economics, May 1, 2018 to August 31, 2018.

SARKANY, Laszlo, Lecturer, Department of Political Science, May 1, 2018 to August 31, 2018.

SCHWEITZER, David, Lecturer, Department of History, May 1, 2018 to August 31, 2018.

SIMEONI, Laura, Lecturer, School of Accounting and Finance, May 1, 2018 to August 31, 2018.

STEVENSON, Michael, Lecturer, Department of Political Science, May 1, 2018 to August 31, 2018.

TIMBERG, Robert, Lecturer, School of Accounting and Finance, May 1, 2018 to August 31, 2018.

WANG, Sining, Lecturer, Department of Economics, May 1, 2018 to August 31, 2018.

WENSLEY, Karen, Lecturer, School of Accounting and Finance, May 1, 2018 to August 31, 2018.

WHelan, Keith, Lecturer, School of Accounting and Finance, May 1, 2018 to August 31, 2018.
Adjunct Reappointments – Miscellaneous (research, consultations, etc.)

THOMPSON, Andrew, Assistant Professor, Department of Political Science, January 1, 2018 to December 31, 2022.

Graduate Students Appointed as Part-Time Lecturers

DEFRAEYE, Julien, Department of French Studies, May 1, 2018 to August 31, 2018.

GALLAGHER, Sara, Department of English Language and Literature, May 1, 2018 to August 31, 2018.

Kampherm, Monique, Department of English Language and Literature, May 1, 2018 to August 31, 2018.

MASSIA, Klye, Department of Germanic and Slavic Studies, May 1, 2018 to August 31, 2018.

MATSINHE, Daniel, Department of French Studies, May 1, 2018 to August 31, 2018.

MITCHELL, S James, Department of French Studies, May 1, 2018 to August 31, 2018.

OFILI, Patricia, Department of English Language and Literature, May 1, 2018 to August 31, 2018.

SULLIVAN, Alexander, Department of Germanic and Slavic Studies, May 1, 2018 to August 31, 2018.

WILLMOTT, Angela, Department of Sociology and Legal Studies, May 1, 2018 to August 31, 2018.

WOODFORD, Benjamin, Department of English Language and Literature, May 1, 2018 to August 31, 2018.

Staff Appointments to Faculty

GLOVER, Adam, Lecturer, Department of Fine Arts, May 1, 2018 to August 31, 2018.

B. ADMINISTRATIVE APPOINTMENTS

HOEPPE, Goetz, Chair, Department of Anthropology, May 1, 2018 to April 30, 2022.

NELSON, Edna (Adie), Associate Chair, Graduate Studies, Department of Sociology and Legal Studies, July 1, 2018 to June 30, 2019.

ROBERTS, Julia, Chair, Department of History, September 1, 2017 to June 30, 2021.

ROY, Susan, Associate Chair, Graduate Studies, Department of History, April 1, 2018 to March 31, 2019.

Administrative Reappointment

AURINI, Janice, Associate Chair, Undergraduate Studies (Sociology), Department of Sociology and Legal Studies, July 1, 2018 to June 30, 2019.

JAKOBSh, Doris, Associate Chair, Graduate Studies, Department of Religious Studies, July 1, 2018 to June 30, 2018.

ROZOTTO, David, Associate Chair, Undergraduate Studies, Department of Spanish and Latin American Studies, May 1, 2018 to April 30, 2019.
SINGH, Rashmee, Associate Chair, Undergraduate Studies (Legal Studies), Department of Sociology and Legal Studies, July 1, 2018 to June 30, 2019.

C. SABBATICAL LEAVES
STILLAR, Glenn, Associate Professor, Drama & Speech Communication, six months from January 1 to June 30, 2018, at 85% salary.

Administrative leave
LIEBSCHER, Grit, Chair of Germanic & Slavic Studies, four months from September 1 to December 31, 2018.

For approval by the Board of Governors:
BRISLEY, Neil, Associate Professor, School of Accounting and Finance, September 1, 2018 to February 28, 2019, six months at 85% salary.

JAKOBSH, Doris, Professor, Department of Religious Studies, January 1, 2019 to June 30, 2019, six months at 85% salary.

NACKE, Lennart, Associate Professor, Department of Drama and Speech Communication, July 1, 2018 to December 31, 2018, six months at 100% salary.

D. ADMINISTRATIVE LEAVES
For Approval by the Board of Governors:
LAWSON, Kate, Associate Professor, Department of English Language and Literature, September 1, 2018 to November 30, 2018, three months at 100% salary.

Douglas M. Peers
Dean, Faculty of Arts
A. **APPOINTMENTS**

**Probationary Term Appointments**

MARTIN, Etienne, Assistant Professor, Department of Mechanical & Mechatronics Engineering, July 1, 2018 – June 30, 2021. PhD McGill University 2010; MA McGill University 2007; BA Ecole de technologies supérieure, Quebec, Canada 2006. Dr. Etienne Martin’s research is in the area of multi-scale modelling, characterization and development of advanced materials. He is currently Senior Materials Scientist at General Electric Research Centre in Niskayuna, New York. He joins the Solid Mechanics & Design group in support of Dr. Kaan Inal’s NSERC/General Motors of Canada Industrial Research Chair in Integrated Computational Mechanics for Mass Efficient Automotive Structures.

BOEKHORST, Janet, Assistant Professor, Conrad Business, Entrepreneurship and Technology Centre July 1, 2018 – June 30, 2021. PhD York University 2015; MA Queen’s University 2010; BA, Commerce University of Guelph 2009. Janet’s research interests include high-performance work teams, workplace diversity and inclusion, leadership and entrepreneurship. In addition to her excellent and relevant research, Janet will bring a wealth of industry research and consulting experience to Conrad and UW. Janet has already proven herself to be an excellent and dedicated teacher, and she will no doubt enrich our students’ classroom experiences.

**Probationary Term Reappointments**


**New Definite Term Appointments – full-time**

MEUNIER, Sarah, Lecturer, Department of Chemical Engineering, May 1, 2018 – April 30, 2021. PhD University of Waterloo 2013; MASc University of Ottawa 2006; BASc Chemical Engineering (Coop) University of Ottawa 2004; BSc Computing Technology, University of Ottawa 2004. In addition to her PhD and MASc in Chemical Engineering, Dr. Meunier received two Bachelor degrees, one in Chemical Engineering and the other in Computing Technology. She will thus bring to the Chemical Engineering Department excellent and flexible teaching capabilities, and contribute to strengthen computer-based courses in the curriculum.

**New Definite Term Reappointments – full-time**

MILNE, Andrew, Lecturer, Department of Mechatanical & Mechatronics Engineering, July 13, 2018 – July 12, 2021.

SEDWARDS, Sean, Research Assistant Professor, Department of Electrical & Computer Engineering, April 1, 2018 – March 31, 2019.

SHAH, Muhammad Umair, Lecturer, Department of Management Sciences, September 1, 2018 – August 30, 2020.
Visiting Appointments
AGHAMIRI, Foad, Professor, Department of Chemical Engineering, March 1, 2018 – February 28, 2019.


AZIMIFAR, Zohreh, Associate Professor, Department of Systems Design Engineering, April 1, 2018 – December 31, 2018.

HUIQIN, Yang, Professor, Department of Chemical Engineering, July 1, 2018 – December 31, 2018.

SAGHAIFAN, Mohsen, Scholar, Department of Mechanical & Mechatronics Engineering, June 1, 2018 – August 31, 2018.

SHAKIR, Ammar Mahmood, Researcher, Department of Civil & Environmental Engineering, November 1, 2017 – October 31, 2018.

TIAN, Feng, Scholar, Department of Electrical & Computer Engineering, April 1, 2018 – March 31, 2019.

WU, Jingda, Scholar, Department of Mechanical & Mechatronics Engineering, May 1, 2018 – July 31, 2018.

YANG, Anija, Scholar, Department of Electrical & Computer Engineering, May 1, 2018 – December 31, 2019.

ZHANG, Zheng, Scholar, Department of Mechanical & Mechatronics Engineering, May 1, 2018 – July 31, 2018.

Special Appointments – Undergraduate Instruction
GABRIEL, Amir (Mel), Lecturer, Department of Management Sciences, May 1, 2018 – August 31, 2018.

HILAL, Allaa, Lecturer, Department of Electrical & Computer Engineering, May 1, 2018 – August 31, 2018.

MORENO, Carlos, Lecturer, Department of Electrical & Computer Engineering, May 1, 2018 – August 31, 2018.

MOUSAVI LAJIMI, S. Amir, Lecturer, Department of Systems Design Engineering, May 1, 2018 - August 31, 2018.

SAAD, John, Lecturer, Department of Electrical & Computer Engineering, May 1, 2018 – August 31, 2018.
Special Reappointments – Undergraduate Instruction
SHAMS, Shoeleh, Lecturer, Department of Civil & Environmental Engineering, May 1, 2018 – August 31, 2018.

SOLEIMANI DAHAJ, Arash, Lecturer, Department of Management Sciences, May 1, 2018 – August 31, 2018.

Special Reappointments – Graduate Instruction
ALLARAKHIA, Minna, Lecturer, Department of Management Sciences, May 1, 2018 – August 31, 2018.

Adjunct Appointments – Graduate Supervision
COMERFORD, Daniel, Assistant Professor, School of Architecture, February 1, 2018 – May 31, 2018.

Adjunct Appointments – Undergraduate Teaching
WASEF, Albert, Lecturer, Department of Electrical & Computer Engineering, May 1, 2018 – April 30, 2019.

Adjunct Reappointments – Research
BICUDO, Jose, Professor, Department of Civil & Environmental Engineering, March 1, 2018 – February 29, 2020.

Adjunct Reappointments – Research and Graduate Supervision
SCHIJVEN, Jack, Professor, Department of Civil & Environmental Engineering, November 1, 2016 – October 31, 2018.

SLAWSON, Robin, Associate Professor, Department of Civil & Environmental Engineering, August 9, 2017 – August 8, 2020.

Cross Appointments
ZHOU, Norman, Professor, Department of Mechanical & Mechatronics Engineering to Department of Electrical & Computer Engineering, April 1, 2018 – December 31, 2021.

Changes in Appointments
ABOUEE MEHRIZI, Hossein, Associate Professor, Associate Chair for Graduate Studies, Department of Management Sciences January 1, 2018 - April 30, 2018 changed to January 1, 2018 – March 31, 2018.

B. ADMINISTRATIVE APPOINTMENTS
HE, Qi-Ming, Associate Chair for Graduate Studies, Department of Management Sciences, April 1, 2018 – August 31, 2018.

WORSWICK, Michael, Director, Waterloo Advanced Manufacturing Consortium Node, Department of Mechanical & Mechatronics Engineering, April 1, 2018 – March 31, 2022.

ADMINISTRATIVE REAPPOINTMENTS
STUBLEY, Gordon, Associate Dean, Teaching, Faculty of Engineering, May 1, 2018 – August 31, 2018.
ALREADY APPROVED BY THE BOARD OF GOVERNORS

C. SABBATICAL LEAVES
ABOUEE MEHRIZI, Hossein, Associate Professor, Department of Management Sciences, May 1, 2018 – April 30, 2019, 12 months at 90.6% salary.

AL-MAYAH, Adil, Assistant Professor, Department of Civil & Environmental Engineering, July 1, 2018 – December 31, 2018, six months at 85% salary.

Pearl Sullivan
Dean, Faculty of Engineering
FOR INFORMATION

A. APPOINTMENTS

Adjunct Appointments

Graduate Supervision

ROCHE, Stéphane, Professor, School of Planning, February 1, 2018 to January 31, 2019.

TELESFORD, John, Assistant Professor, School of Environment, Enterprise and Development, January 1, 2018 to December 31, 2020.

VAN EERD, Laura, Associate Professor, Department of Geography and Environmental Management, April 1, 2018 to March 31, 2020.

Graduate Supervision and Research

ARYA, Neil, Associate Professor, School of Environment, Resources and Sustainability, July 1, 2017 to June 30, 2020.

Special Appointment

Instruction

LETOURNEAU, Marcus, Lecturer, School of Planning, May 1, 2018 to August 31, 2018.

Staff Appointment as Part-Time Lecturer

McKENZIE, Ian, Department of Geography and Environmental Management, May 1, 2018 to August 31, 2018.

Graduate Students Appointed as Part-Time Lecturers

BARR, Stephanie, Department of Geography and Environmental Management, May 1, 2018 to August 31, 2018.

ELMES, Matthew, Department of Geography and Environmental Management, May 1, 2018 to August 31, 2018.

ESMAIL, Shefaza, School of Environment, Resources and Sustainability, May 1, 2018 to August 31, 2018.

LAYCOCK, Katherine, School of Planning, May 1, 2018 to August 31, 2018.

LAZOWSKI, Bronwyn, Department of Geography and Environmental Management, May 1, 2018 to August 31, 2018.

MATTHEWS, Lindsay, Department of Geography and Environmental Management, May 1, 2018 to August 31, 2018.
SABERI, Nastaran, Department of Geography and Environmental Management, May 1, 2018 to August 31, 2018.

SU, Xing, School of Planning, May 1, 2018 to August 31, 2018.

B. ADMINISTRATIVE APPOINTMENTS

CLARKE, Amelia, Associate Dean, Research, Faculty of Environment, May 1, 2018 to April 30, 2021.

FLETCHER, Christopher, Associate Chair, Graduate Studies [Geography Program], Department of Geography and Environmental Management, July 1, 2018 to June 30, 2021.

Jean Andrey
Dean
FOR INFORMATION

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

Probationary-Term Appointments

BROWN, Trevor (BSc, 2011, York University; MSc, 2013; PhD, 2017, both from the University of Toronto), Assistant Professor, David R. Cheriton School of Computer Science, September 1, 2018 – June 30, 2022. Trevor Brown received his PhD from the University of Toronto in 2017 and has followed this with a postdoctoral fellowships at the Technion and the Institute of Science and Technology, Austria. His research interests are in parallel and distributed computing, from experimental systems through theory. His recent work is focussed on concurrent, lock-free data structures, transactional memory and techniques for coping with non-uniform memory architectures.

KAMATH, Gautam (BS, 2012, Cornell University; SM, 2014; PhD, 2018 (exp), both from the Massachusetts Institute of Technology), Assistant Professor, David R. Cheriton School of Computer Science, July 1, 2019 – June 30, 2022. Mr. Gautam Kamath is completing his PhD from MIT in summer 2018 and will be joining the Cheriton School of Computer Science in July 2019 after a postdoctoral fellowship at the Simons Institute for the Theory of Computing at the University of California, Berkeley. His research interests are in developing theoretically principled approaches for statistical data science, at the interface of statistics, machine learning, information theory, privacy, and sublinear-time algorithms.

STEBILA, Douglas (BMath, 2003, University of Waterloo; MSc, 2004, University of Oxford; PhD, 2009, University of Waterloo), Associate Professor, Dept. of Combinatorics and Optimization, July 1, 2018 – June 30, 2021. Dr. Stebila is currently a tenure track assistant professor in the Department of Computing and Software, Faculty of Engineering at McMaster University, Hamilton, Canada. His research focuses on Applied Cryptography and Internet Security, and specifically on authenticated key exchange, post-quantum Cryptography, digital signatures and public key encryption. His research contributions to the field have been significant with 18 of his papers being placed in the Google Scholars Top 20 conference venues in Computer Security and Cryptography. Dr. Stebila's research interests dovetail naturally with existing strength in the faculty.

SPIRLK, Sophie (BSc, 2013; MSc, 2014, both from the Rheinische Friedrich-Wilhelms-Universitaet Bonn); MA, 2016; PhD, 2018 (exp), both from Princeton University), Assistant Professor, Dept. of Combinatorics and Optimization, July 1, 2020 – June 30, 2023. Dr. Spirkl just completed her graduate studies under the supervision of Maria Chudnovsky and Paul Seymour. She will now begin a 2-year NSF postdoctoral fellowship at Rutgers and Princeton Universities, respectively, before joining the University of Waterloo. Dr. Spirkl's research interests broadly lie in Discrete Mathematics, and more specifically focus on Graph Theory. The latter is one of the core research areas of the Department of Combinatorics & Optimization. In her doctoral work, Dr. Spirkl has resolved several decades-old fundamental questions in her area. In particular, Dr. Spirkl resolved a 30-year old conjecture of Gyarfas on the proximity of chromatic and clique numbers of a well-defined super-class of perfect graphs.
WONG, Samuel (BSc, 2008, University of British Columbia; AM, 2009; PhD, 2013 both from Harvard University), Assistant Professor, Dept. of Statistics and Actuarial Science, July 1, 2018 – June 30, 2021. Samuel Wong comes to Waterloo from an assistant professor position at the University of Florida. His research is interdisciplinary and involves Bayesian modeling and approximate inference strategies for a variety of applications including protein structure prediction, learning dynamic systems in biology and quality assessment of forest products. Samuel will complement our existing strength in applied statistics and contribute his research expertise across campus through collaborative projects.

Definite Term - Appointments
CREW, Logan (BSc, 2015, University of Maryland; MA, 2017; PhD 2020 (exp), both from the University of Pennsylvania), Research Assistant Professor, Dept. of Combinatorics and Optimization, July 1, 2020 – June 30, 2023.

Definite Term - Reappointments
BELTAOS, Andrew, Lecturer, Office of the Dean, August 29, 2018 – August 27, 2020.
DUPONT, Eddie, Lecturer, Office of the Dean, August 1, 2018 – July 31, 2021.
FORREST, Barbara, Lecturer, Office of the Dean, August 29, 2018 – August 27, 2020.
FREELAND, Keith, Lecturer, Office of the Dean, September 1, 2018 – August 31, 2020.
SAKHINI, Victoria, Lecturer, David R. Cheriton School of Computer Science, September 1, 2018 – August 31, 2021.

Visiting Appointments
BURGER, Reinhold, Research Associate, David R. Cheriton School of Computer Science, January 1, 2018 – April 30, 2018.
LI, Xin (Jilin University), Scientist, Dept. of Combinatorics and Optimization, December 1, 2018 – November 30, 2019.
ORTEGA GONZALEZ, Alvaro (Instituto de Ciencias Fotonicas), Scholar, Dept. of Applied Mathematics, September 1, 2018 – April 30, 2019.
SCHLUNTZ, Robert, Research Associate, David R. Cheriton School of Computer Science, May 1, 2018 – August 31, 2018.

Adjunct Appointments
Instructor
MIRON, Carol, Lecturer, Office of the Dean, September 1, 2018 – August 31, 2019.
THORGEIRSSON, Sverrir, Lecturer, David R. Cheriton School of Computer Science, May 1, 2018 – August 31, 2018.

Research
AHMED, Rashid (University of North Dakota), Associate Professor, Dept. of Statistics and Actuarial Science, October 1, 2018 – September 30, 2021.

CASIEZ Gery (University of Lillie), Professor, David R. Cheriton School of Computer Science, April 1, 2018 – June 30, 2020.

Adjunct Reappointments
Instructor
BROWN, Janice, Lecturer, David R. Cheriton School of Computer Science, May 1, 2018 – August 31, 2018.

FERNANDES, Brian, Lecturer, Office of the Dean, May 1, 2018 – August 31, 2018.

GIRARD, Mark, Lecturer, Office of the Dean, May 1, 2018 – August 31, 2018.

KERR, Reid, Lecturer, David R. Cheriton School of Computer Science, May 1, 2018 – August 31, 2018.

LEE, Brenda, Lecturer, Office of the Dean, May 1, 2018 – August 31, 2018.

MARTIN, Robert, Lecturer, Dept. of Applied Mathematics, May 1, 2018 – August 31, 2018.

McKINNON, Jennifer, Lecturer, Office of the Dean, May 1, 2018 – August 31, 2018.

SHARMA, Puneet, Lecturer, David R. Cheriton School of Computer Science, May 1, 2018 – August 31, 2018.

SUN, Sun, Lecturer, David R. Cheriton School of Computer Science, May 1, 2018 – August 31, 2018.

SWEENEY, Vincent, Lecturer, Office of the Dean, May 1, 2018 – August 31, 2018.

VINCENTE COLMENARES, Alejandra, Lecturer, Office of the Dean, May 1, 2018 – August 31, 2018.

ZIMA, Eugene, Lecturer, David R. Cheriton School of Computer Science, May 1, 2018 – August 31, 2018.

Research


De ALBA, Enrique (Estadistica Y Matematicas), Professor, Dept. of Statistics and Actuarial Science, September 1, 2018 – August 31, 2021.
DiMARCO, Chrysanne (Associate Professor Emeritus), David R. Cheriton School of Computer Science, January 1 2018 – June 30, 2021.

KALBFLEISCH, Jack (University of Michigan), Professor, Dept. of Statistics and Actuarial Science, October 1, 2018 – September 30, 2021.

RAO, J.N.K. (Carleton University), Professor, Dept. of Statistics and Actuarial Science, October 1, 2018 – September 30, 2021.

SONG, Peter (University of Michigan), Professor, Dept. of Statistics and Actuarial Science, October 1, 2018 – September 30, 2021.

THOMPSON, Mary (Professor Emeritus), Dept. of Statistics and Actuarial Science, September 1, 2018 – August 31, 2021.

Changes in Appointments
GORBUNOV, Sergey, Assistant Professor, David R. Cheriton School of Computer Science (ref. Deans Report to Senate, September 2015)
From: January 1, 2016 – June 30, 2019
To: January 1, 2016 – June 30, 2020

Graduate Students appointed as Part-time Lecturers
AL MASHAGBEH, Mohammad, Office of the Dean, May 1, 2018 – August 31, 2018.


Graduate Students reappointed as Part-time Lecturers
MOSS, Aaron, David R. Cheriton School of Computer Science, May 1, 2018 – August 31, 2018.

ROLlick, Nickolas, Dept. of Pure Mathematics, May 1, 2018 – August 31, 2018.

Postdoctoral Fellows appointed as Part-time Lecturers
HUANG, Hui, David R. Cheriton School of Computer Science, September 1, 2018 – August 31, 2019.


ZHANG, Aoqian, David R. Cheriton School of Computer Science, September 1, 2018 – August 31, 2019.

B. ADMINISTRATIVE APPOINTMENTS
BROWN, Daniel, Acting Director, David R. Cheriton School of Computer Science, July 1, 2018 – December 31, 2018.

BROWN, Daniel, Director of Undergraduate Studies, David R. Cheriton School of Computer Science, January 1, 2019 – June 30, 2019.
GEELEN, Jim, Associate Chair of Graduate Studies, David R. Cheriton School of Computer Science, September 1, 2018 – August 31, 2019.

KERSCHBAUM, Florian, Executive Director, Waterloo Cybersecurity and Privacy Institute, May 1, 2018 – April 31, 2021.

LABAHN, George, Director of Graduate Studies, David R. Cheriton School of Computer Science, July 1, 2018 – June 30, 2020.

RAGDE, Prabhakar, Director of Undergraduate Studies, David R. Cheriton School of Computer Science, July 1, 2018 – December 31, 2018.

SALEM, Ken, Director of Infrastructure, David R. Cheriton School of Computer Science, September 1, 2018 – February 28, 2019.

ADMINISTRATIVE REAPPOINTMENTS

VANDERBURGH, Ian, Director, Centre for Education in Mathematics and Computing, July 1, 2018 – June 30, 2021.

C. RETIREMENT
SMALL, Christopher, Professor, Dept. of Statistics and Actuarial Science, effective April 30, 2018.

D. SABBATICALS (for approval by the Board of Governors)
DUBIN, Joel (Associate Professor), Dept. of Statistics and Actuarial Science, July 1, 2018 – December 31, 2018 with 100% salary.

GIESBRECHT, Mark (Professor), David R. Cheriton School of Computer Science, July 1, 2018 – December 31, 2018, with 85% salary.

GOULDEN, Ian (Professor), Dept. of Combinatorics and Optimization, September 1, 2018 – February 28, 2019, with 100% salary.

HARDY, Mary (Professor), Dept. of Statistics and Actuarial Science, January 1, 2019 – December 31, 2019, with 100% salary.

HENGARTNER, Urs (Associate Professor), David R. Cheriton School of Computer Science, September 1, 2018 – August 31, 2019, with 85% salary.

KARSTEN, Martin (Associate Professor), David R. Cheriton School of Computer Science, September 1, 2018 – February 28, 2019.

KUO, Wentang, (Associate Professor), Dept. of Pure Mathematics, September 1, 2018 – February 28, 2019, with 85% salary.

LARSON, Kate (Professor), David R. Cheriton School of Computer Science, September 1, 2018 – August 31, 2019, with 8% salary.
LIU, Yu-Ru, (Associate Professor), Dept. of Pure Mathematics, September 1, 2018 – February 28, 2019, with 85% salary.

TOMAN, David (Professor), David R. Cheriton School of Computer Science, January 1, 2019 – June 30, 2019, with 85% salary.

TREFLER, Richard (Associate Professor), David R. Cheriton School of Computer Science, September 1, 2018 – August 31, 2019, with 86.4% salary.

WAN, Justin (Associate Professor), David R. Cheriton School of Computer Science, July 1, 2018 – June 30, 2019, with 100% salary.

E. SPECIAL LEAVE

De STERCK, Hans (Professor), Dept. of Applied Mathematics, April 1, 2018 – December 31, 2018. This is an unpaid leave.

CLARKE, Charles (Professor), David R. Cheriton School of Computer Science, July 1, 2018 – August 31, 2018. This is an unpaid leave.

GOULDEN, Ian, (Professor), Dept. of Combinatorics and Optimization, March 1, 2019 – June 30, 2019, with 100% salary. This is an administrative leave.

Stephen M. Watt
Dean
A. **APPOINTMENTS**

**New Definite Term – Full-Time**

**MARTA, Richard**, Lecturer, joint appointment with the Departments of Chemistry (51%) and Physics and Astronomy (49%), May 1, 2018 to June 30, 2021. [B.Sc., University of Waterloo (2004); Ph.D., University of Waterloo (2009).] Dr. Marta has joined the faculty ranks at the University of Waterloo as a Lecturer in Materials and Nanosciences. In his previous position as a lab instructor in the Department of Chemistry, he has served a number of roles over the last seven years, including numerous sessional lecturer positions in both general chemistry and physical chemistry, and has also supported the MNS program through lab development and lab instruction. He was awarded one of two 2018 Excellence in Science Teaching Awards held in the Faculty of Science. He has extensive chemistry experience from his graduate work at Waterloo under the supervision of Dr. Terry McMahon.

**Adjunct Appointments**

**Research**

**HEIKKILA, John,** (Professor Emeritus) Professor, Department of Biology, May 1, 2018 to April 30, 2021.

**Graduate Supervision and Research**

**DALAL, Neal,** Professor, Department of Physics and Astronomy, March 1, 2018 to August 31, 2024.

**EAST, William E.**, Assistant Professor, Department of Physics and Astronomy, January 1, 2018 to August 31, 2023.

**Adjunct Reappointments**

**Graduate Supervision**

**JONES, Jon P.**, Associate Professor, Department of Earth and Environmental Sciences, March 1, 2018 to February 28, 2021.

**LEGGETT, Anthony**, Professor, Department of Physics and Astronomy, February 1, 2017 to January 31, 2020.

**XIAO, Wenjiao.**, Professor, Department of Earth and Environmental Sciences, November 1, 2017 to October 31, 2020.
Undergraduate Instruction and Research

DAMIAN, Festo, Assistant Professor, School of Pharmacy, January 1, 2018 to December 31, 2020.

PALMAY, Lesley, Assistant Professor, School of Pharmacy, January 1, 2018 to December 31, 2020.

Graduate Supervision and Research

DeWITTE-ORR, Stephanie, Assistant Professor, Department of Biology, July 1, 2018 to June 30, 2021.

HEATH, Daniel, Professor, Department of Biology, April 1, 2018 to March 31, 2021.

Cross Appointment

LEONENKO, Zoya, Professor, Physics and Astronomy (and Biology), cross appointed to School of Pharmacy, May 1, 2018 to April 30, 2021.

Cross Reappointment

COURTENAY, Simon C., Professor, Department of Environment and Resource Studies, cross appointed to Department of Biology, April 1, 2018 to March 31, 2021.

Special Appointment

Undergraduate Instruction

FENG, Lucy, Lecturer, School of Pharmacy, May 1, 2018 to August 31, 2018.

Special Reappointment

Research Associate Reappointed as Lecturer

LEKIN, Kristina, Lecturer, Department of Chemistry, May 1, 2018 to August 31, 2018.

B. Administrative Appointment

KLEINKE, Holger, Director, Nanotechnology Graduate Program, joint between the Faculties of Science and Engineering, January 1, 2018 to December 31, 2019.
ADMINISTRATIVE REAPPOINTMENT

JONES, Lyndon, Director, Centre for Ocular Research and Education (CORE) (formerly CCLR), May 1, 2017 to April 30, 2021.

C. RETIREMENT

HEIKKILA, John, Professor, Department of Biology, effective May 1, 2018.

FOR APPROVAL BY THE BOARD OF GOVERNORS

C. SABBATICAL LEAVE

FILLION, Eric, Professor, Department of Chemistry, split leave July 1, 2018 to December 31, 2018 and July 1, 2019 to December 31, 2019, 100% salary arrangement.

SERVOS, Mark, Professor, Department of Biology, 4 for 4 exchange administrative leave, January 1, 2019 to April 30, 2019, 100% salary arrangement.

R.P. Lemieux
Dean
FOR APPROVAL

Committee Appointment
Motion: To approve the following appointment:

- **COU Academic Colleague**: Marios Ioannidis (chemical engineering), term end date change from 30 June 2018 to 30 June 2019.
Senate Graduate & Research Council met on 9 April 2018 and considered a proposal to establish a graduate admissions pathway. Council agreed to forward the following items to Senate for approval as part of the regular agenda.

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

FOR APPROVAL

GRADUATE ADMISSIONS PATHWAY

Faculty of Arts

Motion: To create an Admissions Pathway agreement between the University of Waterloo Department of Economics and the School of Economics at Shanghai University of Finance and Economics (SUFE), for programming beginning 1 September 2018, as presented in the Attachment.

Rationale: The Department of Economics at Waterloo and the School of Economics at SUFE are motivated by a common interest to collaborate on education and research, and to facilitate the participation of students from SUFE in the Master’s degree program in Economics at Waterloo.

As such those entities would enter into the attached Agreement to establish an Admissions Pathway into the Waterloo master’s degree program in Economics, henceforth to be known as the “SUFE – Waterloo Graduate Admissions Pathway” (“SWGAP”). Specifically, the SWGAP is a graduate-level degree Admissions Pathway consisting of two parts, with Part One implemented at SUFE (where SUFE is solely responsible for administration of this part), and Part Two implemented at Waterloo (where Waterloo is solely responsible for the design and administration of this part). For Part One, Students to the SWGAP study one foundational year at SUFE, after which these Students may seek admission to Waterloo. Once admitted to Waterloo, the Candidate will study for between eight months and two years at Waterloo, depending on the Master of Arts (“MA”) option chosen. Upon successful completion of all the academic requirements at Waterloo, Candidates are granted an MA in Economics by Waterloo. SUFE will not grant degrees under this Agreement to candidates in the SWGAP.
ADMISSIONS PATHWAY AGREEMENT

BETWEEN

UNIVERSITY OF WATERLOO
CANADA

AND

SHANGHAI UNIVERSITY
OF FINANCE AND ECONOMICS
CHINA
ADMISSIONS PATHWAY AGREEMENT

BETWEEN

UNIVERSITY OF WATERLOO, a university established by an Act of the Legislature of the Province of Ontario, with its main campus located at 200 University Avenue West, Waterloo, Ontario, N2L 3G1, Canada.
(“Waterloo”)

AND

SHANGHAI UNIVERSITY OF FINANCE AND ECONOMICS of 777 Guoding Road, Shanghai, 200433, China.
(“SUFE”)

WHEREAS, Waterloo and SUFE (singularly an “Institution”, or collectively the “Institutions”) are motivated by a common interest to collaborate on education and research, and to facilitate the participation of students from SUFE in the master’s degree program in Economics at Waterloo.

AND WHEREAS, the Institutions have discussed the furtherance of these interests at the highest levels and now wish to record their mutual understanding in this regard.

NOW THEREFORE the Institutions agree to enter into this Agreement (the “Agreement”).

1 General

1.1 The Department of Economics at Waterloo and the School of Economics at SUFE enter into this Agreement to establish an Admissions Pathway into the Waterloo master's degree program in Economics, henceforth to be known as the "SUFE – Waterloo Graduate Admissions Pathway” (“SWGAP”).

2 Definitions

2.1 The following terms define the stages each student will progress through in the SWGAP.
2.2 “Students” refers to students who have not yet been admitted to Waterloo for Part Two of the SWGAP.

2.3 “Candidates” refers to students who have completed all admission requirements and who are formally enrolled at Waterloo as part of the SWGAP.

3 Admissions Pathway Design

3.1 Waterloo and SUFE will jointly establish the SWGAP. The SWGAP is a graduate-level degree Admissions Pathway consisting of two parts, with Part One implemented at SUFE, and Part Two implemented at Waterloo. For Part One, Students to the SWGAP study one foundational year at SUFE, after which these Students may seek admission to Waterloo. Once admitted to Waterloo, the Candidate will study for between eight months and two years at Waterloo, depending on the Master of Arts (“MA”) option chosen. Upon successful completion of all the academic requirements at Waterloo, Candidates are granted an MA in Economics by Waterloo. SUFE will not grant degrees under this Agreement to Candidates in the SWGAP.

3.2 SUFE will be solely responsible for administering Part One of the SWGAP. Waterloo will be solely responsible for the design and administration of Part Two of the SWGAP, including its curriculum and teaching methodology. Promotion and marketing of the SWGAP is the responsibility of SUFE. Waterloo shall provide permission to SUFE to use its logo, trademarks and publications to market the SWGAP. SUFE shall send copies of all advertisements to Waterloo for approval before actual use.

3.3 Part One of the SWGAP, the foundational year, shall be one- or two- semesters long, depending on the individual progress of each Student. Part One shall consist of three components:

   (a) English language proficiency training courses (listening, speaking, reading, and writing);

   (b) preparatory knowledge training, including microeconomics, macroeconomics, econometrics, and mathematical economics; and
North American education orientation and introduction to Canadian culture. Students shall be introduced to Waterloo teaching methods.

i. Note that the preparatory courses in econometrics, microeconomics, and macroeconomics are taught at an advanced undergraduate level. Waterloo will provide SUFE with an outline of the expected topics that should be mastered in these preparatory courses.

3.4 Part Two of the SWGAP consists of the application, admission, and enrolment of Students in one of the following master’s programs at Waterloo:

- Master of Arts (MA) in Economics
- Master of Arts (MA) in Economics-Co-operative Program
- Master of Arts (MA) in Economics, Collaborative Water Program

(a) The Associate Chair for Graduate Studies in Economics will provide guidance to incoming Students as to which of these three MA program options Students should enroll into under the SWGAP.

3.5 Upon successfully completing the master’s program, SWGAP Candidates will receive an MA in Economics from Waterloo. SUFE will not grant degrees under this Agreement to Candidates in the SWGAP.

4 English Language Proficiency

4.1 SUFE shall assist SWGAP Students in meeting the English language proficiency requirements established by Waterloo for admission. SUFE shall provide English language proficiency training that is designed to help the SWGAP Students prepare for the TOEFL or IELTS exams.

4.2 English language proficiency requirements are given on the Waterloo webpage entitled English Language Proficiency which is found at: https://uwaterloo.ca/graduate-studies-academic-calendar/general-information-and-regulations/english-language-proficiency.

4.3 If academically admissible, and at the discretion of Waterloo, Students who do not
meet the English Language Proficiency requirements may be conditionally admitted to a future term at Waterloo, after successfully completing Level 400 of the English for Academic Success (EFAS) program at Renison University College. Students may take either the regular spring program or the six-week intensive summer program. Successful completion requires an overall average of 75% in the EFAS program. The EFAS program is described here: https://uwaterloo.ca/english-language-institute/programs/academic-english

4.4 It is recommended that even those Students who meet the English Language Proficiency requirements should participate in the EFAS program prior to beginning full-time studies.

5 Application process

5.1 The Institutions acknowledge that the application process consists of two steps.

(a) Step One: Students apply to SUFE for admission to Part One of the SWGAP.

(b) Step Two: Students currently in Part One of the SWGAP and studying at SUFE, apply for admission to Part Two at Waterloo.

(c) Regarding Steps One and Two:
   
   i. Students must meet the application deadlines at both institutions.

   ii. Students must satisfy the application and admission requirements at both institutions.

(d) Regarding Step Two:

   i. SUFE will determine when the Student is ready to apply to Waterloo and will assist the Student through the application process as part of the SWGAP.

   ii. Students’ applications from SUFE will be given careful attention in assessing their admission to Waterloo. Waterloo recognizes the caliber of instruction and education gained by the Students at SUFE.
5.2 If selected by Waterloo, Students will be notified by Waterloo of conditional admission through an offer letter, which will be conditional upon all admission requirements as set out below. Waterloo will notify the Designated Representative at SUFE of the names of all those Students who have been made a conditional or unconditional offer of a place by Waterloo.

5.3 For any Students who are admitted to Waterloo but unable to acquire the appropriate immigration documents to enter Canada in time for Fall enrollment, their admission shall be deferred to the next Fall. Waterloo shall make all admission decisions in the Application Process from Step Two onwards in the SWGAP.

6 Recruitment target

6.1 SUFE and Waterloo will negotiate annual Student recruitment targets for the SWGAP. An initial target will be established of five (5) prospective Candidates to be recruited and trained at SUFE in the Fall 2018 semester and enrolled at Waterloo for the Fall 2019 semester.

7 Admission requirements at Waterloo

7.1 To be admitted to Waterloo for the SWGAP, Students shall have:

(a) obtained a four year Bachelor's degree in China from a recognized university with a minimum overall average of 80%;

(b) completed Part One of the SWGAP at SUFE, having successfully passed all courses each with a minimum average grade of 75% and no individual course with a grade of less than 70%; and

(c) satisfied the English Language Proficiency requirements as detailed under clause 4 English Language Proficiency.

7.2 The Institutions acknowledge that all offers of admission are at the discretion of the Designated Representative at Waterloo.
8 Tuition and Incidental Fees

8.1 The Candidate shall pay tuition fees to the Institution at which they are in residence during the academic term. The Candidate will only be required to pay fees to one Institution at a time.

8.2 The Candidate shall pay Waterloo tuition fees for international students, plus incidental fees, during their residence at Waterloo. International fees at Waterloo are specified on the Waterloo website: https://uwaterloo.ca/finance/student-financial-services/tuition-fee-schedules

9 Health Coverage and Insurance

9.1 Candidates shall maintain appropriate health insurance (and other insurance, if required) at each Institution during their time of residence.

9.2 All international Candidates studying at Waterloo are required to enrol in, and maintain coverage through, the University Health Insurance Plan (UHIP) and Waterloo’s Supplementary Student Health Insurance Plan (SSHIP) available through the Federation of Students/Graduate Students Association (FEDS/GSA) Health and Dental Plan during the period of residence at Waterloo.

10 Financial Support

10.1 Each Institution will provide a letter to the Candidate, indicating any financial support offered. In addition, the Candidate, while resident at an Institution, is entitled to apply for any scholarship or bursary funds for which they are eligible.

11 Student Status

11.1 Once admitted to Waterloo, Candidates registered at Waterloo pursuant to this Agreement will be governed by current Waterloo policies. Waterloo’s decision in respect of any academic judgment relating to its programmes shall be final.

12 Counterparts
12.1 This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which shall constitute one and the same instrument. In the event that any signature is delivered by facsimile transmission or by e-mail delivery of a PDF file, such signature shall create a valid and binding obligation of the signatory (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or PDF signature page were an original thereof.

13 Renewal, Modification, or Termination of Agreement

13.1 This Agreement is effective upon final signature below and shall continue in effect for a period of **one (1) year**. The Agreement shall renew automatically from year to year for additional one (1) year terms unless written notice of cancellation or modification is provided. This Agreement may be modified upon mutual written agreement of the Institutions. This Agreement can be cancelled by either Institution. Written notice of cancellation shall be provided by one Institution to the other Institution prior to April 30 in that year. The cancellation shall not affect the status of the Candidates who are in the process of application or enrolled at SUFE prior to the cancellation date.

14 News Releases

14.1 Any public announcements or news releases resulting from this Agreement should be coordinated with Waterloo’s Office of Marketing and Strategic Initiatives and SUFE’s Center of Study and Exchange at School of Economics.

15 Designated Representatives

15.1 Each Institution will appoint Designated Representatives for co-ordination and administration of this Agreement. The Institutions may change their Designated Representatives at any time by providing written notice.

The Designated Representative for Waterloo is:

Dr. Jeff Casello
Associate Vice-President, Graduate Studies and Postdoctoral Affairs
16 Dispute Resolution

16.1 Any disputes in connection with this Agreement should be settled by negotiation between the Institutions through their Designated Representatives.

17 Indemnification

17.1 Each Institution shall at all times indemnify and hold harmless the other against all claims, actions, loss, or damage arising from the indemnifying Institution's performance or lack of performance under the Agreement or the acts of commission or omission of its employees, agents or students while carrying out this Agreement.
In signing hereunder, the Signatories affirm their legal authority to bind their respective Institutions into, and execute, this Agreement, made in two (2) copies, on the dates shown hereunder.

**UNIVERSITY OF WATERLOO**

per: ________________________________ date: ______________

Dr. Feridun Hamdullahpur
President & Vice-Chancellor

per: ________________________________ date: ______________

Dr. Jeff Casello
Associate Vice-President, Graduate Studies and Postdoctoral Affairs

per: ________________________________ date: ______________

Dr. Ian Rowlands
Associate Vice-President, International

per: ________________________________ date: ______________

Dr. Douglas Peers
Dean, Faculty of Arts

**SHANGHAI UNIVERSITY OF FINANCE AND ECONOMICS**

per: ________________________________ date: ______________

Dr. Guoqiang Tian
Dean, School of Economics
Senate Undergraduate Council met on 10 April 2018 and agreed to forward the following item to Senate for approval. Council recommends this item be included in the regular agenda.

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

FOR APPROVAL

CHANGES TO ACADEMIC PLANS

Faculty of Arts
Honours Liberal Studies

1. **Motion:** That Senate approve a major modification to the liberal studies plan to create a new honours liberal studies plan as described below, effective 1 September 2019.

**Description and Rationale:**

**Honours Liberal Studies**

Continuation in this academic plan requires a cumulative minimum overall average of 60% and a cumulative minimum average of 70% in Arts Faculty courses.

Eligibility for graduation in the Honours Liberal Studies academic plan includes successful completion of the following requirements:

1. Appropriate Program-level requirements. See Bachelor of Arts Degree Requirements.
2. Liberal Studies Plan-level requirements:
   - a minimum Faculty of Arts average of 70%
   - at least 12.5 academic course units (25 courses) in the Faculty of Arts
   - a minimum of three academic course units (six courses) at the 300-level or above, two units (four courses) of which must be in the Faculty of Arts

**Note**
Honours Liberal Studies may be taken in combination with any Minor plan open to Arts students.

**Arts and Business (Co-op and Regular)**

Students may combine the Honours Liberal Studies academic plan with Arts and Business. In addition to the Honours Liberal Studies requirements, students must also complete the Arts and Business requirements.

**Honours double majors**

Honours Liberal Studies may **not** be taken in combination with other Arts Major plans.

**Rationale:** There are presently two Liberal Studies plans, the three-year general and the four-year general. The four-year plan requires 20.0 course units, 12.5 of which must be in Arts and including 2.0 at the 300 level or higher, and a CAV (cumulative average) of at least 60% and a FAV (Faculty average) of at least 65%. The three-year plan is similar, requiring 15.0 course units, 7.5 of which must be in Arts and including 1.0 unit at the 300 level or higher. Based on data from Spring 2016-Winter 2017, there are approximately 500 students enrolled in Liberal Studies plans at any one time. Of these about 250 have CAV > 60 and FAV > 70. Of those students who have CAV > 60 and FAV > 70, about half (49%) have either been admitted to a major or are clearly preparing to declare a major (and are close to or meet requirements). Of those admitted
to a major, nearly half spend only one term in Liberal Studies, and more than 80% will spend three or fewer terms. The other half of students who have CAV > 60 and FAV > 70 can be characterized as “Renaissance students” who seem not to want to specialize in a major discipline.

In the Spring 2016 convocation, 32 students graduated in Liberal Studies with CAV > 60 and FAV > 70, or 44% of the Liberal Studies graduating class; in Fall 2016, those numbers are 24 (29%); in Spring 2017, 24 (40%).

This proposal concerns two groups of students, each of which constitutes half of the current Liberal Studies enrollment:

1. Students in Liberal Studies plans with a CAV > 60 and FAV > 70 who are temporarily in Liberal Studies as they satisfy requirements to enter a major, and
2. Students with a CAV > 60 and FAV > 70 who are in Liberal Studies and do not show an interest in specializing in a major.

The benefits of this degree plan will include:

1. Confering Honours status on those students who fulfill these requirements at the time of graduation, thus accurately reflecting their academic accomplishments to themselves and their friends, families, and future employers;
2. Increasing revenue for the Faculty.
3. Enabling students who do not enter a major but maintain CAV > 60 and FAV > 70 to stay in Co-op.

Mario Coniglio
Associate Vice-President, Academic

/rmw
FOR APPROVAL

Roster of Graduands
Since the roster of graduands will not be available until after the regular meeting of Senate in May and approval is required before the June meeting, the following motion is proposed:

Motion: That Senate delegate such approval to its Executive Committee for its 4 June 2018 meeting.
FOR APPROVAL

Department Name Change

Motion: The Senate approves the following name change: “Department of Drama and Speech Communication” to “Department of Communication Arts,” effective 1 September 2018.

Background and Process:

The Department of Drama and Speech Communication proposes to change its name to the Department of Communication Arts.

The Department of Drama and Speech Communication proposed a new name to Arts Faculty Council in May 2016 (“Department of Communication, Performance, and Design”). This motion was approved 26 to 14 (with 4 abstentions). The proposed change was the result of extensive and ongoing conversations (both formal and informal) about the central aims of the department. A motion was then brought before University Senate in June 2016 and rejected. Subsequent to these meetings, the Department re-started a formal name change process. This required both decisions about process and substance, and conversations inside the department and with external stakeholders. The department decided to find a new name through an “iterative” consultation process, which required moving back and forth between discussions within the department and discussions with other units at the University. The goal of the iterative process was to have external discussion inform internal department decision-making. The Chair of the Department consulted, in some cases on several different occasions, with the Department of Fine Arts, the Department of English Language and Literature, the Stratford Programs, the Faculty of Engineering, the Provost’s Office, and the Dean of Arts. Records of this consultation process were kept and all Department discussions began with reports of feedback from external stakeholders. This iterative process eliminated certain phrases and words from consideration and included robust support for “Communication Arts” from the external stakeholders identified above and from the Department. Substantive discussions concluded in December 2017. The Department voted on December 6, 2017 in favor of the name “Department of Communication Arts.” A motion was then brought to Arts Faculty Council on February 6th, 2018 and that motion passed unanimously.

Rationale:

The name “Drama and Speech Communication” uses two anachronistic and confusing descriptors for the research and teaching that happens within the Department. “Drama” does not identify any existing academic program in the Faculty of Arts and misrepresents the Theatre and Performance program; “Speech Communication” is often confusingly associated with “Speech Pathology”; and Digital Arts Communication is not represented at all in the current department name. The proposed new name – “Communication Arts” – captures the department level emphases on the analysis, inquiry, and critical practice of multi-modal forms of making meaning, including embodied, spoken, written, performative, visual, and digital modes of representation. All students
in the Department engage in the production, performance, and critical cultural study of communication, with the aim of becoming competent and engaged artists/scholars/practitioners in their fields – the new name highlights this shared feature of all of the department’s programs and better captures the kinds of research and creative work characteristic of faculty in the department. Furthermore, “Communication Arts” qualifies the word “communication” in order to distinguish our program from “Professional Communication,” as it is understood in the Department of English Language and Literature, and other Canadian Communication programs (like Wilfrid Laurier’s “Communication Studies” program which does not emphasize embodied performance, digital design arts, or critical practice).

Douglas M. Peers
Dean, Faculty of Arts
FOR APPROVAL

CHANGING THE NAME AND STRUCTURE OF THE CONRAD CENTRE:

**Motion:** That the University of Waterloo change the name of the Conrad Business, Entrepreneurship and Technology Centre to the “Conrad School of Entrepreneurship and Business” within the Faculty of Engineering and that it be granted formal status as an academic unit.

**Rationale:** When the Conrad Business, Entrepreneurship and Technology Centre (Conrad) was established it was made a Centre in part to allow it to exist outside of the faculties and deliver on a cross-university mandate. Since those early days, governance changes at the university have resulted in Conrad moving inside of Engineering and functioning as a department under the auspices of the Dean’s office. However, Conrad’s functioning is not aligned with current governance requirements at UW (it has academic programs, appoints dedicated faculty, needs to oversee tenure and promotion, etc.). The proposed change is “governance housekeeping” on one level, and brings no material change to Conrad’s functioning, programming or mandate. The proposed name captures Conrad’s activities well, is appropriate to its competitive context, and aligns with its external review recommendations. The motion above received unanimous endorsement by Engineering Faculty Council at its January, 2018 meeting.
BACKGROUND

The Conrad Business, Entrepreneurship and Technology Centre (Conrad) is a successful academic enterprise at University of Waterloo. For the last 15 years it has offered a truly unique, high-value professional masters degree (MBET). In its most recent external review, MBET was characterized as “innovative and evolving in line with the newest approaches to both Entrepreneurship and Intrapreneurship, not only in Canada but worldwide.”

More recently, Conrad has begun offering:

- a Graduate Diploma in Business and Entrepreneurship;
- a Weekend version of its unique MBET that has attracted a large inaugural class;
- graduate courses in business and entrepreneurship that attract hundreds of Engineering’s professional masters students every year,
- a ground-breaking online introductory entrepreneurship course (BET100),
- the innovative Bridging Entrepreneurs to Students (BETS) program that provides work experience to unplaced co-op engineering students while accelerating start-up activities at UW and in the region,
- an Enterprise Co-op program that has more than tripled in size since Conrad assumed its leadership; and
- the university’s new undergraduate option and minor programs in entrepreneurship – open to all UW students regardless of discipline.

A proposal for a unique doctoral program in entrepreneurship is also in the formal planning stages.

Conrad’s undergraduate courses and programs are made available to students from every faculty, permitting entrepreneurial students from every discipline to pursue exciting real-world applications of their disciplinary studies. Proposals are in development for how Conrad might also play a similarly valuable role in supporting the education and aspirations of graduate students across campus as well as the research commercialization activities of faculty and doctoral students. Conrad is a going concern that has been rapidly growing in size and scope.

When established by the University of Waterloo’s senate, Conrad’s mandate was “... to provide a focal point for the development and coordination of UW’s business activities...”, including MBET, the development of undergraduate programming, supporting the expansion of business offerings across campus, serving as a focal point for entrepreneurship research activities, and engaging with the business community and external stakeholders through outreach programming.
When Conrad was first formed to offer the MBET degree, it took the form of a university research centre. This was done, in part, to allow it to exist outside the faculties in order to be true to its senate-approved, university-wide mandate to serve all faculties. Over time, it became clear that a unit offering academic programming of this kind was most appropriately situated inside a faculty given UW’s governance structures and, in 2005, Conrad became a unit inside of Engineering. It’s university-wide mandate, however, remained and remains unchanged.

Under current UW governance policies and practices, research centres should not be offering degree programs or for-credit courses, and cannot technically appoint faculty. Further, they lack the requisite formal structures to facilitate the tenure and promotion practices of UW—an increasingly pressing issue that needs to be resolved for Conrad. (Policies 76 & 77)

In order to bring Conrad’s formal structure in line with its mandated and actual activities, Conrad must become either a School or a Department within its faculty. In many respects, the proposal here represents a kind of governance “house keeping”. It represents no material change in Conrad’s activities.

PROPOSAL AND RATIONALE

It is proposed that the Conrad Business, Entrepreneurship and Technology Centre become the Conrad School of Entrepreneurship and Business.

The easiest name change would involve simply changing “Centre” to “School”. However, Conrad and the Faculty of Engineering are mindful that it might be problematic to have the sequence “School of Business” in Conrad’s name given the broad nature of business activities at the university, and we want to continue to position Conrad as a uniquely entrepreneurial entity.

School status is seen to be more appropriate to Conrad’s activities, more helpful to its future aspirations, as well as more appropriate to its role in both the faculty’s and the university’s strategic agendas than department status. There is a robust set of reasons to draw this conclusion:

- The University of Waterloo has a number of schools that are housed within faculties: School of Accounting and Finance (Arts), School of Public Health and Health Systems (Applied Health Sciences), School of Optometry and Vision Science (Science), School of Pharmacy (Science), School of Architecture (Engineering), School of Environment, Enterprise and Development (Environment), School of Computer Science (Math), and the School of Planning (Environment). Each of these schools share a common focus on professional rather than purely academic and disciplinary activities and pursuits. Conrad clearly also has this characteristic focus. Further, as a measure of current thinking, the rationales used most recently in the establishment of both SEED and the School of Environment, Resources and Sustainability align closely.
with Conrad's situation. The scope of Conrad's operations is, additionally, similar to those of the School of Architecture, SEED and the School of Environment, Resources and Sustainability when they were conferred with school status.

- School status offers a signal to the outside world of the importance of such professional entrepreneurship education programming to the university's strategic plan.

- Consistent with the rationale most recently offered for the School of Environment, Resources and Sustainability, almost all of Conrad's competitors are "schools".

- As with all the other schools at the University of Waterloo, school status will be helpful in marketing Conrad and the University's activities in the existing marketplace for such programming.

- Out of necessity and as part of its strategic positioning for UW, Conrad has built up a variety of structures and activities that are more consistent with UW practice in its schools, and less so in its departments. For example, Conrad has received a significant naming gift from the Conrad family that is similar in nature to the Cheriton School gift. Given the unique market it serves, Conrad also invests in its own specialized marketing and communications activities and staffing like Accounting and Finance.

Changing Conrad to a school is also consistent with the recommendations of the Ministry of Colleges and University's external review of Conrad's graduate programs in 2012, its accepted 2015 update to Senate, and the Engineering Faculty's Vision 2015 plan. Indeed, this change of status is one of the last remaining items on Conrad's last approved strategic planning agenda.

Conrad's faculty and staff see this as a critical step in achieving their objectives and advancing their mission. Their Engineering Faculty Council colleagues offered their formal and unanimous support of the proposal.

Respectfully Submitted,

J. Mark Weber
Eyton Director
Conrad Business, Entrepreneurship and Technology Centre

Pearl Sullivan
Dean
Faculty of Engineering
CONRAD SCHOOL OF ENTREPRENEURSHIP AND BUSINESS PROPOSAL
EXECUTIVE SUMMARY

This executive summary was previously presented to SGRC for information, discussion, and comment.

The proposal is:

*That the University of Waterloo change the name of the Conrad Business, Entrepreneurship and Technology Centre to the “Conrad School of Entrepreneurship and Business” within the Faculty of Engineering and that it be granted formal status as an academic unit.*

Background

In 2002, the UW Senate created what is now the Conrad Business, Entrepreneurship and Technology Centre to deliver the Masters of Business, Entrepreneurship and Technology (MBET), and to “provide a focal point for the development and coordination of UW's business activities”. It was created as a Centre because, at that time, among other considerations, the university saw it as a way for the unit to exist outside of a faculty and therefore serve the whole university.

After Conrad’s founding, UW changed the governance model for research centres, putting Conrad offside the new rules and regulations with respect to offering academic programs and appointing and promoting faculty. Further, it became clear that Conrad needed to be brought inside a faculty to ensure appropriate academic oversight and procedure. In 2005, Conrad moved inside of engineering, but its cross-campus mandate remained unchanged.

Over the years, Conrad has grown considerably in size, scope, and impact. It now offers full and part-time MBET programs, a graduate diploma, a cross-campus undergraduate minor, an undergraduate option in Engineering, electives for MEng students and undergrads alike. A proposal for a new doctoral program is in development. Conrad now touches well over 1,000 students a year. At the undergraduate level, approximately 50% are from Engineering, approximately 20% from math, and the remainder from the other four faculties. As Conrad’s profile has grown, the proportion of undergraduate students from engineering has been in decline (but not the absolute number). We think the proposed change will also help us to raise our profile and therefore serve interested UW students even better.

What this change does and does not do

This motion is essentially “governance housekeeping”. It does not change any of Conrad’s activities, or the nature of its mandate. It simply moves Conrad back “onside” with UW governance rules so that it can meet Policy 76 and 77 requirements with respect to its growing faculty (among others).

Conrad must become either a department or a school. Remaining a centre is not an option. At UW the only differences between a department and a school are the name and the title of its head (Director vs. Chair). As with other units from other faculties that have recently become schools, the term school is seen as more appropriate given our professional focus and our external competitive landscape.

Conrad remains deeply committed to being a resource for students in every faculty, and working cooperatively and collaboratively with partners across campus.
Report of the Vice-President, University Research to Senate

May 2018

Tri-Council Funding

Discovery Grants had a success rate of 82.7% overall for the year 2018-19; Waterloo received 110 out of 133 submitted. The national average has been between 64-66% over the last 5 years. The new 5 year grants will net Waterloo $17.6M over the next five years. Waterloo was also awarded 10 Discovery Accelerator Supplements; NSERC traditionally awards 125 nationally. These grants are an additional $120,000 over 3 years, so in total an additional $1.2M over those 3 years. NSERC has announced there will be supplemental funding for Discovery grants due to the increase in budget, announced in the Federal budget.

In Research Tools and Instruments, this is the first year there has not been a quota for each university in 4 years. Waterloo received 11 RTI grants out of 54 submitted (20.4%), with a value of $1.3M.

This past October Waterloo submitted 51 applications to the SSHRC Insight Grant Competition and were successful on 19, for a success rate of 37.3%, receiving a total of $3,408,275. The National success rate was 47.3%. The National average awarded amount was $139,839 whereas the Waterloo average was $179,383.

Major Awards

Applications for the Unaffiliated Canada Foundation for Innovation – John R. Evans Leaders Fund (CFI-JELF) is offered 3 times a year (February, April and October). The funding is a strategic investment tool that is designed to help institutions attract and retain the very best researchers. For the October 2017 competition, two proposals were submitted for a total of $103,000 in requested funds. One of the two submissions was successful for $40,000. The funding rate (% of funds awarded out of requested) of the October round was 38.8%, with an application success rate of 50%.

Office of Research Compliance Review

Deloitte’s compliance review report of the Office of Research resulted in an A rating, indicating that we are “Operating at a Leading Practices Level”. There were no recommendations identified in the report and five areas of major strength:

1) Compliance with Tri-agency requirements
2) Clear understanding of roles and responsibilities
3) Efforts for continuous improvement
4) Governance monitoring activities
5) Strong processes related to User Access Provisions in our systems