

University of Waterloo
SENATE
Notice of Meeting

Date: Monday 17 September 2018

Time: 3:30 p.m.

Place: Needles Hall, room 3407

	OPEN SESSION	
3:30	<p><u>Consent Agenda</u> Motion: To approve or receive for information by consent items 1-5 below.</p> <ol style="list-style-type: none"> 1. Minutes of the 18 June 2018 Meeting 2. Reports from Committees and Councils <ol style="list-style-type: none"> a. Graduate & Research Council b. Undergraduate Council c. Nominating Committee for Honorary Degrees 3. Report of the President <ol style="list-style-type: none"> a. Recognition and Commendation 4. Report of the Vice-President, Academic & Provost <ol style="list-style-type: none"> a. Call for Nominations for University Professor b. University Research Chairs 5. Reports from the Faculties <p><u>Regular Agenda</u></p>	<p>Decision</p> <p>Information Decision/Information Information</p> <p>Information</p> <p>Information Information</p> <p>Information</p>
3:35	6. Business Arising from the Minutes	
3:40	7. Research Presentation – Nandita Basu, Associate Professor, Civil and Environmental Engineering/Earth and Environmental Sciences	Information
3:50	8. Reports from Committees and Councils <ol style="list-style-type: none"> a. Graduate & Research Council 	Decision
4:00	9. Report of the President	Information
4:10	10. Q&A Period with the President	Information
4:15	11. Report of the Vice-President, Academic & Provost <ol style="list-style-type: none"> a. University Research Chair – Revised Policy 	Decision
4:25	<ol style="list-style-type: none"> b. Course Evaluation Project – Phase 2 Update (Dave DeVidi) 	Information
4:35	12. Report of the Vice-President, University Research	Information
4:40	13. Other Business	

CONFIDENTIAL SESSION		
4:45	14. Minutes of the 18 June 2018 Meeting	Decision
4:50	15. Business Arising from the Minutes	
4:55	16. Report of the President	Information
5:00	17. Other Business	

KJJ/ees
10 September 2018

Karen Jack
University Secretary
Secretary to Senate

University of Waterloo
SENATE
Minutes of the Monday 18 June 2018 Meeting

Present: Bilal Akhtar, Jean Andrey, Michael Balogh, Sandra Banks, Lisa Bauer-Leahy, Katherine Bergman, Kankar Bhattacharya, Anne Bordeleau, Carmen Bruni, Kofi Campbell, Claudio Canizares, Jeff Casello, David Clausi, Tara Collington, Mario Coniglio, Joan Coutu, Eric Croiset, Rick Culham (acting dean of engineering), Shannon Dea, Peter Deadman, Charmaine Dean, George Dixon, Mathieu Doucet, Tia Driver, David Edwards, Marlene Epp, George Freeman, Matthew Gerrits, Mark Giesbrecht, Julia Goyal, John Haddock, Feridun Hamdullahpur (chair), Craig Hardiman, Kevin Hare (acting dean of mathematics), Dennis Huber, Karen Jack (secretary), Spiro Karigiannis, Martin Karsten, Robert Lemieux, Tyler Marques, Ian Milligan, Katie Misener, Barbara Moffatt, Richard Myers, Catherine Newell Kelly, Erin O'Connell, Daniel O'Connor, Douglas Peers, Max Salman, Hannah Sesink, Marcus Shantz, James Skidmore, Richard Staines, Paul Stolee, Hamid Tizhoosh, Tomson Tran, Maya Venters, Ross Willard, Dan Wolczuk, Richard Wu

Guests: Christiana Alkiviades, Dianne Bader, Aldo Caputo, Steve Furino, Mike Jack, Andrea Kelman, David Kibble, Derek Madge, Diana Parry, Leanne Perreault, Ian Rowlands, James Rush, Emily Schroeder, Daniel Scott, Daniela Seskar-Hencic, Marilyn Thompson, Rebecca Wickens

Absent: Chris Bauch*, Steven Bednarski*, Brian Cepuran*, Fred Chereshski*, Simon Courtenay*, Fraser Easton*, Paul Fieguth, Wendy Fletcher*, Cindy Forbes*, Shikha Gandhi*, Robert Gorbet*, Kelly Grindrod, Thorsten Heins*, Marios Ioannidis*, Craig Janes*, Tom Jenkins*, Scott Kline*, Alysia Kolentsis*, Kesen Ma*, Mungo Marsden*, Teferi Mergo*, Grant Mitchell, Linda Ogechi Iheme, William Pristanski, Neil Randall*, Naima Samuel*, Beth Sandore Namachchivaya, Mark Seasons*, Joanne Shoveller*, Pearl Sullivan*, Susan Tighe*, Bryan Tolson*, Stephen Watt*, En-Hui Yang*

*regrets

**telephone

OPEN SESSION

CHAIR'S REMARKS

The president introduced new alumni members Lisa Bauer-Leahy and John Haddock, and advised that agenda item #19 is withdrawn from consideration.

Consent Agenda

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

Myers and O'Connor.

1. MINUTES OF THE 22 MAY 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. Senate heard the following motions:

Faculty of Mathematics, Policy for Late Switches from Advanced MATH Courses to the Regular Equivalents

Motion: To add CO 255 and CO 250 to the list of courses in the chart under "Policy for Late

Switches from Advanced MATH Courses to the Regular Equivalents,” effective 1 September 2019.

Faculty of Science, Honours Science and Aviation – Earth Sciences Specialization and Physics Specialization

Motion: To approve the inactivation of the Honours Science and Aviation – Earth Sciences Specialization and Honours Science and Aviation – Physics Specialization, effective 1 September 2019.

Senate received the remainder of the report for information.

3. REPORT OF THE PRESIDENT

Recognition and Commendation. Senate received the report for information.

4. REPORTS FROM THE FACULTIES

Senate received the reports for information.

5. COMMITTEE APPOINTMENTS

Senate heard the following motions:

Motion: To approve Bruce MacVicar (civil and environmental engineering) as the Engineering faculty representative on Senate Undergraduate Council, term 1 May 2018 to 30 April 2020.

Motion: John Haddock as the alumni member of Senate on Senate Nominating Committee for Honorary Degrees, term 1 May 2018 to 30 April 2019.

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

Senate received the report for information.

Senator Dea sought clarity on the lack of gender balance in the report of the Vice-President, Academic & Provost, and heard from Dixon that many recommended names reflect the University meeting its contractual obligations for former Balsillie chairs.

The question was called, and the motion carried unanimously.

Regular Agenda

7. BUSINESS ARISING FROM THE MINUTES

Dixon advised that with respect to responsibility under the *Fair Workplaces* Act, the University awaits a legal opinion and expects to have more information for Senate in October.

8. RESEARCH PRESENTATION

Dean introduced Alexander Wong, Canada Research Chair in Artificial Intelligence and Medical Imaging Systems. Professor Wong gave a presentation titled, “Enabling Operational Artificial Intelligence: Anywhere, Anyone, Anytime” and informed Senators about: deep learning; operational artificial intelligence and its challenges; the questions around transparent and responsible AI; practical applications.

9. REPORTS FROM COMMITTEES AND COUNCILS

Graduate & Research Council

New University Research Centre, Interdisciplinary Centre on Climate Change (IC³). Senate heard a motion to approve the Interdisciplinary Centre on Climate Change (IC³) transitioning from a Research Centre (as established 1 June 2008) to a University Research Centre, as presented in Attachment 1.

Casello and Andrey. Carried unanimously.

New Research Centre, Waterloo Centre for Electrochemical Energy. Senate heard a motion to approve the establishment of the Waterloo Centre for Electrochemical Energy (WCEE), as presented in Attachment 2.

Casello and Lemieux. Carried unanimously.

Program Change, Faculty of Arts. Senate heard a motion to approve four changes to the Master of Fine Arts (MFA) in Studio Art: lower the minimum admission average from 80% to 75%; lower the number of references required for admission from three to two and change the type of references required from “academic” to “academic and/or professional”; update the current “Fields” (areas of research); input name change from Keith and Win Shantz Summer Internship to Keith and Win Shantz International Scholarship, as presented in Attachment 3.

Casello and Peers. Carried unanimously.

Program Change, Faculty of Mathematics. Senate heard a motion to approve a new computer science PhD program with a required internship and create the corresponding milestone for the internship, as presented in Attachment 4.

Casello and Hare. Carried unanimously.

Changes to Graduate Studies Regulations and Academic Calendar, Graduate Studies and Postdoctoral Affairs. Senate heard a motion to approve five changes to the academic calendar and graduate studies regulations: drop/add deadline date, fee arrangement deadlines, graduate student class enrolment; apply for graduation; inactive status; Master’s thesis regulations; PhD comprehensive examinations, as presented in Attachment 5.

Casello and Goyal.

In response to a question re: communication strategies, Senate heard about what has already taken place and what is planned for the future.

The question was called and the motion carried unanimously.

Undergraduate Council

Faculty of Arts, Human Rights Minor. Senate heard a motion to approve the proposed new minor in human rights as described in the report, effective 1 September 2019.

Coniglio and Peers. Carried unanimously.

Faculty of Arts, French Teaching Specialization. Senate heard a motion to approve the following changes to the French teaching specialization: (a) clarifying restrictions around plan combinations; and (b) removing the requirement to complete a BEd degree at Nipissing University (or elsewhere) in order to have the specialization recognized on a student's diploma, effective 1 September 2019.

Coniglio and Peers. Carried unanimously.

Faculty of Mathematics, Math/FARM Online. Senate heard a motion to approve the offering of a fully online Math/Financial Analysis and Risk Management (Math/FARM degree, effective 1 September 2019.

Coniglio and Hare. Carried unanimously.

10. REPORT OF THE PRESIDENT

The president extended thanks to those Senators who participated in last week's convocation ceremonies and spoke to how gratifying the week was, as always. He offered preliminary commentary on the newly elected provincial government and the launch of the next strategic planning process. Haldullahpur closed his comments with an expression of sincere thanks to Dixon for having stepped into the role of Provost over the last year. Following kudos from the president, Senate offered Dixon a round of applause.

11. Q&A PERIOD WITH THE PRESIDENT

There were no questions.

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

The vice-president had no items to report.

13. REPORT OF THE VICE-PRESIDENT, UNIVERSITY RESEARCH

University Research Chairs – Revised Policy. Senate heard a motion to create a new pathway to the University Research Chair designation as provided in the memorandum.

Dean and Andrey.

In discussion, Senate heard: concerns re: retention and lack of clarity between the various distinctions, and a response that these matters have been considered carefully, renewals of Canada Research Chairs (CRC) beyond the usual time frame are not at the University's discretion, and the proposal is meant to address the retention concern; the proposal is meant only for CRCs in the first path; language is being added to the Office of Research's Equity Action Plan to address this; the provost did not bring this to the Faculty Relations Committee, in line with past activity; from the provost, that, as indicated, all recommendations will be made by deans to the vice-president, research who will inform Senate through a report from the Provost; how other Canadian universities are proceeding.

Following a suggestion, a friendly amendment to the motion was put forward to strike the last sentence in the proposal: “The Vice-President, Academic and Provost will consult with the President of the Faculty Association before announcing any University Research Chair appointments.”

An objection to this amendment was raised by several Senators, and following discussion, Senate understood the friendly amendment will not proceed, and the motion will continue as originally proposed. Senate understood that conversations will take place at the Faculty Relations Committee to consider the matter and Senate will be apprised of the outcome.

The question was called and the motion carried unanimously.

June Update. Senate received the report for information.

14. REPORT OF THE DEAN OF ARTS

Changes to the Faculty of Arts Constitution. Senate heard a motion to approve, pursuant to Section 15 of Senate Bylaw 1, the revised Constitution of the Faculty of Arts.

Peers and Andrey.

Following confirmation that Senate’s procedures do not allow for proxy votes, the question was called, and the motion carried unanimously.

15. OTHER BUSINESS

Delegation of Authority – Chair of the Dean of Applied Health Sciences Nominating Committee and the Dean of Arts Nominating Committee. Senate heard the following two motions together:

Motion: That Senate grant the Vice-President, Academic & Provost the authority to delegate the role of chair of the Dean of Applied Health Sciences Nominating Committee.

Motion: That Senate grant the Vice-President, Academic & Provost the authority to delegate the role of chair of the Dean of Arts Nominating Committee.

Freeman and Skidmore. Carried.

Senate convened in confidential session.

10 July 2018

Karen Jack
University Secretary
Secretary to Senate

CONFIDENTIAL SESSION

The confidential minutes have been removed.

University of Waterloo
SENATE GRADUATE & RESEARCH COUNCIL
Report to Senate
17 September 2018

Senate Graduate & Research Council met on 11 June 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, new milestones, course revisions, course inactivations, minor plan changes, and minor program revisions for the Faculties of Applied Health Sciences (kinesiology, recreation and leisure studies, school of public health and health Systems), Arts (peace and conflict studies), Engineering (electrical and computer engineering, systems design engineering), and Environment (department of geography and environmental management).

OFFICE OF RESEARCH

On behalf of Senate, council approved the following Research Ethics Committee continuing membership items: (1) renewal of member for 3-year term, and (2) new member for 3-year term.

ACADEMIC PROGRAM REVIEW REPORTS

On behalf of Senate, council approved the Final Assessment Report – Guelph-Waterloo Centre for Graduate Work in Chemistry and Biochemistry (GWC)², as presented in Attachment 1.

TASK FORCE ON GRADUATE STUDENT SUPERVISION

On behalf of Senate, council approved the terms of reference and purpose of a task force on graduate student supervision (Casello to serve as chair), as presented in Attachment 2.

GRADUATE AWARDS

On behalf of Senate, council approved the Ginny Dybenko Experiential Learning Award (internal endowment), the JD Leslie Graduate Award (endowment), the Engineering Excellence Master's and Doctoral Fellowships (operating), and the Faculty of Engineering Graduate Dean's Entrance Awards (operating).

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

Charmaine Dean
Vice President, University Research



**OFFICE of THE PROVOST AND
VICE-PRESIDENT (ACADEMIC)**

OFFICE OF THE ASSOCIATE VICE-PRESIDENT (ACADEMIC)

Cyclical Program Review
Final Assessment Report and Implementation Plan
Guelph-Waterloo Centre for
Graduate Work in Chemistry and Biochemistry (GWC)²

Summary of the Cyclical Program Review of the Joint Graduate Programs in Chemistry and Biochemistry (Joint: Guelph-Waterloo)

1. The Program's Self-Study was received by the Office of Quality Assurance on January 16, 2017
2. The Review Committee consisted of two external reviewers: Andrew Bennet (Simon Fraser University) and Yining Huang (Western University). The internal facilitator was David Wolyn, Department of Plant Agriculture, Ontario Agricultural College.
3. The site visit occurred February 16-17, 2017 (see itinerary attached)
4. The Reviewers' Report was received on March 9, 2017.
5. The Director's response, from Dr. France-Isabelle Auzanneau, in consultation with the faculty and Chairs from U of G and U Waterloo, was provided on May 10, 2017
6. The Dean's response, from Interim Dean Richard Zytner, University of Guelph, was received June 23, 2017
7. The Dean's response, from Dean Lemieux, University of Waterloo, was received on June 14, 2017

The academic programs in the centre and examined as part of the cyclical program review include:

MSc and PhD, Chemistry, with various fields

The Departments also contributes to the following collaborative programs which undergo review separately and while may be referenced from time to time in the self-study, these are not under direct purview of this review:

Nanotechnology (University of Waterloo)

Quantum Information (University of Waterloo)

Toxicology (University of Guelph)

Strengths and weaknesses of the programs, as identified in the external reviewers' assessment report:

The reviewers stated:

Program Strengths. The external review team noted that the degree programs at both institutions are well respected and produce strong graduates.

In both National and International contexts, the excellent faculty are the strength of the graduate programs in Chemistry at the Centre on both campuses. The quality of research emanating from the Centre's members is evident from the number of research awards received by the faculty at both national and international levels; the number of research chairs, including Canada Research Chair (8), Canada Excellence Research Chair (1), NSERC industrial chairs (2); and university supported chairs (1); the research funding (over \$100 M for the current evaluation period) from a diverse range of funding sources; the number of high quality publications and patents; the research leadership demonstrated by the faculty on national and international stages (*e.g.* serving on prestigious academic/government/industry advisory boards and editorial boards of high impact journals, organizing conferences and workshops); the number of invited/plenary/keynote lectures; and the large number of high quality graduate students they supervised. The Centre's faculty also provide multi-disciplinary research environments such as the Institute of Polymer Research (Waterloo), Waterloo Institute for Nanotechnology, The Institute for Quantum Computing (Waterloo) and The Electrochemistry Technology Centre (Guelph).

During our meeting with students on both campuses, we specifically asked about the quality and availability of graduate supervision. The students at the meetings unanimously expressed their satisfaction and we have no concern in this regard.

Program Weaknesses

As mentioned earlier, while the current faculty complement at Waterloo is healthy, the current number of faculty is dangerously low at Guelph. The distribution of full time research active, tenured and tenure-track faculty members is 39 at Waterloo and 15 at Guelph. As stated in the Self Study, that no faculty hiring has occurred, in the Department of Chemistry at University of Guelph campus, during a 10-year period clearly has had detrimental effect on the graduate program at Guelph. A gradual reduction of faculty members at Guelph significantly limits the ability of graduate course offering (especially in the areas of biological chemistry, polymer and theory) and prevents the growth of graduate enrolment. It also markedly affects the overall research profile of the Department.

Research Strength and Activity. During the external review team's discussions with the Centre's director, it became clear that one of the major challenges faced is rejuvenation of the Centre given that the two Universities have, over the last 10 years, had very different outcomes with regard to faculty renewal. This discrepancy has resulted in the Chemistry graduate programs at Guelph undergoing a decrease in the number of graduate students enrolled. In contrast, at Waterloo there have been a significant number of new faculty hires, which has resulted in an

active and vigorous research environment. The Dean assured the review team that Guelph's Chemistry Department has the go ahead for faculty renewal with several replacement positions. Indeed, the process had started with the successful recruitment of a Tier 1 Canada Research Chair in Electrochemistry. The reviewers also note the importance for newly hired faculty to be given sufficient start-up funds, which could include access to CFI grants. Thus, we recommend that Guelph University develops a sound financial plans to fund starting faculty adequately so that they can initiate their research program in a timely manner.

Internationalism. A significant difference between the two universities, which became apparent early on in the review process, is the different level of support for international graduate students at the two Universities. Specifically, very few international students are enrolled at Guelph, a problem that is widely acknowledged, and this results in a decreased diversity in the graduate student population. On the other hand, at Waterloo, about 35% of the graduate students are international, however, many faculty expressed concerns about the move to a new budget model and the potential implications for reduced access to support for international graduate students.

The overall recommendation of the external reviewers:

The Graduate programs offered **Meet all Expectations**

The joint Guelph-Waterloo Graduate Programs in Chemistry and Biochemistry (GWC)^{2B} are among the largest and strongest chemistry programs in Canada. Overall, the reviewers were impressed with the high standard and quality of the programs. The facilities for graduate research and training are excellent. The quality of both faculty and graduate students is very high.

Despite some changes that are needed for improvement as outlined above, especially recommendation number 1, the reviewers feel that the graduate programs offered by (GWC)^{2B} **meet all expectations.**

Summary of Recommendations of the External Reviewers and the Department's and Dean's Responses

*NB: The following are the reviews' recommendations, noted in bold and Chair/Director/Department responses, noted in italics. Dean's endorsement or additional comment is included.

Reviewer's Recommendations for immediate improvement:

- 1. It is critical that the University of Guelph's administration follows through on the promise of faculty renewal in the Department of Chemistry, and that starting faculty are given competitive start ups so that they can readily initiate their research programs.**

The Director stated agreement from the Department of Chemistry at Guelph:

Three positions are currently at various stages of recruitment: a Tier 1 Chair replacement, the position made possible by Peter Tremaine's IRC, and a position in Biological Chemistry for which funding has been received from the Provost Office. In addition to these three positions and as described in the Self Study, the Chair of the Department of Chemistry and the Director of (GWC)2 had received indication in January 2017 from the Interim Dean of CPES (Prof. R. Zytner) that the three positions left vacant by recent retirements in 2012, 2015 and 2016 would be made available for recruitment. However, at the present time, discussions are ongoing between the Chair of Chemistry and the Dean to explore the possibility of hiring Faculty in these positions based on the needs of the Department and finances.

NB: The remainder of the Director's response to this recommendation can be found in her accompanying memo.

In his response, the **Interim Dean, U of G**, confirmed:

the GWC2 program is important to the College of Engineering and Physical Sciences (CEPS), and has the full support of the Dean's Office. Accordingly I have discussed the requested faculty positions outlined in Recommendation I with the Provost. These discussions are ongoing as part of the overall faculty complement needed in CEPS.

The **Dean, Waterloo**, did not comment as it is out of his jurisdiction.

- 2. The persistent technical problems in link-rooms on both campuses must be fixed as soon as possible. Fully functioning link rooms are essential to the programs as they are used for graduate teaching, thesis defense, and committee meeting.**

The Director noted:

A task force (members from Chemistry and Physics at U of G and U Waterloo; teaching support services) was struck in February 2017 to discuss upgrades to the link rooms at Guelph and Waterloo.

At Guelph: Phase 1 of the renovations took place in Summer 2017: Upgrading of the CODECs in both room and replacing the camera in the mainlink. Phase 2 is scheduled for summer 2018 to complete replacing cameras, screen, sound systems, teaching stations etc. We are currently waiting for an update from OpenEd on the schedule for phase 2.

At Waterloo: The oldest CODEC in the mainlink was replaced with that removed from the minilink at Guelph. Quality has already improved greatly.

The **Interim Dean, U of G**, confirmed "support is being provided to upgrade the link rooms between both institutions

3. It is recommended that the number of international graduate students at Guelph be increased significantly. While the current enrolment of international students is adequate at Waterloo, the possible change in funding policy we learned may reduce the intake of international graduate students in the coming years. We urge the University administration to continue to support international students at its current funding level as a significant reduction of international student complement would have detrimental impact on the graduate program.

In response, the Director commented on issues related to international graduate targets at both Waterloo and U of G:

- *Clarification on the planned changes at Waterloo has been requested. No formal announcement has yet been made so it is unclear what the plan is.*
- *The Department of Chemistry at Guelph and the Director of (GWC)² agree very strongly with this recommendation. The Interim Dean of the College knows that increased access to international students will advance the academic and research interests of the Department, College, and University. This is a University-level decision, and the implementation of a sustainable internationalization plan is the responsibility of the Provost's office.*

*The **Dean, Waterloo**, notes:*

"Currently, funding is offered by Graduate Studies and Postdoctoral Affairs to every international student applying to GWC2 to offset the international tuition differential. My understanding is that this funding is currently being reviewed, which may impose limitations on our ability to recruit and support international students. Furthermore, notwithstanding the recognized benefits that international graduate students bring to the GWC2 programs, the fiscal realities of the provincial funding formula dictate that we become more aggressive in targeting domestic graduate students."

*The **Interim Dean, U of G**, further states the expectation that there will be an opportunity to increase "the number of international graduate students through a centrally funded internationalization initiative which will start September 2017."*

4. Given the unique teaching situation involving two campuses, we recommend that the Centre take the lead and work with the departments to develop new graduate course delivery modes in form of e-learning. The Universities should provide adequate resources to support teaching innovation.

The Director agreed and advised that:

“An “E learning (GWC)2 Committee” will be established in the Fall 2017 to discuss the scope of online courses and answer the following three questions:

- 1. Should e-learning courses be developed with key courses first, then rolled out to all courses or should they be limited to select courses such as, but not limited to, those mentioned in recommendation 5?*
- 2. How many online courses should graduate students be allowed to take to complete their degree requirements?*
- 3. What credit value should these courses have?*

Key faculty and courses will then be identified and appropriate support given to bring those courses to fruition.

**Update November 2017: Work is underway at Waterloo (undergraduate) and the Director will meet with both Chairs in 2018 to identify faculty members for a focus group.*

*While the **Interim Dean, U of G, and the Dean, Waterloo**, did not specifically address this recommendation, both endorsed the Director’s responses overall and indicate strong support for the recommendations and their implementation.*

- 5. It is recommended that the Centre develop and offer graduate courses that provide training on professionalism, communication and teaching skills, scientific writing, entrepreneurship, knowledge of patent application, and other soft skills. Such expertise is critical for successful degree progression and then beyond the time at the Centre, especially in the work force.**

The Director acknowledged the value of such courses and indicates such courses already exist at both Waterloo and U of G:

“An inventory of those existing or similar courses will be established in the Fall 2017 and kept up to date by the Graduate Secretary at Guelph and the Graduate Administrative Coordinator at Waterloo. We will attempt to adapt these courses to the needs of graduate chemistry students. We will investigate how to expand the content of existing seminar and project based courses at the undergraduate and graduate student levels to develop ‘soft skills’ rather than developing new credit courses.”

In addition to encouraging faculty to formalize such teaching objectives, the Director indicates the program will “explore expanding the graduate seminar courses to include professional development aspects.”

Update November 2017: The Director has asked the Graduate Coordinator/Secretary on both campuses to provide an inventory of such courses offered at both universities (to be completed in 2018). Some members of the committee already have graduate students writing NSERC grant proposals as part of their course requirement; we are encouraging this with as many courses as possible.

*As above, no specific response from the **Deans** on this recommendation.*

6. The Centre should raise its profile and brand awareness by enhancing its website and using social medium (such as Facebook and Twitter).

The Director responded:

In 2016/2017 funds (\$10K) were reserved for the development of the (GWC)2 web portal by professional, external web designers. Due to the workload implied by the IQAP review, these funds have not yet been used. In the Spring-Fall 2017, the Director will approach professional web designers to design a new (GWC)2 web site that will include social media threads. We will also create a Facebook page and invite all (GWC)2 members, particularly students, to join and contribute. Ultimately the Director will encourage the (GWC)2 Graduate Student Club (see below) to take control of the Facebook page. Additional branding efforts have also been carried out in the Winter 2017 with the design and printing of “(GWC)2” business cards and swag to promote the two Departments and the Graduate school during recruiting events.

Update, November 2017: the GWC Facebook page has been launched, and the GWC Twitter account set up. An external company has been hired to develop the new GWC webpage that is to be launched by 2018. The Director also presented the new GWC flyer that will be mailed out in 2018 to grad clubs and Chemistry departments in Ontario and beyond

*As above, no specific response from the **Deans** on this recommendation.*

7. It is recommended that the Centre increase the effort in facilitating the social and academic integration of the students from both campuses. The interactions between faculty remembers from Guelph and Waterloo should also be encouraged. The Centre and the Departments should foster and facilitate co-supervision of grad students, co-application of research grants and collaboration in research.

The Director advised this is an on-going preoccupation for her:

“During the Annual General Meeting 2017 (April 28), we have created the (GWC)2 Graduate Student Club which is to be run collectively by students from both campuses. Two students (one for each campus) have enthusiastically agreed to establish the Club and bring students together during various social and academic initiatives. Meeting of a steering committee will be called during the Spring 2017 semester to discuss activities and budget. Social interactions between faculty will continue to be encouraged through and during the recruiting socials and the Fall and Winter (GWC)2 Seminar series. We hope that such interactions between faculty members will lead to research collaborations in the future.”

While there is no specific response from the **Deans** on this recommendation, both maintain a commitment to the joint program and the **Dean, Waterloo**, further states:

“The report provides useful recommendations for the Centre to further improve its delivery of graduate programs in Chemistry and Biochemistry, and improve coordination between the two departments over the next seven years.”

- 8. It is recommended that both departments develop and implement a plan for an effective staffing transition to accompany staff retirement so that key knowledge is transferred to staff, ensuring that training of graduate students and research are not affected. We view this as imperative.**

The Director responded by advising the following:

- The Department of Waterloo shares the concern expressed by the reviewers. There is indeed a lot of both ongoing and upcoming turnover at Waterloo and identifying replacements with the appropriate expertise will be a key challenge.*
- The Department of Chemistry at Guelph also agrees with this concern. Two staff retirements are scheduled for the upcoming few months (Karen Ferraro -Graduate Secretary, and Uwe Oehler-Software Management). We are attempting to provide 1-2 months of overlapping employment for both replacement hirings. The anticipated retirements of our stockroom manager and financial clerk will be treated similarly. Technical services will require a greater degree of overlap; this will be important for our anticipated hirings of electronic technologists. Two part-time ‘soft money’ positions (glass-blower, machinist) are posing additional problems, which are very concerning to the Chemistry Faculty and are yet to be resolved.*

*The **Deans** did not specifically comment on this recommendation.*

- 9. All graduate student offices should be separated from the labs where the experiments are performed. This is an occupational safety and health issue. The University should provide space and resources for implementation.**

The Director affirmed the commitment of both Waterloo and U of G to ensure separated office space for graduate students. At Waterloo, this is a medium-term commitment (two years, plus), while at U of G, the renovation of MacNaughton-West has afforded new communal offices for laboratory staff and graduate and undergraduate students will be provided space outside of the experimental/laboratory spaces.

*The **Interim Dean, U of G**, referred to the renovation in his response and the **Dean, Waterloo**, did not specifically comment on this recommendation.*

10. We recommend that the Centre implement policies to reduce the average completion time for a M.Sc. degree to 2.0 years.

The Director commented and agreed with the importance of this recommendation and further stated:

the (GWC)2 Coordinating Committee will further review the suggestion to reduce the number of graduate courses required to graduate, during its Fall 2017 meeting.

Update November 2017: U Waterloo advised that the course requirement is already at the minimum for Waterloo.

No further action on reducing course credits.

11. Given the critical role of recruiting, we recommend that the Centre better coordinates its efforts to attract top quality Canadian graduate students in the Southern Ontario region and try some new recruiting initiatives (see also recommendation 12).

The Director described the priority at both institutions and:

“additional funds were also agreed upon by both Chairs of the departments in 2016 to support new recruiting initiatives at the (GWC)2 level. We propose to identify key faculty members from both campuses to participate in a “Recruiting Task Force” whose mandate will be to design and implement such initiatives.”

12. The workload currently shouldered by the Administrative Assistant (Kim Rawson) will increase following implementation of our recommendations. As a result, we recommend that more resources are provided to make the Centre more effective in communicating to potential graduate students and between current students and faculty on both campuses. We understand, based on discussions during the wrap-up meeting, that at Waterloo the Faculty of Science is hiring a graduate recruitment staff member to assist all Departments in Science (Chemistry and GWC2B have access to this person), while at Guelph, 30% of a new Chemistry staff hire's responsibilities will be graduate support (to be filled summer 2017). The external reviewers note that if these two positions are filled then the Centre will have successfully implemented recommendation 12.

Clarification: *The new Guelph hire is, like the new hire at Waterloo, a resource shared among the Departments of the College. The 30% allocation is the fraction of this person's time that will be made available to assist in Graduate Student Recruitment.*

The Director elaborated on workload and hiring constraints at both institutions. She further discussed implementation of process improvements and streamlining to assist decreasing the workload for support staff.

She further stated:

“The department is also exploring ways to streamline the Graduate Secretary’s workflow through increased on-line reporting, bookings, and document generation; the University’s OGPS is also moving in this direction. The Director is committed to bring the new Graduate Secretary at Guelph, the Administrative Coordinator (Graduate) at Waterloo and the (GWC)2 Administrative Assistant to the Director to work together as a team to streamline processes and facilitate recruiting.” The full response can be found in the Director’s Response.

Update November 2017: New graduate secretary (U of G) hired and all three staff met in Waterloo and now work in close collaboration and progress made on streamlining paperwork.

Implementation Plan – Recommendations selected for implementation

Recommendation	Proposed Follow-up	Responsibility for Leading Follow-up*	Timeline
2. The persistent technical problems in link-rooms on both campuses must be fixed as soon as possible.	Task force struck and work underway at U of G and Waterloo	Department Chairs	Phase 1 (U of G) completed Summer 2017 Phase 2 (U of G) – Winter 2018 Updates ongoing at Waterloo Report on progress in one-year follow-up report
3. That the number of international graduate students at Guelph be increased significantly. While the current enrolment of international students is adequate at Waterloo, the possible change in funding policy we learned may reduce the intake of international graduate students in the coming years.	U of G is currently drafting an international plan, with the goal to increase international student numbers Waterloo’s budget model is changing and while the intention is to retain international graduate students, there may be changes in the future. Both are dependent on MAESD policies related to international student enrolment and funding.	AVP(GS) Chairs, Director, Deans	Report to SCQA on progress of U of G international plan in Winter 2018. Report on progress in one-year follow-up report

4. That the Centre take the lead and work with the departments to develop new graduate course delivery modes in form of e-learning. The Universities should provide adequate resources to support teaching innovation.	<p>Director to meet with Department Chairs in Winter 2018 to constitute faculty focus group.</p> <p>If recommendation moves forward, subsequent submission to governance committees in next curriculum change cycle (likely 2018-2019)</p>	Director	<p>Report on progress in one-year follow-up report</p> <p>Additional reporting and submission to governance dependent on course conversion</p>
5. That the Centre develop and offer graduate courses that provide training on professionalism, communication and teaching skills, scientific writing, entrepreneurship, knowledge of patent application, and other soft skills.	<p>Many of these exist currently.</p> <p>Create inventory of courses from both departments</p> <p>Expand opportunities within existing seminar and project courses</p>	Director	Spring 2018
6. The Centre should raise its profile and brand awareness by enhancing its website and using social medium (such as Facebook and Twitter).	<p>Plans for development of GWC2 webportal, facebook and other social media</p> <p>November 2017 update: Facebook and Twitter launched; website in Winter 2018; recruitment flyers produced for distribution in Ontario and beyond.</p>	Director	<p>Implemented (Facebook, Twitter)</p> <p>Work on website Fall 2017 and Winter 2018 2018.</p>
7. Increase the effort in facilitating the social and academic integration of the students and faculty from both campuses and foster and facilitate co-supervision of grad students, co-application of research grants and collaboration in research	Established GWC2 student club to facilitate; Director and Chairs host Annual General Meeting each April	Director, Chairs	Report on progress in one-year follow-up report
9. All graduate student offices should be separated from the labs where the experiments are performed.	Waterloo continues to work toward this goal U of G – priority during the renovation of MacNaughton-West in Summer 2017/Fall 2018	Chairs, Deans	Report on progress in one-year follow-up report
10. That the Centre implement policies to reduce the average completion time for a M.Sc. degree to 2.0 years.	Adequate times to completion policies already exist. Reducing MSc average from 2.5 yrs is a priority for both campuses, though through central incentives rather than the creation of additional specific policy changes	Director, Chairs	Report on progress in one-year follow-up report

	Waterloo not able to reduce required credits, however times-to-completion should be reviewed where specific student concerns arise		
11. Given the critical role of recruiting, we recommend that the Centre better coordinates its efforts to attract top quality Canadian graduate students in the Southern Ontario region and try some new recruiting initiatives	Specific staffing positions committed by both Waterloo and U of G. Exploring possibility of task force with GWC2 faculty and students	Director, Chairs	Report on progress in one-year follow-up report
12. That more resources are provided to make the Centre more effective in communicating to potential graduate students and between current students and faculty on both campuses.	New hires to be shared with other departments in both Faculty of Science at Waterloo and CEPS at U of G. Director to facilitate interactions between three staff across Waterloo and U of G to streamline processes and facilitate recruiting	Chairs, Deans Director	Completed Fall 2017 Completed Fall 2017

*Chairs/Directors along with Deans are responsible for monitoring Implementation Plans. Responsibility for one-year follow up reports rest with Chairs/Directors, in consultation with the Dean and respective Associate Deans (Academic and/or Research and Graduate Studies). In some cases, there may be additional timelines and reporting to BUGS or BGS may also be required.

The following two recommendations (# 1 and #8) were not selected for implementation under the auspices of the Cyclical Program Review and the specific budgetary and hiring decisions have been referred back to the Departments and the Faculty of Science at Waterloo and the College of Engineering and Physical Sciences at U of G.

1. That the University of Guelph's administration follows through on the promise of faculty renewal in the Department of Chemistry, and that starting faculty are given competitive start ups so that they can readily initiate their research programs.	Specific faculty hiring is outside of the purview of the cyclical program review and thus this recommendation was referred to the Interim Dean and the Provost as part of the College's and the University's budgeting process.		N/A
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8. That the departments develop and implement a plan for an effective staffing transition to accompany staff retirement so that key knowledge is transferred to staff, ensuring that training of graduate students and research are not affected.	Specific staff hiring is outside of the purview of the cyclical program review and thus this recommendation was referred to the Interim Dean and the Chairs as part of the College's budgeting process.		N/A
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(GWC)² JOINT GRADUATE PROGRAM IN CHEMISTRY

University of Guelph / University of Waterloo

Academic Program Review Site Visit

Thursday, February 16th and Friday February 17th, 2017

Site Visit Team
Professor Andrew Bennet, Simon Fraser University Professor Yining Huang, University of Western Ontario Professor David Wolyn, Internal Review

Wednesday, February 15, 2017

Time	Details	Location
2:25 pm	Pick up A. Bennett at airport, F-I Auzeanneau	
3-6 pm	Hotel Check in: Delta Hotel in Guelph, 50 Stone Rd W.	
6:50 pm	Meet in the Delta Hotel lobby.	
7:00 pm	Dinner with France-Isabelle Auzeanneau, Liz Meiering, Paul Rowntree, Marcel Schlaf	

Thursday, February 16, 2017 – University of Guelph

Time	Details	Location
7:30 – 8:45 am	Breakfast, Patricia Tersigni, Director, Academic Programs and Policy; David Wolyn, Internal Facilitator	Hotel Restaurant
9:00 – 9:30 am	Dr. Sofie Lachapelle, Acting Associate VP Academic & Ben Bradshaw, Assistant Vice-President, Graduate Studies	UC 4 th floor, Exec Suite
9:30 – 10:00 am	Dr. France-Isabelle Auzeanneau, (GWC) ² Director	SSC 1511
10:00 – 10:15 am	Break	
10:15 – 10:45 am	Dr. Paul Rowntree, Chair, Department of Chemistry	SSC 1511
10:45 – 11:15 am	Tour of MacNaughton Labs, Paul Rowntree	
11:15 – 12:00 pm	Pam Jacobs, Interim Head of Collections and Content & Paul St-Pierre, Collection and Content, Library	LIB 359
12:00 – 1:30 pm	Lunch meeting with students	SSC 1511
1:30 – 2:00 pm	Dr. Richard Zytner, Interim Dean of CPES; Dr. Leonid Brown, Associate Dean of Research and Graduate Studies	SSC 1511
2:00 – 2:30 pm	Meeting with Faculty – Organic, Biological, Theoretical	SSC 1511
2:30 – 3:00 pm	Meeting with Staff	SSC 1511
3:00 – 3:15 pm	Break	
3:15 – 4:00 pm	Meeting with Faculty – Inorganic, Physical, Analytical, Nanoscience	SSC 1511
4:00 – 5:00 pm	Dr. Marcel Schlaf, Graduate Coordinator & Tour, Summerlee Science Complex Labs	SSC 1511
5:00 pm	Dinner with Adrian Schwan, Peter Tremaine, Scott Hopkins; transportation to Delta Hotel in Guelph	

Friday, February 17, 2017 – University of Guelph

Time	Details	Location
8:00 am	Transportation to Waterloo	
9:00 – 10:00 am	Dr. Bill Power, Chair, Department of Chemistry; Tour of Chemistry Labs	C2-361
10:00 – 10:30 am	Meeting with Faculty – Physical, Nano, Polymer	C2-361
10:30 – 10:45 am	Break	
10:45 – 11:15 pm	Meeting with Faculty – Organic, Biochemistry, Theoretical	C2-361
11:15 – 12:30 pm	Lunch meeting with students	C2-361
12:30 – 1:00 pm	Dr. Bob Lemieux, Dean of Science	C2-361
1:00 – 1:30 pm	Dr. Rob Hill, Associate Dean, Graduate Studies	C2-361
1:30 – 2:00 pm	Meeting with Staff	C2-361
2:00 – 2:30 pm	Guy Guillemette, Former Graduate Coordinator & Former GWC Director	
2:30 – 2:45 pm	Break	C2-361
3:00 – 3:30 pm	Meeting with Faculty – Inorganic, Analytical	C2-361
3:30 – 4:00 pm	Meeting with (GWC) ² Administration, Kim Rawson	C2-361
4:00 – 4:30 pm	Recap – David Wolyn, F-I. Auzanneau, Bill Power, Paul Rowntree, (Patricia Tersigni) via conference call	C2-278B
4:30 – 6:00 pm	Discussion of Report	C2-278B
	Check in Delta hotel in Waterloo, 110 Erb St W, evening to the reviewers' convenience.	

Saturday, February 18, 2017

Time	Details	Location
TBD	Airport shuttle pick up at Delta hotel in Waterloo for A. Bennett	

A Task Force on Graduate Student Supervision

Background

The University of Waterloo strives to create an environment in which graduate students are empowered and supported to achieve academic, professional and personal successes. The relationship that is perhaps the most important to realizing this objective is that between graduate students and their supervisors who play critical roles as mentors and advisors.

At the [University of Waterloo's Senate meeting of 15 June, 2015](#), a proposal was brought forth to introduce University regulations on Approved Doctoral Dissertation Supervisor (ADDS) status. These regulations were ultimately approved and have been in place. After the approval of the ADDS regulation, the following motion was approved by Senate:

"That Senate recommend to the Provost that a task force be established to investigate the mechanisms by which the quality of graduate supervisions at both the masters and doctoral levels are assessed at the university."

To our knowledge, no such task force was created. The meeting minutes reflect that significant discussion occurred with regard to the breadth of the mandate of this task force. To provide clarity on the scope of the task force's work, the following section establishes the questions to be addressed.

Purpose

Following the mandate from Senate, GSPA in partnership with the Associate Deans Graduate, propose the formation of a task force related to graduate student supervision. More specifically, the task force shall investigate the following questions:

1. What are the supervisory practices among the many faculty colleagues who are or have been recognized at Waterloo for excellence in graduate student supervision?
2. What data exist that provide evidence of the quality of graduate student supervision at the University of Waterloo? How are these data gathered? How are the results disseminated? Are there formal processes by which actions are taken in response to these data?
3. What are the best practices in terms of establishing, evaluating, and updating common expectations between supervisors and students? Is there evidence that those best practices are taking place at Waterloo?
4. What are the best practices in terms of receiving feedback from students on the performance and competencies of their graduate student supervisor(s)?
5. What are the best practices in terms of evaluating graduate student supervision? Is there evidence that these practices are taking place at Waterloo?
6. What are the best practices in terms of training for graduate student supervisors? What have been identified as contemporary challenges in graduate student supervision (e.g. mental health, accessibility, intellectual property, professional outcomes, etc.)? Do the University of Waterloo policies and procedures match these best practices?
7. Are there acknowledged indicators that have been used to identify supervisors whose competencies and performances warrant attention? Do sufficient policies and or practices exist to manage these situations at Waterloo?
8. What are the resources available to students, supervisors and administrators when conflicts arise? Are these resources sufficient?

Membership

Relevant stakeholders to this conversation include GSPA, Associate Deans Graduate, faculty members, and graduate students. To ensure adequate representation, the following membership is proposed:

1. Associate Vice President, Graduate Studies and Postdoctoral Affairs (Chair);
2. One Associate Dean, Graduate, representing a range of supervisory philosophies and approaches from across campus;
3. One Ph.D. candidate;
4. One Master's student;
5. One faculty member at large representing a Faculty other than the one represented by the Associate Dean;
6. One representative from the University's Office of Research as appointed by the Vice President, University Research;
7. One representative from the Centre for Teaching Excellence (CTE) as appointed by the Director;
8. One representative from Campus Wellness.

Resources to the committee should include Institutional Analysis and Planning (IAP) for data as well as various staff in GSPA. The expectation is also that the review of best practices will involve peer and aspirational peer universities.

Timelines and Consultation Schedules

The task force on graduate student supervision shall have its terms reviewed and approved by Senate Graduate and Research Council (SGRC) on behalf of Senate. Work shall begin immediately after approval.

The task force shall engage the following university stakeholders:

1. Faculty members who are recognized for excellence in graduate student supervision;
2. The Faculty Deans;
3. The Graduate Student Association;
4. Faculty Associate Deans Graduate;
5. Faculty Associate Deans Research;
6. The Faculty Association.

The task force shall complete its work not later than one year from its start date.

Deliverables

The results of the task force's work shall be a written report, endorsed by its membership, to be presented to the Vice President, Academic and Provost. The report shall generally address the eight themes of questions above, with specific recommendations to ensure continuing high-quality graduate supervision and mentorship and opportunities for supervisory development at Waterloo.

University of Waterloo
SENATE UNDERGRADUATE COUNCIL
Report to Senate
17 September 2018

Senate Undergraduate Council met on 19 June 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 Arts

1. Bachelor of Arts Breadth Requirements

Motion: That Senate approve the following revisions to the Bachelor of Arts breadth requirements, effective 1 September 2019.

Background and Rationale:

The current text can be found at: <http://ugradcalendar.uwaterloo.ca/page/ARTS-BA-Breadth-Requirements>.

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

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

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

Notes

1. Arts First courses (ARTS 130 and ARTS 140) do not fulfil any of the breadth requirements.
2. No more than one academic course unit (two courses) in the same discipline may count towards the Social Sciences requirement.

3. Cross-listed courses may be designated to fulfil any one requirement. For example, a student registered in PACS 203/HIST 232 may receive credit for either the Transdisciplinary Studies requirement or the Humanities requirement, but not for both.
4. Language courses accepted as transfer credits (e.g., LANG) may be counted towards the Languages and Cultures requirement.
5. Because Professional Development (PD) courses are not regular academic courses, they do not fulfill any of the breadth requirements.
6. Because Work-report (WKRPT) courses are not regular academic courses, they do not fulfil any of the breadth requirements.
7. For students enrolled in an Arts degree program prior to September 2008, refer to the Group A and B requirements. Those students who wish instead to adhere to the new Breadth Requirements (effective September 2008) may do so by petition to the Examinations and Standings Committee.

Rationale for the proposed changes: Cultural Identities (CI), Canadian Studies (CDNST), Mennonite Studies (MENN), and Human Rights (HRTS) are new subject codes that need to be added to one of the five categories of the breadth requirements. CI courses fit within the languages and cultures category. Transdisciplinary studies is an appropriate category for CDNST, MENN, and HRTS. The WS subject changed to GSJ and DRAMA changed to THPERF. We are reflecting this change in the breadth requirements as well.

Faculty of Arts

2. Restrictions on Multiple Plan Combinations

Motion: That Senate approve the following revisions to the Faculty of Arts restrictions on multiple plan combinations, effective 1 September 2019.

Background and Rationale:

The current text can be found at: <http://ugradcalendar.uwaterloo.ca/page/ARTS-Restrictions-on-Multiple-Plan-Combinations>

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

Sample Invalid Multiple-Plan Combinations

The Faculty of Arts will amend the list of invalid plan combinations when new academic programs or plans (including minors/diplomas/certificates/specializations) are created. Students should confirm any plan combination with their academic advisor.

* Indicates an inactivated plan

Table of invalid multiple-plan combinations

Plan	Cannot be Combined With
Arts and Business	Departmental Co-op, or French Teaching Specialization (French majors), or Management Studies Minor, or Mathematical Economics, or Sociology/Legal Studies - Criminology Specialization*

Bachelor of Accounting and Financial Management	A Management Studies Minor or Diploma, or Any stand-alone major
Bachelor of Arts (Honours major)	Bachelor of Arts (General major)
Bachelor of Global Business and Digital Arts	Digital Arts Communication Minor, or Management Studies Minor or Diploma, or Any stand-alone major
Applied Mathematics –Economics Option	Economics plans
Biotechnology/Economics	Economics plans
Church Music and Worship Minor or Diploma	Music majors
Classical Studies Minor	Classics major Greek Minor Latin Minor
Classics major	Classical Studies Minor
Crime and Deviance Specialization (Sociology majors)*	Legal Studies Minor
Digital Arts Communication Minor	Bachelor of Global Business and Digital Arts, or Digital Arts Communication Specialization (Arts and Business)*, or Digital Media Studies Specialization (English majors)
Digital Arts Communication Specialization (Arts and Business)*	Digital Arts Communication Minor
Digital Media Studies Specialization (English majors)	Digital Arts Communication Minor
Economics Minor	Applied Mathematics – Economics Option Biotechnology/Economics Mathematical Economics
Economics plans	Applied Mathematics – Economics Option Biotechnology/Economics Mathematical Economics Environmental Economics Minor*, or Economic Theory Minor
Economic Theory Minor	Economics plans Applied Mathematics – Economics Option Biotechnology/Economics Mathematical Economics
English majors	Technical Writing Minor
Environmental Economics Minor*	Economics plans
French Teaching Specialization (French majors)	Arts and Business, or Any other stand-alone major
Greek Minor	Classical Studies Minor
Human Resources Management Minor or Diploma	Students who have completed a Diploma in HRM or the course requirements for the Certified Human Resources Professional (CHRP) designation, or who have graduated from a college or university HR or Business program
International Relations Specialization (History majors)	International Relations Specialization (Political Science majors)
International Relations Specialization (Political Science majors)	International Relations Specialization (History majors)

International Trade Minor	International Trade Specialization (Arts and Business)*
International Trade Specialization (Arts and Business)*	International Trade Minor
Latin Minor	Classical Studies Minor
Legal Studies Minor	Crime and Deviance Specialization (Sociology majors)*; or Sociology/Legal Studies - Criminology Specialization*
Management Studies Minor	Any university business program, major, or sub-plans, including: <ul style="list-style-type: none"> • Arts and Business • Bachelor of Accounting and Financial Management • Bachelor of Global Business and Digital Arts • Business Administration and Mathematics Double Degree • Environment and Business • Mathematics/Business Administration • Recreation and Sport Business • Science and Business (any specialization)
Mathematical Economics	Arts and Business, or Any other stand-alone major Economics Minor Economic Theory Minor
Music majors	Church Music and Worship Minor or Diploma
Music in a Global Context Specialization (Music majors)	Music and Peace Specialization (Music majors)
Music and Peace Specialization (Music majors)	Music in a Global Context Specialization (Music majors)
Public Policy and Administration Minor	Public Policy Specialization (Economics majors)
Public Policy Specialization (Economics majors)	Public Policy and Administration Minor
Sociology/Legal Studies - Criminology Specialization*	Arts and Business, or Any other stand-alone major, or Legal Studies Minor
Spanish plans	Spanish/English Translation Minor*
Spanish/English Translation Minor*	Spanish plans

Rationale for the proposed changes: The French Teaching Specialization (FTS) cannot be combined with Arts and Business or any other stand-alone major (previously approved). We are adding this exclusion to the table of invalid multiple-plan combinations.

The Spanish/English Translation Minor has been inactivated, effective September 2019, and as such we are adding an asterisk where the plan is listed in the table. This indicates the plan is inactivated.

FOR INFORMATION

ACADEMIC PROGRAM REVIEW REPORT

Final Assessment Report – Chemistry

Council approved the final assessment report for Chemistry on behalf of Senate, noting that all concerns

identified by Council's reviewers had been addressed. See Attachment #1.

Final Assessment Report – International Development

Following discussion of plans to address outstanding recommendations, Council approved the final assessment report for International Development on behalf of Senate. See Attachment #2.

Final Assessment Report – Mennonite Studies

Council approved the final assessment report for Mennonite Studies on behalf of Senate, noting progress made against recommendations and incorporation of feedback from Council's reviewers. See Attachment #3.

MINOR PLAN & CURRICULAR MODIFICATIONS

Council approved the following on behalf of Senate:

- minor plan changes for: arts (School of Accounting and Finance, classical studies – medieval studies, Mennonite studies, arts and business, drama and speech communication – theatre and performance, economics – mathematical economics and management studies, religious studies – Jewish studies, social development studies, other housekeeping changes to reflect course code changes for gender and social justice and theatre and performance); engineering (honours bachelor of architectural studies, biomedical engineering, chemical engineering, management engineering, nanotechnology engineering, systems design engineering); science (biotechnology/CPA degree requirements, honours biotechnology/economics, honours co-operative and regular science and business programs, honours co-operative science and business).
- new courses for: arts (School of Accounting and Finance, Mennonite studies, Germanic and Slavic studies, classical studies, social development studies, religious studies, sociology and legal studies); engineering (chemical engineering, systems design engineering); science (earth).
- course changes for: arts (School of Accounting and Finance, arts and business, Mennonite studies, classical studies, Greek, theatre and performance, speech communication, economics, management studies, English language and literature, fine arts, Germanic and Slavic studies, Russian and east European studies, philosophy, psychology, social development studies, social work, religious studies, sexuality, marriage and family studies); engineering (architecture, biomedical engineering, chemical engineering, business, entrepreneurship and technology, management engineering, mechanical engineering, nanotechnology engineering, systems design engineering); science (biology, materials and nanosciences, optometry, physics).
- course reactivation for: science (pharmacy).
- course inactivations for: arts (classical studies – Greek, drama and speech communications – drama, economics, social work, religious studies); engineering (architecture, chemical engineering, nanotechnology engineering).

/rmw

Mario Coniglio
Associate Vice-President, Academic



Final Assessment Report

Chemistry (BSc)

May 2018

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 (BSc) delivered by the Department of Chemistry. A self-study (Volume I) was submitted to the Associate Vice-President, Academic on September 26, 2016. The self-study presented the program descriptions and learning outcomes, an analytical assessment of the program, and program data including information collected from a student survey along with the standard data package prepared by the Office of Institutional Analysis & Planning (IAP). Appended were the course outlines for all courses in the program and the CVs (Volume II) for each full-time faculty member in the Department.

Two arm's-length external reviewers (Volume III) (Dr. Boyd, Professor Emeritus of Chemistry, Dalhousie University, and Dr. Natalie Cann, Professor of Chemistry, Queen's University) were ranked and selected by the Associate Vice-President, Academic ; in addition one internal reviewer was selected (Dr. Emmett Macfarlane, Associate Professor of Political Science).

They reviewed the self-study documentation and then conducted a site visit to the University on January 26-27, 2017. The visit included interviews with the Associate Vice-President, Academic; Dean of the Faculty; Faculty Associate Dean of Undergraduate Studies, Chair of the Department, Faculty members, lab instructors and meetings with a group of current undergraduate students. The external review team also had an opportunity to meet with the Liaison Librarian and Head Librarian.

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.

Program characteristics:

The Chemistry program began in 1957 with the co-op stream added in 1967, whereas the Biochemistry program (joint undergraduate program of the Department of Biology and Department of Chemistry) began in 1980. Chemistry also has joint programs with the Department of Earth and Environmental Sciences (Geochemistry), the Department of Physics and Astronomy (Chemical Physics, Materials and Nanosciences), and the Departments of Electrical and Computer Engineering and Chemical Engineering (Nanotechnology Engineering).

May 2018



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

Strengths

- Faculty research funding
- Program ranked extremely highly (nationally and internationally)
- Program offers a larger enrolment co-op option than any other Canadian department.
- Co-operation between other departments to deliver programs (e.g., Biochemistry offered jointly with Biology and Chemical Physics offered jointly with Physics, etc.)

Challenges and weaknesses:

- Total number of required chemistry courses and total number of contact hours significantly exceed the Canadian Society for Chemistry (CSC) and national averages
- Limited number of elective courses
- Co-op employment of students (e.g., nature of job, instrumentation used, etc.) not well communicated to other students
- Limited number of meaningful employment opportunities, especially for early-year Co-op students

Summary of key findings from the external reviewers:

The University of Waterloo offers its students a range of accredited Chemistry programs that is unmatched by any Canadian university. Recent curriculum review and planning processes, coupled with the open and effective leadership within the Department of Chemistry, have strategically positioned the Department to face the future in an increasingly competitive environment.

The Department of Chemistry at Waterloo is one of the most research-active chemistry departments in Canada. Students benefit from learning in a research intensive environment in multiple ways: They gain hands-on research experience by completing fourth-year research projects; they can join a research group as part of a work term in the co-op program; they can work (NSERC USRA, ...) or volunteer in the research groups; and, finally, they have the opportunity to learn from the Department's faculty and to select courses (mostly in fourth year) that align with their interests.



Program response to external reviewer recommendations

External Reviewer Recommendations

1. Self-study reports should contain the detailed program requirements for all degree programs under review.

Response

Programs under review will be instructed to include detailed program requirements with their self-study. This will be communicated by the Quality Assurance Office through improvements to the self-study template.

2. The Dean of Science and the senior administration should ensure that the upgrades of Building C2, in particular the ventilation system upgrade, are to be completed as soon as possible.

Response

The anticipated renovation of the Chemistry-2 building ventilation system is currently undergoing a review and assessment and the Department hopes to be able to proceed with that over the next two years.

3. The Department should review the existing laboratory facilities and develop a plan for space management and upgrade, to align with ongoing equipment/infrastructure renewal.

Response

Space planning and renovations are part of the new annual budget planning process. The Department Executive Committee and Chair will be responsible for ensuring this recommendation is implemented.

4. The future plans of the Department of Chemistry should include a dedicated study space/resource center for Chemistry students.

Response

The review of laboratory space and student study space is an ongoing item that will be addressed as soon as possible – an immediate remedy for the student space is the provision of the departmental seminar room for student study when not in use. The Department also notes the large amount of study and student life space now available in the new STC building.



5. The Department of Chemistry should review its safety procedures at regular intervals.

Response

This is reviewed annually under Policy 34 by the Chair and Safety Committee.

6. The Department should review the coordination of multi-section courses. Course coordinators (if applicable) and instructors should place a high priority on following an agreed-upon timeline for delivering the course content, as students are distressed when sections are out of sync.

Response: Course coordinators are in place for multi-section courses in first year will be responsible for ensuring sequencing and timing of courses is consistent. Communication between instructors will alleviate any timing issues.

7. The Department should review the coordination and grading of CHEM 494 projects. Reminders with respect to the expectations for the time devoted to the project should be widely circulated, information about projects and the course should be circulated to students in a timely manner, and a greater emphasis on grading by reviewers should be considered.

Response

Both the First-Year Coordinator and the Chem 494 Coordinator will report to the Undergraduate Affairs Committee this summer on plans to improve the student experience and orientation in these key courses.

8. The Department should review the coordination of joint programs.

Response

The advisors of the joint programs, particularly Biochemistry (joint with Biology) and MNS (joint with Physics and Astronomy) have met frequently over the last several months since the site visit to implement and communicate curriculum changes, a process which is largely now complete for Biochemistry, and close to final approval for MNS. The comments of the site visit team served as a useful catalyst to complete this work.



9. The Department should review the list of required courses for the Materials and Nanoscience program to ensure that required core courses meet the students' needs and that pre-requisites adequately prepare students for upcoming courses.

Response

Course changes are ongoing at the present moment. The Materials and Nanoscience Coordinating Committee has set the course sequence.

10. The Department should continue to support initiatives that strengthen the library-department relationship.

Response

The Chemistry Liaison Librarian will be invited annually to department meetings to provide updates and receive feedback. Instructors will be reminded of the availability of the library to enhance the program and courses delivered.

11. The Department should review placement information to ensure that co-op students receive a breadth of experiences throughout their co-op program.

Response

The Co-op Coordinator and Chair will annually hold an information session for students in CHEM 100 and 200. As part of Faculty-wide changes, new venues for informing students have been identified, including second year (2A) instructors who can mentor coop students on preparing for their first work term, and peer mentoring by having senior coop students present their final work term reports as posters to junior coop students who can benefit from the range of placements highlighted as well as the experiences of the senior students.

12. We recommend that the Department develop a long-term plan for the sustainability of the 2+2 and 2+1+1 initiatives and that the issue of resources and support be discussed with the Faculty of Science and the University.

Response

The Department will develop a plan with the Dean's Office in summer of 2017 to execute this recommendation. The Dean together with the Associate Dean International has identified a number of steps that may be taken over the next year to deal with these concerns, including the provision of additional teaching resources to support these programs and the international teaching they involve. The Department hopes to fully



address this recommendation over the next year, and will continually monitor the growth of these programs to ensure they are properly supported.

13. The Department should consider discontinuing programs with chronic low enrolments, such as geochemistry and chemical physics.

Response

This is currently under review by the Undergraduate Affairs Committee. Geochemistry has had low enrolments for a number of years and may be discontinued; this will be determined by the Earth and Environment Science department which has taken over administrative leadership of this program. The Chemical Physics program has low enrolment, but requires no special courses and attracts high-achieving students, so will be monitored but maintained for the near future. One option being explored is moving this program from a second-year entry to a first-year entry, making it more visible to students. The Materials specialization of the Chemistry program has been deactivated.

14. We recommend that the Department continue to assess its programs, ensuring that all accredited programs provide outstanding training in chemistry while, at the same time, balancing workload and accommodating diverse student interests.

Response

The Department through the Undergraduate Affairs Committee will continue to review its programs. Since the curriculum has undergone significant changes over the last two years, student success and outcomes will be monitored over the next five years to identify any ongoing or new weaknesses. Continued investment in the lab components will remain a high priority.

15. The Department should consider the implementation of annual Department-level review of the suite of experiments for the labs, with the goal of identifying issues with current experiments and selecting potential new experiments. The external reviewers recommended that the Department explore means, such as assistance from students, to support the lab instructors in updating and developing experiments.

Response

The Chair, along with the Dean and Undergraduate Affairs Committee will plan to adjust workloads so instructors have time for lab updates and development.



16. The Department should review its website to ensure that potential students can easily identify the many programs offered.

Response

The Undergraduate Affairs Committee along with the Associate Chair of Undergraduate program and Dean's Office will work to ensure the website is updated and contains information pertinent to potential students.

17. The Department should review its mechanisms for communicating with successful graduates.

Response

The Undergraduate and Graduate Affairs Committees along the Science Alumni Office will review how it communicates with graduates. The Department will continue to run its exit survey of graduating students and will work with the Science Alumni Office to facilitate ongoing communication with them.

18. The Department should explore opportunities for including student members on committees.

Response

The Chair and Executive Committee are reviewing this recommendation. Student representatives are invited to particular meetings regarding curriculum when appropriate, but attendance by students at every meeting is difficult due to scheduling constraints. Students have been invited to interviews and asked to provide feedback with our latest faculty hire and this practice will continue.

19. The Department should explore opportunities to include more discussion and group work into the curriculum.

Response

This is currently discussed by the Undergraduate Affairs Committee and the Teaching Fellow. Compilation of the various efforts involving group work is ongoing and will be shared throughout the Department for information.



Implementation Plan:

	Recommendations	Proposed Actions	Responsibility for Leading and Resourcing (if applicable) the Actions	Timeline for addressing Recommendations
1.	Self-study reports should contain the detailed program requirements for all degree programs under review	Include in future templates and instructions	Quality Assurance Office	Self-study template will be updated in Fall 2017
2.	The Dean of Science and the senior administration should ensure that the upgrades of Building C2, in particular the ventilation system upgrade, are completed as soon as possible	Evaluation underway	Dean's Office	Two year project planned to commence in March 2018
3.	The Department should review the existing laboratory facilities and develop a plan for space management and upgrade, to align with ongoing equipment/infrastructure renewal	Space planning and renovations are part of new annual budget planning process	Department Executive Committee and Chair	Annually
4	The future plans of the Department of Chemistry should include a dedicated study space/resource center for Chemistry students	Short-term: make seminar room available for students Long-term: review with students	Chair	Short term space allocated in C2; longer term space will follow renovation (point 2) that will be completed in 2020.

May 2018



5.	The Department of Chemistry should review its safety procedures at regular intervals	Annually reviewed under Policy 34	Chair and Safety Committee	Annually
6.	The Department should review the coordination of multi-section courses. Course coordinators (if applicable) and instructors should place a high priority on following an agreed-upon timeline for delivering the course content, as students are distressed when sections are out of sync	Review with course coordinators in CHEM 120 & 123	First-year Coordinator, UG Affairs Committee and Associate Chair, UG programs	Completed Fall 2017 – will also be an item of focus in all upcoming offerings.
7.	The Department should review the coordination and grading of CHEM 494 projects. Reminders with respect to the expectations for the time devoted to the project should be widely circulated, information about projects and the course should be circulated to students in a timely manner, and a greater emphasis on grading by reviewers should be considered	Additional Orientation with 494 students; Highlight website; New LEARN site as student resource	CHEM 494 coordinator (Chair)	Completed Fall 2017
8.	The Department should review the coordination of joint programs	Coordinating Committees	Chair and Chairs of Biology and Physics and Astronomy	Biochem/Biol Coordinate completed Winter 2017. MNS/Physics coordination completed Fall 2017
9.	The Department should review the list of required courses for the Materials and Nanoscience	Course changes ongoing now; course sequence is set	MNS Coordinating Committee	Completed Fall 2017

May 2018



	program to ensure that required core courses meet the students' needs and that pre-requisites adequately prepare students for upcoming courses			
10.	The Department should continue to support initiatives that strengthen the library-department relationship	CHEM 100, CHEM 200 and CHEM 494	UG Affairs Committee	Librarian involved in course and department meetings Fall 2017.
11.	The Department should review placement information to ensure that co-op students receive a breadth of experiences throughout their co-op program	Information sessions for students, CHEM 100, CHEM 200, mentoring by second year instructors, peer mentoring by senior coop students	Co-op Coordinator, Chair, instructors.	Annually
12.	The Department should develop a long-term plan for the sustainability of the 2+2 and 2+1+1 initiatives and that the issue of resources and support be discussed with the Faculty of Science and the University	Develop a plan with the Dean's Office. Consult with Department. New dedicated faculty lecturer position undergoing search	Chair, Associate Chair (UG programs) and Dean; Chemistry Executive Committee, Department of Physics & Astronomy	Lecturer to be in place for May 2018. Coordination between departments and Dean's office through ongoing meetings in 2018.
13.	The Department should consider discontinuing programs with chronic low enrolments, including geochemistry, chemical physics and materials specialization in Chemistry.	Geochemistry – referred to EES department; Chemical Physics – new entry point being explored;	UG Affairs Committee	Winter 2018

May 2018



		Materials Specialization in Chemistry inactivated.		
14.	We recommend that the Department continue to assess its programs, ensuring that all accredited programs provide outstanding training in chemistry while, at the same time, balancing workload and accommodating diverse student interests	Additional plan flexibility introduced beginning September 2019.	UG Affairs Committee	Once new plan is underway, annual assessments of student outcomes will be made.
15.	The Department should consider the implementation of annual Department-level review of the suite of experiments for the labs, with the goal of identifying issues with current experiments and selecting potential new experiments. We recommend that the Department explore means, such as assistance from students, to support the lab instructors in updating and developing experiments	Plan to adjust workloads so instructors have some time for lab updates and development	Chair with Dean on resources; UG Affairs Committee on priorities and implementation.	2018
16.	The Department should review its website to ensure that potential students can easily identify the many programs offered	Website has been revised	UG Affairs Committee, Associate Chair (UG programs), and Dean's Office	Completed Summer 2017
17.	The Department should review its mechanisms for communicating with successful graduates	Under review	UG Affairs and Grad Affairs Committees and Science Alumni Office	Ongoing

May 2018



18.	The Department should explore opportunities for including student members on committees	Under review	Chair and Executive Committee	Summer 2017 for hiring committees and ongoing with curriculum changes.
19.	The Department should explore opportunities to include more discussion and group work into the curriculum	Second (254), third (360) and fourth year (430) courses have added group activities to their curriculum.	UG Affairs Committee, Teaching Fellow	Winter and Fall 2017.

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



UNIVERSITY OF
WATERLOO

2024

Date of next program review:

Date

Signatures of Approval:

A handwritten signature in black ink, appearing to be 'UB' followed by a horizontal line.

May 30, 2018

Chair/Director

Date

AFIW Administrative Dean/Head (For AFIW programs only)

Date

A handwritten signature in black ink, appearing to be 'R' followed by a horizontal line.

31.5.18

Faculty Dean

Date

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

Date

Associate Vice-President, Graduate Studies and Postdoctoral Affairs
(For graduate and augmented programs)

Date



Final Assessment Report

International Development (BES, Minor, Option) and Development Practice (MDP)

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 Bachelor of Environmental Science (BES, including the minor and option) in the International Development (INDEV) program and the Master of Development Practice (MDP), delivered by the School of Environment, Enterprise and Development (SEED). A self-study (Volume I) was submitted to the Associate Vice-President, Academic and Associate Vice-President, Graduate Studies and Postdoctoral Affairs on September 16, 2016. The self-study presented the program descriptions and learning outcomes, an analytical assessment of these two programs, and program data including information collected from a student survey along with the standard data package prepared by the Office of Institutional Analysis & Planning (IAP). Appended were the course outlines for all courses in the program and the CVs (Volume II) for each full-time faculty member in the School of Environment, Enterprise and Development. A ranked list of proposed external reviewers was provided by the program (Volume III).

Two arm's-length external reviewers – Dr. David Black, Professor of Political Science, Dalhousie University and Dr. Haroon Akram-Lodhi, Professor of International Development Studies, Trent University – were selected by Associate Vice-President, Academic and Associate Vice-President, Graduate Studies and Postdoctoral Affairs. In addition one internal reviewer – Dr. Barbara Schmenk, Professor of German – was selected.

The site visit occurred on January 5-6, 2017. The visit included interviews with the following groups or individuals: Vice-President, Academic & Provost; Associate Vice-President, Graduate Studies and Postdoctoral Affairs; Associate Vice-President, Academic; Dean of the Faculty of Environment; Principal of St. Paul's University College; Director of the MDP program; Director of SEED; Faculty and staff members, and current 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.



Program characteristics

The INDEV and MDP programs have been designed to address the challenges of sustainable development (such as poverty, health, conservation, climate change) and to (1) integrate knowledge from several disciplines including environmental studies, social sciences, and management; (2) develop competencies for adapting to different cultural and societal perspectives on 'development', for problem-solving on multi-cultural teams, and for adapting technology to fit the local situation; and (3) encourage innovative, sustainable solutions to development issues.

The INDEV degree provides a strong language and work integrated learning component which prepares graduates for international development work in challenged communities throughout the world with a particular, but not exclusive, focus on urban communities. The MDP also includes a strong focus on professionalization and evidence-based practice in the development context.

Bachelor of Environmental Science (BES) in International Development (INDEV)

The undergraduate program has two specializations, a practice specialization, and a research specialization. All students are admitted into the same program, and are required to choose one of the specialization streams. The research stream was created in 2013 to address some concerns the program had about requiring students to go on field placement, as this requirement raised some accessibility issues, and did not serve those students who were interested in international development issues from a more academic standpoint.

The curriculum for the first three years is identical for both streams. Practice specialization students are required to enroll in Spring term of their third year (4A term) to take courses related to their field placement. The fall and winter terms of their fourth year are spent in a field placement, which is unpaid, but for credit. Since the field placement is for credit, it includes ongoing course work in the form of assignments and reflections that students must complete during their field placement. Students participate in a final capstone program after the field placement. Students in the practice specialization take 30 required courses and 10 electives.

In the research specialization, enrolment in the Spring term of their third year (4A term) is not required, as the INDEV courses taken by the placement stream are placement related. In their fourth year, research specialization students are required to take four (2.0 credits) required INDEV courses consisting of a seminar course on Contemporary Development Issues and a course on International Development Theory, and a 1.0 credit thesis/project course, intended to allow students to pursue a research paper in an area of interest. For the remaining 3.0 credits, students take electives of their own choosing. Students in the research stream take a total of 25 required courses and 15 electives.



Minor in International Development (INDEV)

The International Development Minor is open to all University of Waterloo undergraduate degree students. The requirements of the Minor are 5.0 units (ten courses) with a minimum overall cumulative average of 65% and the completion of the community service experience.

The community service component comprises experience with an organization or initiative that identifies with the mission of the INDEV program: building a fairer, more equitable and environmentally sustainable world. Pre-approval is required from the INDEV Manager of International Work Experience. Students are responsible for arranging his/her community service and at his/her own expense. Specifically, community service may consist of:

- a minimum of three weeks of community service with an organization in Canada or internationally'
- participation in an international seminar focused on community development; or
- a co-op work term relevant to international development.

Option in International Development (INDEV)

The International Development Option is available to all undergraduate students in the Faculty of Environment, except for students in the International Development Honours plan. The requirements of the Option are six courses (five core and one elective) with a minimum overall cumulative average of 65% and the completion of a community service experience.

The International Development Minor and Option both require the completion of a pre-approved community service experience or educational seminar focused on community development issues of at least three weeks duration in Canada or internationally. Pre-approval is required by the International Development Field Placement Coordinator. This requirement must be organized by the student with support from the Field Placement Coordinator and is to be completed at the student's own expense. Co-op work terms that meet the above description will normally qualify for this requirement.

Master of Development Practice (MDP)

The Masters of Development Practice (MDP) is a 16-month, professional, course-based program that was launched in Fall 2012 with an initial cohort of 18 students. The concept of this program originated in the Fall of 2009, motivated in part by a grant the MacArthur Foundation of USD 200,000. The program was developed as part of the Global MDP network, an initiative that saw the creation of a network of 29 MDP programs in 19 countries. The underlying philosophy of the global initiative was recognition that current international development studies programs were not oriented towards the creation of a professional cadre of development practitioners. These programs, including the one at Waterloo, were intended to fill this gap.



Summary of strengths, challenges and weaknesses based on self-study

INDEV

Strengths

- The program is highly structured and the curriculum is designed to be a logical and additive progression throughout the program
- INDEV's interdisciplinary approach to delivering content enables students to understand a very complex phenomenon, and provides students with a set of skills and experiences that will prepare them for professional employment and further study
- The field placements and integration into INDEV 401 and 402 (International Development Placement 1 and 2, respectively) are viewed by students as a positive transformative activity in their intellectual and professional development
- INDEV has experienced faculty and outstanding support and partnership between the SEED and St. Paul's University College

Challenges/Weaknesses

- The program believes it could be successfully expanded to 60 incoming students per year from the current 40; however, an expanded research stream would be necessary to accommodate program expansion
- Retention is a principal concern – the program needs to develop better strategies in terms of recruiting and retaining students that will continue across all four years
- The program should recruit students from other parts of Canada as opposed to mainly from southern Ontario and recruit more males (current enrolment is predominantly female)
- INDEV must strive to promote unexploited opportunities to engage students in faculty research and provide students in the research stream with greater experiential education activities

MDP

Strengths

- The association of the MDP with the external MDP network helps create a wider international platform that is able to promote the MDP as a recognized graduate degree for development practitioners globally. This will contribute to the broad currency of the



degree, which will appreciate over time as the network matures and as global alumni take positions in development organization worldwide

- This association also provides a strong recruitment window for students worldwide as it competitively positions the program at Waterloo in relation to other programs
- The MDP network significantly enlarges the learning community for Waterloo students and faculty, through Global MDP meetings and strong connections to other development associations, particularly the Sustainable Development Solutions Network
- The experiential learning opportunities within this program set it apart from other Canadian programs and are viewed very positively by its students. Opportunities include: the field placement, an annual research field trip to the Caribbean and opportunities to attend Global MDP and SDSN meetings. These connections allow students to gain critical practice insights and to develop their own professional network
- Faculty members are very experienced in both development practice and scholarship and all have active field research programs
- The program curriculum is intensive but it provides students with a comprehensive understanding of the contemporary development practice and a theoretical context
- MDP students complete their degree in 16 months, which is faster than many of the MDP programs that are 24 months in length

Challenges/Weaknesses

- Given the intensity of the curriculum, the heavy course load the first two terms of program can be challenging for students – this is constantly being monitored
- As a non-thesis program, the MDP has limited financial support available for students
- The professional training opportunities in the MDP may not be sufficient for some entry level positions in international development
- The current program content may not sufficiently cover gender and education issues
- The program will need to increase recruitment activities in order to increase its size from 25 to 30 incoming students

Summary of key findings from the external reviewers

Both the INDEV and the MDP programs are unique programs in the Canadian international development studies landscape. Both programs do an excellent job of delivering a curriculum that pushes students to become better and more independent critical thinkers. At the same time, students are equipped with a set of practice-based skills that are directly applicable for those going into the field of development management (within or beyond Canada) with the purpose of becoming innovative and entrepreneurial problem-solvers. The “jewel in the crown” of INDEV is

July 2017



its 4th year experiential in-field placement in the practice specialization. For the MDP, the four core competencies of the program allow students to become conversant in a range of international development problems, and to effectively “translate” between specialists in particular sub-fields.

Both programs attract impressive, motivated students with a strong sense of collegiality that, upon graduation, have high opinions of the quality and utility of the education that they have received. Both programs, while small, have grown since their creation. The core faculty on INDEV and the MDP, who have heavy administrative workloads in addition to their teaching responsibilities, remain exceptionally productive in their scholarly activities.

However, both programs embody tensions that have impacted upon the ability to increase recruitment and (in the case of INDEV) retention, and this represents the “core paradox” of both programs. The combination of critical thinking with practice-based skill formation results in both programs being very prescriptive, which impacts upon a) the depth of the curricula, b) the range of foundational international development arts and humanities concepts that are explored, and c) the range of contemporary international development issues that can be covered.

Program response to external reviewer recommendations

INDEV Recommendations

1. A review of the curriculum to evaluate whether all core courses are required, particularly across the first two years of the degree.

Response

The Reviewers noted that the number of courses that focused on international development specifically appeared low, although the program requires 24% of the courses in this area. The reviewers also note the desire for more courses in the natural environment and humanities. The current balance reflects the desire of the program to include several practice-based courses that provide skills in economics, marketing, accounting and entrepreneurship that are an integral part of development practice, as well as providing some fundamentals in environmental science and quantitative analysis. Elsewhere in the report, the Reviewers comment positively on the balance of knowledge-based courses in international development and skills-based courses that promote professional development.

Within this context, SEED will implement a limited curriculum review in the 2017/18 academic year with the specific intention of considering the following:



1. The structure of the practice stream course in 4th year to mitigate heavy assessment burden and better satisfy the work placement experiential and professional learning objectives (see recommendation 4 below)
2. The appropriate balance between development courses and other practice oriented offerings, and the need for more humanistic offerings
3. The appropriate course support for the research stream.
4. An increased focus on identification and use of appropriate electives to more systematically make up for shortfalls in what the faculty are able to deliver, given capacity constraints within SEED.

Response

A similar review has been undertaken in the past and the program advisor stays up-to-date on electives across campus. We will update this work and ensure that it is easily available to students. It should be noted that the purpose of electives is not related to shortfalls in faculty resources, but rather ensuring that our students have access to courses that support and complement their learning. We do not currently feel there is a need for SEED to create further UG courses to support this program. Notwithstanding, and as part of curriculum review, we will undertake a 360 review of international development related offerings across campus.

5. The establishment of a new 2nd year winter term course in critical thinking to more effectively transition students from the 2nd to the 3rd year.

Response

The Reviewers noted that there is a significant gap between second and third year related to increased critical and theoretical expectations that could be addressed by introducing some of these more advanced concepts in second year. This is a sensible suggestion which the program will explore options to address through the proposed curriculum review.

6. A reduction in the assessment intensity of the 4th year experiential in-field placement in the practice specialization.

Response

SEED will consider this recommendation as part of curriculum review, but can indicate at this stage that we view this suggestion favourably, and will work in advance of curriculum review to address assessment burden in field placement.

7. Consider moving the in-field placement to terms 4a and 4b, (summer and fall of final year) so that students returning from the placement have a full term of post-placement courses



that are better able to take full pedagogical advantage of students' placement experiences.

Response

SEED will not pursue this suggestion, as it would be very hard to implement given the course restraints and the need to coordinate with field partners. We will look at ways to better leverage the placement experience to ensure reflection and learning, as part of curriculum review.

8. The introduction of a 3rd year course in research design, research epistemology and research methodology for students entering the research specialization of INDEV.

Response

The School does offer a research methods course in its undergraduate Environmental and Business program (ENBUS 306) that we will explore making available to INDEV students in the research stream.

9. Consider ways in which students in the research specialization can take part in faculty research, perhaps by introducing a course for credit in which research specialization students act as research assistants to faculty.

Response

Providing credits for taking on research assistantships is likely to create administrative and pedagogical concerns. We will look into incorporating interested INDEV students into the ENBUS 402 capstone structure, which pairs students with external clients for a research-based project. We are exploring attracting some development related clients for this purpose on a trial basis (in 2017/18).

10. The use of an expanded array of electives, as noted in 2. above, to enable a taught (non-field placement) specialization of INDEV.

Response

We do not believe that a third stream is a viable option. We will consider whether the research stream provides sufficient flexibility to allow students to pursue minors or other alternatives within the program.

11. Consider ways in which students in the research and taught specializations can be given international exposure through an international short course option or by partnering with another university that offers an international short course option.



Response

There is flexibility to do this through the program's requirement for community service. We will explore whether it is suitable to identify particular external programs that could satisfy this requirement as part of the curriculum review.

12. The marking rubric that is being introduced by INDEV is strongly supported by the External Reviewers as a way of ensuring not only evaluative consistency across faculty members but also improving the management of student expectations over the course of the degree.

Response

Agreed.

13. Ensure procedures are put in place so that core faculty rotate teaching in the 3rd and 4th years.

Response

This will be addressed as part of the curriculum review, but our view is that the issue is less related to rotating faculty than it is about the need to restructure the field placement assessment methods to more properly align with the program and university's experiential work placement learning objectives (see recommendations 1 and 4 above).

MDP Recommendations

1. A review of the curricula in order to establish whether a rebalancing of core and elective courses is feasible and desirable.

Response

We will establish a curriculum review for the following purposes:

1. assessing whether the current course requirements are too onerous (this must be balanced with broader requirements set by the Global MDP network – the process for reviewing the global curriculum has already begun)
 2. balancing the availability of electives for students
 3. assessing the balance between skills based learning and other (theoretical) material
 4. leveraging the field placement experience for reflection and pedagogical purposes in final term of program
2. A review of course assessment in order to ensure that all courses have some element of skill-building based assessment built into the curriculum; and/or that skills-focused courses be added as elective offerings so students could potentially graduate with



serviceable skills relevant to potential governmental and non-governmental development organization employers.

Response

This will be addressed in curriculum review.

3. The development of a capstone experience that draws students together at the end of their course of study to critically reflect upon their learning.

Response

This will be addressed in curriculum review.

4. The development of a curriculum map for the MDP, to better explain the logic of the program to students and in so doing better manage expectations.

Response

SEED will consider implementing a more rigorous and standardized approach to course syllabi that more explicitly links program learning objectives to course objectives to ensure clarity of intent and clear expectations. This will be guided by the development of a curriculum map with the assistance of the Centre for Teaching Excellence.

5. Priority consideration be given to ways in which the marketing of the MDP can be improved.

Response

There are ongoing discussions that are most appropriately held at the faculty level between the Faculty and the GSO on professional graduate student marketing and recruitment. SEED will explore ways to improve graduate recruitment through this process, including ensuring that the faculty and university provide a mechanism to support these efforts with appropriate resources.

INDEV and MDP Recommendations

1. There is a lack of integration of the INDEV and MDP students which the University/SEED should address in order to strengthen the sense of community among international development students at the University, and reinforce complementarities between the two programs. This can involve:

- 1.1 Having MDP students returning from their experiential in-field placement present critical reflections on their placement experiences to the INDEV students preparing



to go on their in-field placements. This should be integrated into the MDP curriculum as a skill-development opportunity

1.2 Having INDEV students returning from their experiential in-field placement have MDP students as key members of the audience and commentators during their capstone week activities. This should be integrated into the MDP curriculum as a skill-development opportunity

1.3 Find ways to encourage stronger participation of MDP students in the annual INDEV student conference, as presenters, discussants, and organizers

Response

SEED will explore ways to promote cross-program activities, including opportunities for further participation in the field placement capstone and the INDEV conference.

2. Independently of any University intervention, both INDEV and the MDP need to seriously deal with issues around Indigeneity, which are only very weakly represented in their curricula.

Response

The issue of Indigeneity and the institutional responses to the TRC are best addressed at the University and Faculty level, where appropriate resources can be found to implement these requirements. The Faculty and University have a growing number of courses that focus on Indigenous issues, which will be identified as part of the curriculum review. Efforts will be made to ensure that the development dimensions of Indigenous issues are addressed as part of core curriculum.



Implementation Plan

INDEV recommendations			Follow-Up	Responsibility	Timeline
1.		A review of the curriculum should be undertaken to evaluate whether all core courses are required, particularly across the first two years of the degree;	SEED will implement a limited curriculum review in the 2017/18 academic year with the specific intention of considering the following: <ul style="list-style-type: none"> 4. The structure of the practice stream course in 4th year to mitigate heavy assessment burden and better satisfy the work placement experiential and professional learning objectives (see recommendation 4 below) 5. The appropriate balance between development courses and other practice oriented offerings, and the need for more humanistic offerings 6. The appropriate course support for the research stream. 	INDEV/MDP Curriculum Committee	Fall 2017
2.		Increase the focus on identification and use of appropriate electives to more systematically make up for shortfalls in what the faculty is able to deliver, given capacity constraints within SEED.	As part of curriculum review, we will undertake a 360 review of international development related offerings across campus	INDEV/MDP Curriculum Committee/ INDEV Program Director	Fall 2017
3.		Establish a 2nd year winter term course in critical thinking to more effectively transition students from the 2nd to the 3rd year;	We will consider this as part of the curriculum review.	INDEV/MDP Curriculum Committee	Fall 2017

July 2017



4.		Reduce the assessment intensity of the 4th year experiential in-field placement in the practice specialization.	We will consider as part of curriculum review, but can indicate at this stage that we view this suggestion favourably, and will work in advance of curriculum review to address assessment burden in field placement	INDEV/MDP Curriculum Committee	April-August 2017
5.		Move the in-field placement to terms 4a and 4b, (summer and fall of final year) so that students returning from the placement have a full term of post-placement courses that are better able to take full pedagogical advantage of students' placement experiences and so that students have more time for structured and supported reflection and learning concerning these experiences;	We will not pursue this suggestion, as it would be very hard to implement given the course restraints and the need to coordinate with field partners. We will look at ways to better leverage the placement experience to ensure reflection and learning, as part of curriculum review.		N/A
6.		Introduce a 3rd year course in research design, research epistemology and research methodology for students entering the research specialization of INDEV;	SEED currently teaches an UG methods course (ENBUS 306), we will consider the appropriateness of using that offering to meet the needs of the research stream students.	SEED Director	Fall 17-Spring 18
7.		Consider ways in which students in the research specialization can take part in faculty research, perhaps by introducing a course for credit in which research specialization students act as research assistants to faculty;	Providing credits for taking on research assistantships is likely to create administrative and pedagogical concerns. We will look into incorporating interested INDEV students into the ENBUS 402 capstone structure, which pairs students with external clients for a research-based project. We are exploring attracting some development related clients for this purpose on a trial basis (in 2017/18).	SEED Director	April 17-April 18



8.		Consider the use of an expanded array of electives, as noted in 2. above, to enable a taught (non-field placement) specialization of INDEV as a positive alternative to the practice specialization;	We do not believe that a third stream is a viable option. We will consider whether the research stream provides sufficient flexibility to allow students to pursue minors or other alternatives within the program.		N/A
9.		Consider ways in which students in the research and taught specializations can be given international exposure through an international short course option or by partnering with another university that offers an international short course option;	There is flexibility to do this through the program's requirement for community service. We will explore whether it is suitable to identify particular external programs that could satisfy this requirement as part of the curriculum review.	INDEV Program Director/Field Placement Coordinator	Fall 2017
10.		The marking rubric that is being introduced by INDEV is strongly supported by the External Reviewers as a way of ensuring not only evaluative consistency across faculty members but also improving the management of student expectations over the course of the degree.	Agreed	SEED and Program Directors	Ongoing
11.		Ensure procedures are put in place so that core faculty rotate teaching in the 3rd and 4th years;	This will be addressed as part of the curriculum review, but our view is that the issue is less related to rotating faculty than it is about the need to restructure the field placement assessment methods to more properly align with the program and university's experiential work placement learning objectives (see recommendations 1 and 4 above).	SEED Director	Spring 2017

July 2017



MDP recommendations			Follow-Up	Responsibility	Timeline
1.		Review of the curricula in order to establish whether a rebalancing of core and elective courses is feasible and desirable. The External Reviewers believe that the 9 core courses could be cut to 6 - 7 without any loss of pedagogical rigour, and the increased space that this would create for electives would allow for meaningful specializations to emerge;	<p>We will establish a curriculum review for the following purposes:</p> <ul style="list-style-type: none"> 5. assessing whether the current course requirements are too onerous (this must be balanced with broader requirements set by the Global MDP network – the process for reviewing the global curriculum has already begun) 6. balancing the availability of electives for students 7. assessing the balance between skills based learning and other (theoretical) material 8. leveraging the field placement experience for reflection and pedagogical purposes in final term of program 	INDEV/MDP Curriculum Committee	Fall 2018
2.		A review of course assessment should be undertaken in order to ensure that all courses have some element of skill-building based assessment built into the curriculum; and/or that skills-focused courses be added as elective offerings so students could potentially graduate with serviceable skills relevant to potential governmental and non-governmental development organization employers;	This will be addressed in curriculum review	INDEV/MDP Curriculum Committee	Fall 2018



3.	Consider the development of a capstone experience that draws students together at the end of their course of study to critically reflect upon their learning;	This will be addressed in curriculum review.	INDEV/MDP Curriculum Committee	Fall 2018
4.	Consider the development of a curriculum map for the MDP, to better explain the logic of the program to students and in so doing better manage expectations;	SEED will consider implementing a more rigorous and standardized approach to course syllabi that more explicitly links program learning objectives to course objectives to ensure clarity of intent and clear expectations	INDEV/MDP Curriculum Committee	Fall 2018
5.	Priority consideration should be given to ways in which the marketing of the MDP can be improved. There is, in the view of the External Reviewers, a large untapped market of graduates of international development studies programs in Canada in general and southern Ontario in particular that are looking for a skills-oriented, problem-solving program like the MDP, but who have not heard of the MDP or have little knowledge of it. While such marketing should not be left to faculty, who already have heavy workloads, faculty need to be involved in devising innovative and appropriate marketing strategies, including visits to undergraduate programs in the southern Ontario region and potentially to other centres of international development studies, such as Halifax, Montreal, Vancouver or Winnipeg, when appropriate.	There are ongoing discussions that are most appropriately held at the faculty level between the Faculty and the GSO on professional graduate student marketing and recruitment. SEED will explore ways to improve graduate recruitment through this process, including ensuring that the faculty and university provide a mechanism to support these efforts with appropriate resources.	MDP Program Director	Fall 2017



INDEV and MDP recommendations			Follow-Up	Responsibility	Timeline
1.		<p>To strengthen the sense of community among international development students at the University, SEED should consider:</p> <ul style="list-style-type: none"> 1.1 having MDP students returning from their experiential in-field placement present critical reflections on their placement experiences to the INDEV students preparing to go on their in-field placements. This should be integrated into the MDP curriculum as a skill-development opportunity; 1.2 having INDEV students returning from their experiential in-field placement have MDP students as key members of the audience and commentators during their capstone week activities. This should be integrated into the MDP curriculum as a skill-development opportunity; 1.3 finding ways to encourage stronger participation of MDP students in the annual INDEV student conference, as presenters, discussants, and organizers. This might involve leveraging the INDEV student conference to offer a one-day graduate student conference in conjunction with the undergraduate organized conference. 	Seed will explore ways to promote cross-program activities, including opportunities for further participation in the field placement capstone and the INDEV conference.	INDEV and MDP Program Directors	Fall 2017

July 2017



2.		Both INDEV and the MDP need to seriously deal with issues around Indigeneity, which are only very weakly represented in their curricula. This can be done by using a global comparative lens as the focus of attention to Indigenous issues, as this is weakly done in the Canadian university landscape.	While the issue of indigeneity and the institutional responses to the TRC are best addressed at the University and Faculty level, where appropriate resources can be found to implement these requirements, steps may be taken at the department level. SEED is working closely with St. Paul's University College on these issues.	INDEV/MDP Curriculum Committee	Ongoing
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The Department Chair/Director, in consultation with the Dean of the Faculty shall be responsible for monitoring the Implementation Plan.



UNIVERSITY OF
WATERLOO

Date of next program review _____ 2024
Date

Signatures of Approval

A handwritten signature in black ink, appearing to read "J. Haynes".

5 April 2018

Chair/Director _____ Date

AFIW Administrative Dean/Head (For AFIW programs only) _____ Date

A handwritten signature in black ink, appearing to read "Jennifer O'Leary".

April 9/18

Faculty Dean _____ Date

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

Associate Vice-President, Graduate Studies and Postdoctoral Affairs _____ Date
(Formerly known as the Associate Provost, Graduate Studies)



Final Assessment Report

Mennonite Studies (Minor)

September 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 Mennonite Studies (MS)¹ Minor delivered by Conrad Grebel University College and the Faculty of Arts. A self-study (Volume I) was submitted to the Associate Vice-President, Academic on July 11, 2016. The self-study presented the program description and learning outcomes, an assessment of this program, along with the standard data package prepared by the Office of Institutional Analysis & Planning (IAP). Appended were the course outlines for all courses in the program and the CVs (Volume II) for each full-time faculty member associated with the MS Minor.

Two arm's-length external reviewers (Volume III), (Dr. Steven Bednarski, Professor of History and Medieval Studies, St. Jerome's University/ University of Waterloo and Dr. Stefan Idziak, Associate Professor of Physics and Astronomy, University of Waterloo) were selected by the Associate Vice-President, Academic.

They reviewed the self-study documentation and then conducted a site visit on November 7th, 2016. The visit included interviews with the Acting Associate Dean of Arts, Director of Mennonite Studies, Faculty members, Liaison Librarian and meeting with current 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.

Program characteristics

Mennonite Studies (MS) is an interdisciplinary program of study in the Faculty of Arts at the University of Waterloo. It provides students with the opportunity to gain specialized knowledge about Mennonites through completion of courses from various disciplines.

Mennonites in Canada and around the world represent a fascinating diversity of religious expression and cultural practice. In fact, Waterloo Region and southwestern Ontario contain perhaps the greatest degree of Mennonite pluralism in the world. As such, the program provides a guide to learn about the history, beliefs, and culture of a unique population that

¹ As of June 25, 2018 a new course indicator (MENN) was adopted and replaced MS.



surround the University of Waterloo community. Courses in the program explore the past and present lives and thought of Mennonites, in all their variety.

Summary of strengths, challenges and weaknesses based on self-study

Strengths:

- An exceptional on-site Library and Archives that specializes in Mennonite Studies research resources
- Opportunities for students to obtain experience and skill working with primary sources in the Archives
- An abundance of community connections – individuals, organizations, and places – that provide opportunities for experiential education, field trips, fieldwork, and learning partnerships
- Strong teaching and good enrolments in Mennonite Studies courses despite the low number of graduates
- The presence in the Conrad Grebel residence and in the UW student body of many students of Mennonite identity or background who are interested in their present-day and historic beliefs and traditions (a good consumer base)
- Regular course offerings make the 8-course Minor easy to complete
- Many Mennonite-related events in the community and at Conrad Grebel are available for student participation
- High level of student satisfaction with the courses and the program

Weaknesses:

- Low number of graduates over time. We have had 5 graduates in 10 years (2 currently enrolled in the plan).
- Limited visibility and awareness of Mennonite Studies as a plan offering
- Loss of Literature/Arts specialist due to retirement
- Lack of time for promotion of the Minor on the part of faculty and staff

Challenges:

- UW branding does not typically emphasize the Arts
- Declining enrolment in some Arts disciplines, especially Religious Studies which is often a connection and path into Mennonite Studies
- Difficulty getting students to attend events outside of class
- Despite active research and community education program, getting students to enroll in the Minor is a real challenge - it is not viewed as valuable



Summary of key findings from the external reviewers

The Mennonite Studies Minor is a mission-central program that should continue despite low enrolment. The program is of intrinsic interest to the mission of Conrad Grebel University College, to the Mennonite Community, to the Faculty of Arts, and the broader University. Mennonite Studies, moreover, requires little in the way of direct support as it draws almost entirely upon courses offered by other units. Given the low cost associated with this program, and its centrality to mission and to local and regional Mennonite culture, Mennonite Studies remains an important program despite weak enrolments.

The reviewers do note that the loss of a full-time specialist in Mennonite Literature has had an impact on the breadth of the program, as well as the impending loss through retirement of Kenneth Hull, Associate Professor of Music and Director of the Institute for Worship and the Arts. In light of effectively two full-time faculty members leaving, the reviewers hope that future hires at Conrad Grebel can further contribute to providing courses for the program.

Core faculty involved in the MS Minor are very clearly engaged with the topic and are enthusiastic to share their knowledge. The research activity of the core faculty over the last few years is acceptable, especially given the teaching and administrative loads they carry. The research activity easily demonstrates that the program's faculty members maintain the expertise needed to deliver the core courses of the Minor.

Program response to external reviewer recommendations

Recommendations

1. Identify a set of degree level expectations and learning outcomes, and make them visible online and in print advertising.

Response

The program accepts this recommendation and will draw on the objectives now listed in the core required courses and also generalize them to suit the whole Minor.

2. Have the Institute of Anabaptist and Mennonite Studies Advisory Group (IAMS) take a greater leadership role to help guide and shape the program, particularly in light of upcoming retirements.

Response

The program thinks that perhaps the review team misunderstood the IAMS mandate and its relationship to the Mennonite Studies (MS) Minor. One of the recommendations of the last program review in 2010 was to bring the teaching and research components of Mennonite studies at Conrad Grebel more closely together. Up until then IAMS had functioned solely as a research, publishing, and public education institute, while the Mennonite Studies Minor (the teaching component) was overseen by the College Dean or a faculty member. Following the last review, the Minor was deliberately brought under the oversight of the Institute of Anabaptist and Mennonite Studies Advisory Group, and thus IAMS gained a greater leadership role in the program. A faculty member on IAMS continues to serve as the Director of MS, given that the IAMS Director is currently the
September 2017



College's Archivist-Librarian (without faculty status). The program will work at bringing greater clarity to the governance of MS and the Minor plan. It should be noted that there are no administrative time releases attached to leadership in Mennonite Studies.

3. Establish an independent MS rubric and cross-list, where appropriate and possible, courses offered by other units.

Response

The program is pleased by this recommendation, despite the small number of courses that would be listed under a Mennonite Studies course code. The program has already inquired about the process for creating a new course code and, if approved, hopes to have this in place for 2018-19.

4. Cross-list ARTS 125 with MS 125 and HIST and / or RS courses to improve visibility and enrolment.

Response

The program has been well aware that the low visibility of this course is due, in part, to its Arts code (recommended by the Arts Undergrad Office when the interdisciplinary course was created in 2013). The program has already put in a request to the Religious Studies Department for a cross-listing as the program feels that RS is most appropriate given that there are already two required courses in History (247, 348) and just one in RS (344).

5. Create a Special Topics or Directed Readings course within the MS rubric if the enrolment in MS grows significantly.

Response

The program will happily give some thought to this recommendation after the MS rubric is created; this is contingent on faculty resources to offer a special topics course, as well as student demand. Conrad Grebel recently initiated a named Fellowship program in Mennonite Studies that will occasionally bring a Visiting Scholar to the campus to engage in research, archival consulting, public education, and perhaps teaching on their area of expertise. In the future this could create opportunities for special topics courses, in addition to potential offerings by regular faculty.

6. Expand upon the experiential learning / primary research project conducted in HIST 247 to allow for greater library and archive internship work elsewhere in the curriculum.

Response

The collaboration between HIST 247 (Mennonite History) and the Mennonite Archives of Ontario (at Grebel) in 2015 that led to a year-long public exhibit on conscientious objection in World War Two, was very successful. The program will work at incorporating this as an ongoing component of this particular course and will explore options for similar assignments in other MS courses, such as Arts 125, or History 348/RS 344. As well, the Archives Internship is in the development stage, which will allow students to explore and develop their skills in historical research and archives work, and assist the Archives itself in processing collections and developing exhibits. Initially, we expect this to be a non-credit option, but hope that it evolves into a for-credit course under the MS rubric or as a



History course. We are confident that there will be students keen to undertake this experiential learning option, given the student volunteers that we now have, and given the History Department's Applied History specialization and new departmental co-op option.

7. Make explicit in print and online other experiential learning components of the MS Minor, such as opportunities to interact with local members of the Mennonite community. Standardize and promote the experiential learning components on the program.

Response

The program will try to make the experiential components of the MS Minor more explicit in the course descriptions, syllabi, and advertising. Several of the required MS courses include regular field trips and other activities that expose students to Mennonite individuals and agencies/organizations in the local community. These learning experiences cannot be completely standardized, given that instructors frequently respond to opportunities in the community as they arise. However, the program intends to have conversation about how experiential learning might be elevated to a more central and distinctive feature of the Minor.

8. Advertise at other Affiliated and Federated Institutions of Waterloo (AFIW) and Waterloo locations.

Response

The program is committed to developing more online and print materials to advertise the Plan at UW, focusing on academic units where we think there might be most interest.



Implementation Plan

	Recommendations	Proposed Actions	Responsibility for Leading and Resourcing (if applicable) the Actions	Timeline for addressing Recommendations
1.	Identify a set of degree level expectations and learning outcomes, and make them visible online and in print advertising;	The program will draw on the objectives now listed in the core required courses and also generalize them to suit the whole Minor.	Director of Mennonite Studies Minor, working with Institute of Anabaptist and Mennonite Studies (IAMS) Advisory Group and Conrad Grebel Dean.	A key participant was on sabbatical leave in fall 2017; these will be developed in winter and spring 2018.
2.	Have IAMS take a greater leadership role to help guide and shape the program, particularly in light of upcoming retirements;	IAMS does have leadership in guiding and shaping the program and will make its program needs known to the College Dean in light of upcoming retirements.	Director of Mennonite Studies Minor, working with Institute of Anabaptist and Mennonite Studies (IAMS) Advisory Group.	No particular action required. The Dean is aware of the program needs and currently sits on the IAMS committee. A search is underway in winter 2018 to replace one retirement that will maintain the church music and worship components of the program.
3.	Establish an independent MS rubric and cross-list, where appropriate and possible, courses offered by other units;	The program has already inquired about the process for creating a new course code and, if approved, hopes to have this in place for 2018-19.	Director of Mennonite Studies Minor, working with Institute of Anabaptist and Mennonite Studies (IAMS) Advisory Group and Conrad Grebel Dean.	Work to begin spring 2017, for approval in 2017-18 and activation in 2018-19
4.	Cross-list ARTS 125 with MS 125 and HIST and / or RS courses to improve visibility and enrolment;	The program has already put in a request to the	Director of Mennonite Studies Minor, working with Institute of Anabaptist and Mennonite	Work towards approval in 2017-18 and activation in 2018-19.

September 2017



		Religious Studies Department for a cross-listing.	Studies (IAMS) Advisory Group, Religious Studies Department, and Conrad Grebel Dean.	Note: as of winter 2018, RS has declined the cross-list and the IAMS committee has decided to pursue cross-listing of Arts only with a new MS rubric.
5.	Create a Special Topics or Directed Readings course within the MS rubric if the enrolment in MS grows significantly;	The program will give some thought to this after the MS course rubric is created; this is contingent on faculty resources to offer a special topics course in the program as well as student demand.	Director of Mennonite Studies Minor, working with Institute of Anabaptist and Mennonite Studies (IAMS) Advisory Group and Conrad Grebel Dean.	For discussion and possible offering in 2018-19 or 2019-20. As of winter 2018, a specific topics course has been developed and will be moved forward for approval where required.
6.	Expand upon the experiential learning / primary research project conducted in HIST 247 to allow for greater library and archive internship work elsewhere in the curriculum;	The program will incorporate library-archives assignments as an ongoing component of HIST 247 and will explore options for similar assignments in other MS courses, such as Arts 125 and Hist 348/344. The program will develop an Archives Internship that will allow students to explore and develop their skills in historical	Director of Mennonite Studies Minor, working with Institute of Anabaptist and Mennonite Studies (IAMS) Advisory Group, Archivist, and Conrad Grebel Dean.	The program will develop an internship framework during the 2017-18 academic year for introduction in 2018-19. As of winter 2018, a non-credit archival internship award has been developed and publicized at Conrad Grebel and to relevant depts. at UW and other AFIW.



		research and archives work, and assist the Archives itself in processing collections and developing exhibits.		
7.	Make explicit in print and online other experiential learning components of the MS minor, such as opportunities to interact with local members of the Mennonite community. Standardize and promote the experiential learning components on the program;	The program will make the experiential components of the MS Minor more explicit in our course descriptions, syllabi, and advertising. The program will discuss whether standardization of these is possible or practical.	Director of Mennonite Studies Minor, working with Institute of Anabaptist and Mennonite Studies (IAMS) Advisory Group, Instructors of MS courses, and Conrad Grebel Dean.	The program will develop a plan for this in 2017-18
8.	Advertise at other AFIW and Waterloo locations.	The program will develop more online and print materials to advertise the Plan at UW, focusing on academic units where The program think there might be most interest.	Director of Mennonite Studies Minor, working with Institute of Anabaptist and Mennonite Studies (IAMS) Advisory Group, Conrad Grebel Communications staff, and relevant academic units at UW.	Work will begin spring 2017 and be ongoing. A new info sheet and poster for the minor was created, highlighting its value for students pursuing vocations education, social services, healthcare, history professions, for example. This was sent to relevant units at UW and



				the AFIW. There appears to be growing knowledge and interest in the minor but no new students have signed into the plan as of yet.
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The Department Chair/Director, in consultation with the Dean of Conrad Grebel shall be responsible for monitoring the Implementation Plan.

September 2017



Date of next program review: _____ **2023**
Date

Signatures of Approval:

Chair/Director Date **April 20/18**

AFIW Administrative Dean/Head (For AFIW programs only) Date **APRIL 20/18**

Faculty Dean Date

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

Associate Vice-President, Graduate Studies and Postdoctoral Affairs Date
(For graduate and augmented programs)

2018 FALL CONVOCATION
List of Honorands with Biographies

APPLIED HEALTH SCIENCES and SCIENCE – Friday, October 26, 2018 at 10:00 a.m.

David Butler-Jones – Honorary Doctor of Science (*S*)

Lynn Judge – Honorary Member of the University

ENVIRONMENT and MATHEMATICS – Friday, October 26, 2018 at 2:30 p.m.

Ingrid Daubechies – Honorary Doctor of Mathematics (*S*)

Alfrieda Swainston – Honorary Member of the University

ARTS – Saturday, October 27, 2018 at 10:00 a.m.

Installation of the Chancellor

ENGINEERING – Saturday, October 27, 2018 at 2:30 p.m.

Parker Mitchell – Honorary Doctor of Engineering (*S*)

George Roter – Honorary Doctor of Engineering (*S*)

Leo Rothenburg – Distinguished Professor Emeritus

S = speaker

David Butler-Jones

Dr. David Butler-Jones is a professor of medical microbiology at the University of Manitoba as well as a clinical professor within the Department of Community Health and Epidemiology at the University of Saskatchewan's College of Medicine. He was Canada's first chief public health officer, and in that role he championed the government's efforts to protect and promote the health and safety of Canadians as leader of the Public Health Agency of Canada. He has collaborated on global issues with the World Health Organization (2003-04), Canadian International Development Agency (1998-2003), as well as health initiatives in Chile (2001), Kosovo (2001), Scotland (1993), Dominican Republic (1991, 1992), and Turkey (1992).

Lynn Judge

Lynn Judge started working in the Graduate Studies Office (now Graduate Studies and Postdoctoral Affairs) in 1979. In 1990, she assumed the lead staff role in the office – Director of Graduate Academic Services, a role she held until her retirement in 2015. Ms. Judge served on many committees and worked on several critical projects at the University and provincial level. At the University, Ms. Judge was involved in transforming the graduate application process to a fully-electronic platform; simplifying the delivery of graduate student awards; helping to build Waterloo's brand online, as early as 1996 when web based marketing was just evolving; and developing indicators of graduate students' and graduate studies' success. Ms. Judge has also presented at several conferences on topics including comparative administrative structures for graduate studies, graduate studies website development, and electronic applications for admission; participated in the Ontario University Registrars' Association (OURA) Graduate Studies International Placement Guide Project, Ontario Council on Graduate Studies Working Group in Macroindicator Data, and City of Waterloo Cultural Roundtable; and been recognized with an OURA Honorary Membership, OURA Innovation Award, and OURA Award of Achievement.

Ingrid Daubechies

Dr. Ingrid Daubechies is one of the leading mathematicians today, known worldwide for her fundamental contributions to wavelets and other subjects. Daubechies earned a Bachelor's degree in Physics (1975) and Ph.D. in Theoretical Physics (1980) from Vrije Universiteit Brussel. She worked at

AT&T Bell Laboratories and then Rutgers University, before joining Princeton University in 1994 where she became the first female full professor of mathematics. From 2004 to 2010, she was the William R. Kenan, Jr. Professor at Princeton. In January 2011, Daubechies moved to Duke University and became James B. Duke professor in the department of mathematics and electrical and computing engineering. In 2011, she also became the first female president of the International Mathematical Union. In 2012, King Albert II of Belgium granted Dr. Daubechies the title of Baroness. She was awarded the Louis Empain Prize for Physics (1984), Steele Prize for Mathematical Exposition (1994), Ruth Lyttle Satter Prize in Mathematics (1997), Golden Jubilee Award for Technological Innovation (1998), the International Society for Optical Engineering Recognition of Outstanding Achievement (1998), Eduard Rhein Foundation Basic Research Award (2000), National Academy of Sciences Award in Mathematics (2000), Gold Medal of the Flemish Royal Academy of Arts and Sciences (2005), Guggenheim Fellowship (2010), IEEE James Kilby Medal (2011), Steele Prize for Seminal Research (2011), Okawa Prize (2011), Benjamin Franklin Medal (2011), Frederic Esser Nemmers Prize in Mathematics (2012), and the BBVA Foundation Frontier of Knowledge and Culture Award in Basic Science (2013). She was a MacArthur Fellow (1992 – 1997), an Emmy Noether Lecturer (2006) and a Society for Industrial and Applied Mathematics John von Neumann Lecturer (2011). She is a fellow of the IEEE (1998), Society for Industrial and Applied Mathematics (2009) and the American Mathematical Society (2012), and elected member of the American Academy of Arts and Sciences (1993), National Academy of Sciences (1998) and the National Academy of Engineering (2015).

Alfrieda Swainston

Alfrieda Swainston joined the University in 1968 as a clerical assistant in the Library. She transitioned to Human Resources in 1984 where she remained until her retirement in March 2018. Ms. Swainston has participated in and/or led such major initiatives as: the design, implementation and maintenance of a fair and equitable staff compensation system; the implementation of pay equity legislation at the University; and the development of key policies on matters of staff compensation such as overtime, leaves and vacations. Within the broader community, Ms. Swainston has served on the human resources committee at the Canadian Clay and Glass Gallery, and worked with community members in supporting the Waterloo Region Education & Employment Equity Network (WRE3N) for activities such as "In the Spirit of Understanding" - a conference to promote Aboriginal awareness.

Parker Mitchell

Parker Mitchell is the co-founder and former co-CEO of Engineers Without Borders (EWB). Mitchell holds a BAsC and BA from the University of Waterloo, and an MPhil in Development Studies from Cambridge University. Following graduation from the University of Waterloo, Mitchell founded EWB with George Roter (see below). Since its founding, EWB has grown from a grass-roots establishment dedicated to providing Waterloo Engineering co-op students with work-term opportunities at non-government organizations into one of Canada's most respected and influential development organizations. Roter and Mitchell have received numerous awards and honours in recognition of their outstanding achievements, including the Meritorious Service Cross from the Governor General, Canada's Top 40 Under 40 award, Alumni of the Year (University of Waterloo), and honorary degrees from University of Toronto and Queen's University. Since leaving EWB in 2011, Mitchell co-founded Significance Labs, which ran a fellowship program enabling established technology leaders to experience the reality of low-income Americans to allow them to build products to meet those needs. After Significance Labs was merged into the Robin Hood Foundation, Mitchell spent two years at Bridgewater Associates before founding Accompany.io. In addition to the joint honours and awards mentioned above, Mitchell has also been recognized with an Ernst & Young Entrepreneur of the Year award for social entrepreneurship.

George Roter

George Roter is the co-founder and former co-CEO of Engineers Without Borders (EWB). Roter completed his BAsC in Mechanical Engineering at the University of Waterloo (1999) and was working toward his MASc when he withdrew to work with Parker Mitchell (see above) on EWB. After Mitchell left EWB in 2011, Roter continued to lead the organization until 2014. During his tenure with EWB, Roter engaged in advocacy and education related to aid, public policy, and civic participation in global development. One of the tools he developed was a reporting mechanism to allow aid organizations to share failures, learn from mistakes and ultimately make aid more effective. Roter is now the Head of Core Contributor Participation at Mozilla, responsible for crowdsourcing and global community initiatives. In addition to the jointly received awards and honours enumerated above, Roter is an Ashoka Fellow, was awarded the Action Canada Fellowship on public policy, and has received honorary degrees from the University of Calgary and McMaster University.

Leo Rothenburg

Educated as a physicist and an engineer, Leo Rothenburg holds degrees from the Moscow State University, Russia (Dipl. Phys., 1968) and Carleton University, Canada (PhD, 1980). He joined the civil engineering department of the University of Waterloo as an assistant professor in 1983, became an associate professor in 1986, a full professor in 1992, and chaired the department from 2003 to 2008. Dr. Rothenburg chaired the geological engineering program board (1991-1994), which oversaw program changes necessary to ensure accreditation. Following a year as Acting Dean of Engineering (2008-2009), he assumed the portfolio Associate Vice-President, International overseeing international activities and satellite campuses abroad from 2009-2012. He is a registered professional engineer in Ontario and a fellow of the Canadian Society of Civil Engineering. In addition to his significant contributions as an administrator, Professor Rothenburg is an internationally known scholar and engineering educator, having published more than 180 well-cited journal and conference articles and supervised 40 graduate students. Dr. Rothenburg retired in 2015, but remains active in his department.

University of Waterloo
SENATE
Report of the President
17 September 2018

FOR INFORMATION

Recognition and Commendation

The Ubiquitous Health Technology Lab (UbiLab), headed by School of Public Health and Health Systems professor **Plinio Morita**, was one of three \$25,000 winners in a national competition aimed at generating new methods to collect and use data in public health monitoring. UbiLab's entry, "Smart Home Tech for Public Health Surveillance," will enable 24-hour data collection by leveraging information from more than 10,000 smart thermostats to help the Public Health Agency of Canada gain real-time insights into health behaviours such as physical activity, sedentary activity, and sleep. The Healthy Behaviour Data Challenge is a partnership between the MaRS Discovery District, the Public Health Agency of Canada and the Canadian Institutes of Health Research. It was launched one year ago, with more than 30 research teams and companies applying. MaRS and its partners are now working with the winning teams on their prototypes. (adapted from the *Daily Bulletin*, 24 May 2018)

Former Vice-President, Academic & Provost George Dixon has announced the winners of the 2017 Outstanding Performance Award earlier this year in June. The University of Waterloo established an Outstanding Performance Fund to reward faculty members for outstanding contributions in teaching and scholarship. The award came into effect in May 2005 in accordance with the 2003 Faculty Salary Settlement. The 2017 winners are:

Applied Health Sciences: **Lisbeth Berbary; Mark Ferro; Shannon Majowicz; Joe Quadrilatero; Paul Stolee; Chris Vigna**

Arts: **Greg Andres; Joel Blit; Mathieu Doucet; Valerie Cecile Dusaillant-Fernandes; Riemer Faber; Jonathan Fugelsang; Nicolas Gauthier; Jasmin Habib; Dorothy Hadfield; Kathryn Henne; Suzan Ilcan; Ronald Kroeker; Colin MacLeod; Aimée Morrison; Lennart Nacke; Elizabeth Nilsen; Evan Risko; Pamela Seeds; Mikal Skuterud; Imre Szeman; Bojana Videkanic; Linda Warley; Sarah Wilkins-Laflamme**

Engineering: **Hossein Abouee Mehrizi; Rania Al-Hammoud; Anne Bordeleau; Slim Boumaiza; Wayne Chang; David Clausi; Ramadan El Shatshat; Ehab El-Saadany; Paul Fieguth; Kamyar Ghavam; Maud Gorbet; Jason Grove; Anwarul Hasan; Carol Hulls; Yuning Li; William Melek; Mary Robinson; Xuemin Shen; Michael K.C. Tam; Neil Thomson; Robert Van Pelt; Alexander Wong; Serhiy Yarusevych**

Environment: **Jennifer Clapp; Goretty Dias; Robert Gibson; Heather Mary Hall; Leia Minaker; Prateep Nayak; Jonathan Price**

Mathematics: **Ilham Akhundov; Jason Bell; Lori Case; Robin Cohen; Kenneth Davidson; James Geelen; Mark Giesbrecht; Ian Goldberg; Ihab Ilyas Kaldas; Srinivasan Keshav; Pengfei Li; Anna Lubiw; Eduardo Martin-Martinez; Zoran Miskovic; John-Paul Pretti; Gregory Rice; Ken Seng Tan; Levent Tunçel**

Science: **Michael Balogh; Kristine Dalton; Vivian Dayeh; Andrew Charles Doxey; Richard Epp; Kelly Grindrod; Roland Hall; David Hawthorn; John Honek; Linda Nazar; Carol Ptacek; Andre Stanberry; Scott Taylor; Philippe Van Cappellen; Shawn Wettig**
(adapted from the *Daily Bulletin*, 1 June 2018)

The Canadian Association for Graduate Studies (CAGS) announced that University of Waterloo's **Gregory Lui** is the national **Three Minute Thesis (3MT) competition People's Choice award winner**, as well as the second place winner overall in this year's national 3MT. Lui is a PhD candidate in the Department of Chemical Engineering. His research involves the synthesis of nanomaterials that can be used in multi-functional, photo electrochemical systems, including photocatalytic wastewater treatment, energy production in photo electrochemical cells, and photo-assisted energy storage. The Three Minute Thesis (3MT) competition at the University of Waterloo is the largest in Canada. The competition cultivates University of Waterloo graduate students' presentation and communication skills, and provides them with invaluable networking opportunities. Winners also have the potential to win thousands of dollars in prizes. (adapted from the *Daily Bulletin*, 6 June 2018)

Associate Vice-President, Government Relations **Rob Esselment** was honoured by his peers at a reception on Wednesday 30 May 2018. Esselment was awarded the **Gillian A. Wood Award** at the opening reception of the annual Government Relations Officers conference. Former Vice-President, Academic & Provost George Dixon was on hand at the reception, held at the Art Gallery of Guelph, and gave remarks. The award was established in 2012 by the Government Relations Officer Network for Canadian Universities (GRO Network) to honour the commitment of Gillian A. Wood, assistant vice-president government relations at Dalhousie University, a founding member and stalwart supporter of the GRO Network. Award recipients must, in the opinion of the GRO Executive Committee, have furthered the standing of the university government relations profession in Canada. The award is presented annually at the yearly gathering of the GRO Network, an association of higher education government relations officers from universities across Canada. "Congratulations Rob, on being recognized by your colleagues and peers from across Canada, for your leadership and contribution to public affairs in the university sector," wrote Vice-President, University Relations Sandra Banks in a memo circulated to University Relations staff. (adapted from the *Daily Bulletin*, 7 June 2018)

PhD student **Michael Abebe** is one of six recipients worldwide and the only recipient from Canada to receive a prestigious 2018 **Facebook Emerging Scholar Award**. Launched in 2017, Facebook's Emerging Scholar Awards support talented students from under-represented groups in the technology sector to encourage them to continue their PhD studies, pursue innovative research, and engage with the broader research community. "This year we received over 800 applications from promising and talented PhD students from around the world," said Sharon Ayalde, Fellowship Program Manager at Facebook. "We are pleased and excited to award 17 Fellows and six Emerging Scholars — a significant increase from last year." Supervised by **Khuzaima Daudjee**, Abebe is a member of the David R. Cheriton School of Computer Science's Data Systems Group. His research interests are at the intersection of distributed systems, data systems and machine learning, specifically designing and building large-scale data systems that are elastic, scalable and self-managing. "I'm delighted to see Facebook recognize Michael's contributions to distributed data systems and for the organization to support his research and studies through this significant award," said Khuzaima Daudjee. In addition to receiving a 2018 Facebook Emerging Scholar Award, Abebe is currently supported by an NSERC Alexander Graham Bell Canada Graduate Scholarship. (adapted from the *Daily Bulletin*, 21 June 2018)

Phoebe Stephens has been named one of Canada's **Pierre Elliott Trudeau Foundation** scholars for her project investigating the need for sustainable food systems. "Increasingly we are seeing food being treated as a financial product, vulnerable to stock market volatility. This is dangerous for something everyone needs to survive," said Stephens. "On top of this, the financialization of the food system tends to favour an industrial model of production." Stephens is as a PhD candidate in social and ecological sustainability in the School of Environment, Sustainability and Resources at the University of Waterloo. She is also a researcher for Sustain Ontario's Food Enterprise Network, a member of the Waterloo Food Interest Group, and co-founder of Natural Interest, a consultancy geared towards supporting the growth of social finance in Ontario's food sector. "Phoebe's work has the potential to not only transform the way we think about food, but also restructure the way in which sustainable food alternatives are made available to Canadians and the world," said Jeff Casello, associate vice-president, Graduate Studies and Postdoctoral Affairs. "The impacts of her work, like so many graduate student researchers at Waterloo, are being recognized. The Pierre Elliott Trudeau Foundation scholarships are among the most sought-after and highly respected honours that can be received by emerging scholars, and we congratulate her and

her supervisory team on this remarkable accomplishment.”

“I am honoured to be given this amazing opportunity to study a topic of great importance by the Pierre Elliott Trudeau Foundation,” said Stephens. “Deepening our understanding of the viability of impact investing as a means of promoting food system sustainability will contribute to the advancement of knowledge necessary to build a more sustainable future for Canada. My research is poised to make both theoretical and practical contributions.” (adapted from the *Daily Bulletin*, 25 June 2018)

University of Waterloo founder **Ira Needles** has been permanently honoured with a statue hosted at The Boardwalk in Kitchener. The statue was revealed at an installation ceremony on Thursday 21 June 2018. Waterloo Professor Emeritus and historian **Ken McLaughlin** provided remarks about Needles and his historical contributions to the region. Vice-Dean of Engineering **Richard Culham** was also in attendance, alongside community leaders and family, including several grandchildren of Needles. “Ira George Needles was an outstanding community leader who became the foremost spokesman in Canada for creating a new university in Waterloo that would include Co-operative learning as the basis for its engineering program,” writes Ken McLaughlin. “In August 1956, Needles’ announcement of what he described as ‘The Waterloo Plan’ challenged Ontario’s university system and against formidable opposition led to the creation of the University of Waterloo. Needles’ passion for experiential learning and his role as a Canadian and community business leader has re-shaped this community and the university landscape across Canada and was recognized with the installation of a statue of Ira Needles at the Boardwalk proximate to the exact spot where University Avenue and Ira Needles Boulevard intersect.” (adapted from the *Daily Bulletin*, 3 July 2018)

University of Waterloo Library's digital archivist, **Danielle Robichaud**, has received the **James J. Talman Award**, named in honour of the second Archivist of Ontario. Given by the Archives Association of Ontario (AAO), the award is presented when an individual “has demonstrated an outstanding level of imagination and innovation in contributing to the profession, his/her institution, or the archival community, or who has pioneered any aspect of archival work.” Danielle was chosen largely for her work in implementing *Calls to Action* from the Truth and Reconciliation Committee (TRC), through increasing Indigenous representation on Wikipedia by: improving existing articles (with more than 4,250 edits to her credit), training archivists on editing Wikipedia, and leading Wikipedia Edit-a-thons. Danielle has helped organize multiple edit-a-thons at Waterloo and local public libraries, giving staff, students and community members the skills and empowerment to improve the representation of Indigenous peoples and women on the popular crowd-sourced site. After Danielle contributed 434 edits to the Wikipedia page on the Canadian Indian Residential School System, it was designated a Featured Article by Wikipedia’s editors, placing it among the best Wikipedia has to offer. Danielle also created a webpage for the AAO, giving archivists the tools they need to help implement the *Calls to Action* in working Towards Truth and Reconciliation. (adapted from the *Daily Bulletin*, 9 July 2018)

On Thursday 28 June 2018, the Government of Italy announced the appointment of **Michele Mosca** as a **Knight of the Order of Merit** for his significant contributions in quantum computing and cybersecurity, including research, training, outreach, and commercialization efforts. Giuseppe Pastorelli, Consul General of Italy in Toronto, who conferred the Knighthood, explained, “President Mattarella was deeply impressed by his thought leadership in cybersecurity and quantum computing and the strong connection to his Italian heritage which was apparent from their discussion. I was delighted to learn of his decision to appoint Professor Mosca to the Order of Merit of the Italian Republic.” His contributions to the theory and practice of quantum information processing include the first experimental implementation of a quantum algorithm, techniques for studying the limitations of quantum computers, quantum self-testing, private quantum channels, and methods for compiling quantum circuits. Beyond research, Mosca has contributed to outreach and training programs including the ETSI-IQC workshop series in quantum-safe cryptography and CryptoWorks21, a training program for building the quantum-safe cryptography workforce and supported by RBC. He is also a co-founder of evolutionQ Inc., a company that provides services and products that enable organizations to evolve their quantum-vulnerable systems and practices to quantum-safe ones, and softwareQ Inc., a company that offers quantum software products and services to enable organizations to benefit from quantum computing. “I am honoured and humbled to be recognized with this distinction,” said Mosca. “I am grateful for the support of many colleagues and friends in together developing this

tremendous opportunity to use quantum computers to solve important problems for humanity, and at the same time better protect the world from powerful cyber attacks of the future”. (adapted from the *Daily Bulletin*, 11 July 2018)

Waterloo Engineering professors and graduates were inducted into the **Canadian Academy of Engineering (CAE)** on 18 June 2018. The new fellows include faculty members **Fakhri Karray**, electrical and computer engineering, **Susan Tighe**, civil and environmental engineering, **John Yeow**, systems design engineering, and adjunct professor **Mary Wells**, mechanical and mechatronics engineering. Also inducted were Waterloo Engineering alumni **Catherine Booth** (BASc ‘88, SD, MASc ‘90, ManSci), **Jim Estill** (BASc ‘80, SD), **Fraser Forbes** (BASc ‘82, MASc ‘84 Chem), **Dianne Freeman** (BASc, ‘92, Civil), **Josephine Hill** (BASc ‘91, MASc ‘92, Chem) and **David Ross** (BASc ‘91, Comp). CAE President Eddy Isaacs inducted a total of 57 new Fellows and two new International Fellows into the academy during its annual general meeting and symposium held in Calgary. “The new fellows are engineers of outstanding abilities and of widely varying backgrounds, from industry and academe and government,” said Isaacs during the ceremony. “What they all have in common is the demonstrated desire and ability to go beyond the normal practice of engineering and contribute in exemplary ways towards their fields and to their communities.” Founded in 1987, the CAE is the national institution through which Canada's most distinguished and experienced engineers provide strategic advice on matters of critical importance to Canada. (adapted from the *Daily Bulletin*, 13 July 2018)

The Canadian Network of Asset Managers (CNAM) gave two Waterloo researchers awards at their recent 2018 CNAM Conference. **Mark Knight**, the executive director of the Centre for the Advancement of Trenchless Technologies (CATT), received the 2018 CNAM Pioneer Award. This award honours individuals who have played an integral role in advancing the asset management industry in Canada and celebrates their long-term commitment and unwavering dedication to the asset management industry. Professor Knight accepted the award on behalf of his fellow researchers colleagues (**Andre Unger** in the Department of Earth Sciences, **Carl Haas** in the Department of Civil and Environmental Engineering, **Neil Brisley** in the School of Accounting and Finance, and **Rizwan Younis** at CATT), PhD and master’s graduate students at the University of Waterloo, and industry partners (City of Waterloo, City of London, Region of Waterloo, City of Niagara Falls, and City of Cambridge). Over the past ten years, Knight and the team have been working with industry partners to develop innovative water asset management tools that allow water utilities to develop long-term sustainable financial plans and to use existing utility data to determine inflation rates in water projects.

In addition, Civil and Environmental Engineering PhD candidate **Hamed Mohammad Fardi** was given the 1st place award for the 2018 CNAM Student Research Symposium. Hamed’s presentation focused on Sustainability Assessment of Asset Management Plans of Wastewater Collection Network Systems. His research supervisors are Professor **Mark Knight** in the Department of Civil and Environmental Engineering and Professor **Andre Unger** in the Department of Earth Sciences. Hamed’s research is focused on implementing sustainability assessment to the Systems Dynamic model developed by his supervisors. He has successfully developed a novel decision-making tool to coordinate asset management plans of linear and non-linear water and wastewater infrastructures at the strategic level. His research shows that the high cost of building and operating of wastewater treatment plants can be reduced if the utility implements cost saving pipeline renovation programs that will reduce inflow and infiltration into the pipe networks.

CNAM is the association of public infrastructure asset management in Canada. Its government and private sector members develop policy, tools and technologies, which improve the level of service for public infrastructure assets in every province and territory. (adapted from the *Daily Bulletin*, 19 July 2018)

James Skidmore, a faculty member in Germanic and Slavic Studies and director of the Waterloo Centre for German Studies, won a national award for innovative teaching. He received the **Innovate German Award** at the 2018 Congress of the Humanities and Social Sciences. The German Academic Exchange Service (DAAD) and the Canadian Association of University Teachers of German sponsor the award. It recognizes new courses, curriculum and program development, and the implementation of new approaches to teaching and learning.

Skidmore was honoured for GER 271 (German Thought and Culture - Objects). The jury recognized this online course for its “truly interdisciplinary and innovative” methodologies that contextualize student learning within larger frameworks, such as material culture and engaged learning. “(His) expertise in structuring this authentic inquiry with an online platform, readings, and meaningful assignments that draw attention to the students’ commitment to their own performance and curiosity for the world is exemplary.” The course’s online framework, including its extensive use of online discussion forums for content delivery and critical analysis, was singled out for its easily intuitive structure and its potential for training and inspiring other instructors. GER 271 is one of a suite of three online courses Skidmore authored that use a modular approach in their course design. Unlike most online courses that require significant budget resources whenever content needs updating, modules in these courses can be added or deleted from term to term, ensuring that the courses won’t require significant investment to remain current. The Department of Germanic and Slavic Studies has been heavily involved in online course design and delivery for well over a decade. The department currently offers 14 online courses in both language acquisition and cultural studies. (adapted from the *Daily Bulletin*, 24 July 2018)

SheLeads, a software company that enables female-focused organizations to better assess their programs, was one of the big winners at yesterday’s 22nd staging of the **Velocity Fund Finals (VFF)** held at the University of Waterloo. Velocity, which will on 28 September 2018 officially celebrate its 10-year anniversary, is a comprehensive entrepreneurship program at Waterloo providing the resources and mentorship to help founders initiate and incubate high-growth startups. SheLeads helps non-for-profit organizations geared towards assisting females 18 and under to assess their programs to fund initiatives, evaluate efforts, and influence policy changes. The all-female company was founded by **Cassandra Myers**, who last year graduated from the University of Waterloo with an undergraduate degree in Peace and Conflict Studies and is an alumna of the Greenhouse entrepreneurship program. “Organizations that work with young females and all non-for profits, in general, are just like real businesses; they do have the same problems,” Myers said. “They have a lot of money flowing through them, but they don’t have a lot of solutions that apply to some of the unique problems that they’re facing. So, our overall mission is to provide new and innovative solutions for the not-for profit space.” During the competition, 10 companies pitched their businesses to a panel of judges representing the investment, startup and business communities. Judges considered innovation, market potential, market viability and overall pitch.

Micromensio, which is developing a platform technology for low-cost, disposable, wireless biosensor microchips for bacterial identification, was among the other three grand-prize winners of \$25,000. Micromensio also copped the top hardware company prize, worth \$10,000.

All four winning VFF\$25K startups took home an extra \$5K in intellectual property services from local firm, PCK | Perry + Currier. They will also be admitted to the Velocity Garage startup incubator. The other two grand-prize winners of \$25,000 were:

- **Hodlbot** - puts your cryptocurrency investing on autopilot. Users can create, share, discover and execute any portfolio strategy on its platform.
- **HITCH** - is a locally relevant education platform designed for African schools
(adapted from the *Daily Bulletin*, 26 July 2018)

Colin MacLeod, chair of Psychology for the past seven years, received the highest honour from the Canadian Psychological Association with the presentation of its **Gold Medal Award for Distinguished Lifetime Contributions to Canadian Psychology**. The award celebrates outstanding Canadian psychologists who have dedicated their careers to advancing the field nationally and globally. He also holds the Donald O. Hebb Distinguished Contribution Award from the Canadian Society for Brain, Behaviour, and Cognitive Science, and the Donald O. Hebb Award for Distinguished Contributions to Psychology as a Science from the Canadian Psychological Association. In 2016, MacLeod was elected as a Fellow of the Royal Society of Canada. (adapted from the *Faculty of Arts News*, 28 July 2018)

Three faculty members have been awarded the **2018 Faculty of Mathematics Golden Jubilee Research Excellence Award**. **Jason Bell**, **Luke Postle**, and **Daniel Vogel** are each awarded \$2,500. This honour is conferred to early or mid-career faculty members who have made outstanding research contributions, was established in 2017 to mark the 50th anniversary of the Faculty of Mathematics. The award is based on the quality of a candidate's research over the past five years or for an influential paper published within the past five years as assessed through its quality and impact. The three winners will receive their awards in the fall at the annual Faculty Reception. **Bell**, a professor in the Department of Pure Mathematics, has published about a wide range of mathematics including algebra, combinatorics, number theory and dynamics, with 15 papers in 2017. His most recent work is a joint project on the growth of algebras with Efim Zelmanov, a Fields Medal winner. A member of the Department of Combinatorics and Optimization, Postle's research in structural graph theory, has earned him a strong international reputation through his use of a very broad and innovative range of tools to solve old and deep problems in combinatorics. Postle has made significant contributions to important and long-standing open problems in graph colouring. An associate professor with the David R. Cheriton School of Computer Science, Vogel's research focuses on human-computer interaction in combination with computer graphics and visual art to develop better experiences for people using computers. Vogel is a member of the Human-Computer Interaction Research Group. (adapted from the *Daily Bulletin*, 7 August 2018)

Human Rights, Equity and Inclusion has announced the **2018 Gender Equity Research Grant** recipients. The grant winners are as follows:

- **Hilary Bergsieker**: Gender stereotyping by romantic partners constrains women's career, relationship, and mental health outcomes;
- **Karla Boluk**: Back to work: Exploring the experiences of pre-tenured women negotiating the transition to and from maternity leave;
- **Sherilyn Houle**: Gender, wage, and geography: Exploring co-op placement gender wage gaps and geographic placement gaps in health-related programs at University of Waterloo;
- **Corey Johnson**: Creating and improving Trans Affirming Health Resources in the Waterloo Region;
- **John Mielke**: How might gender, work strain, and perceived social support interact to affect the way that stress 'gets under the skin' of professors at the University of Waterloo
- **Bessma Momani**: Assessing gender equity in senior administration at UW;
- **Sean Peterson**: What attracts and retains girls and women in science, technology, engineering, and math (STEM)? Identifying success in a national entrepreneurial program;
- **Andrea Quinlan**: Barriers to Gender Equity: Teaching Evaluations and the Career Trajectories of Marginalized Academic Women; and
- **Nancy Worth**: Counting ourselves in: media engagement and pre-tenure women.

These grants were established in 2016 as part of the HeForShe IMPACT 10x10x10 initiative. Individual grants of up to \$10,000 are funded to support research that investigates and addresses gender equity with preference given to projects that advance Waterloo's three IMPACT 10x10x10 commitments or of demonstrated relevance to the University. (adapted from the *Daily Bulletin*, 9 August 2018)

Each year the School of Pharmacy presents an award for **Co-op Supervisor of the Year**. The award recognizes a supervisor who has shown outstanding commitment to mentorship of Waterloo Pharmacy students on co-operative education work terms. The 2017 recipient is **Sally Ebsary**, a Clinical Lead Pharmacist at Remedy's Rx Sunnyside Long-Term Care in Cambridge. Ebsary has long been a supporter of Waterloo Pharmacy: not only does she supervise students, but she served as a Clinical Adjunct Professor for the School from 2008 to 2013. As a pharmacist at Remedy's Rx, she has mentored both co-op and rotations students, consistently cultivating a supportive environment, and modelling successful interprofessional collaboration. "On behalf of the Waterloo School of Pharmacy, I'd like to congratulate Sally Ebsary," said Anthony Miller, Experiential Coordinator of Co-op at the School. "Sally models the kind of exemplary leadership in the profession that we hope to instill in our students, along with providing a unique and exciting opportunity for students to try a non-standard pharmacy setting." (adapted from the *Daily Bulletin*, 9 August 2018)

MEMORANDUM

September 17, 2018

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

Copy: Daily Bulletin

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

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

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

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

UNIVERSITY PROFESSOR

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

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

Selection Process

1. Annually, nominations will be sought from Faculty deans, directors of schools and department chairs, as well as from the university community generally. A nominee shall have demonstrated exceptional scholarly achievement and international pre-eminence in a particular field or fields of knowledge. The individual who nominates a colleague is responsible for gathering the documentation and submitting it to the vice-president academic & provost before the December break. The University Tenure & Promotion Committee will act as the selection committee; its decisions are final.

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

University of Waterloo
SENATE
Report of the Vice-President Academic & Provost
September 17, 2018

FOR INFORMATION

Further to the June 18, 2018 Report to Senate, four new 2018 University Research Chairs have been awarded:

Sue Horton (school of public health and health systems, and economics); **Fakhreddine Karray** (electrical & computer engineering); **Barbara Schmenk** (Germanic and Slavic studies); **Michael Tam** (chemical engineering)

UNIVERSITY RESEARCH CHAIRS

University of Waterloo owes much of its reputation and stature to the quality of its professors and their scholarly accomplishments. University of Waterloo recognizes exceptional achievement and pre-eminence in a particular field of knowledge through the designation "University Research Chair" - a title which may be held for up to seven years, with the possibility of a re-nomination. A faculty member with this title will receive either a teaching reduction of one course per year or an annual stipend of \$10,000, which will be allocated to the Department/School if teaching reduction is chosen. The University Research Chair title and benefits will be relinquished if a Canada Research Chair or other major research chair is awarded.

It is anticipated that there will be a limited number of University Research Chairs; at steady state, the intention is to make at most five appointments each year. The number of appointments will be reviewed annually by the Vice-President, Academic & Provost in consultation with Deans' Council and the program will be reviewed after an initial period of five to ten years.

University of Waterloo
REPORT OF THE DEAN OF APPLIED HEALTH SCIENCES TO SENATE
September 17, 2018

FOR INFORMATION

A. APPOINTMENTS

Change in Appointment

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

Definite-term Appointment

JANDU, Narveen, Lecturer, School of Public Health and Health Systems, August 1, 2018 – July 31, 2020. [Hon. BSc, Wilfrid Laurier University, 2002; MSC, McMaster University, 2004; PhD, University of Toronto, 2008; MPH, University of Waterloo, 2017.] Dr. Jandu's research focusses on biological, behavioural and social determinants of health that impact the population. Her teaching and research experience will enhance the School's profile in the biomedical area and complement the multi-disciplinary research activities of the School.

Adjunct Appointments

Graduate Supervision

CSABA, Varga, Assistant Professor, School of Public Health and Health Systems, July 1, 2018 – May 31, 2021.

HODDINOTT, John, Professor, School of Public Health and Health Systems, July 1, 2018 – April 30, 2021.

KARAKOLIS, Thomas, Assistant Professor, Department of Kinesiology, July 1, 2018 – June 30, 2020.

LEE, Joonwu, Associate Professor, School of Public Health and Health Systems, September 1, 2018 – August 31, 2019.

Graduate Supervision and Research

HITCHMAN, Sara, Assistant Professor, School of Public Health and Health Systems, August 1, 2018 – July 31, 2020.

Change in Appointment

Graduate Supervision

JUUTILAINEN, Sandra, Assistant Professor, School of Public Health and Health Systems, March 1, 2018 – December 31, 2022.

Adjunct Reappointments

Graduate Supervision

BIALACHOWSKI, Anne, Lecturer, School of Public Health and Health Systems, May 1, 2018 – December 31, 2018.

Graduate Supervision and Research

HILBRECHT, Margo, Lecturer, Department of Recreation and Leisure Studies, July 1, 2018 – June 30, 2020.

MANNELL, Roger, Distinguished Professor Emeritus, Department of Recreation and Leisure Studies, July 1, 2018 – June 30, 2020.

Special Appointments

Undergraduate Instruction

BRISCOE, Carrie, Lecturer, Department of Recreation and Leisure Studies, September 1, 2018 – December 31, 2018.

COUSINEAU, Luc, Lecturer, Department of Recreation and Leisure Studies, January 1, 2019 – April 30, 2019.

COSTA CAMARA DO BOMFIM, Marcela, Lecturer, School of Public Health and Health Systems, January 1, 2019 – April 30, 2019.

MANWELL, Laurie, Lecturer, School of Public Health and Health Systems, September 1, 2018 – December 31, 2018.

Undergraduate and Graduate Instruction

DOLSON, Mark, Lecturer, School of Public Health and Health Systems, September 1, 2018 – December 31, 2018 and January 1, 2019 – April 30, 2019.

HOMAEIAN, Leila, Lecturer, School of Public Health and Health Systems, January 1, 2019 – April 30, 2019.

RAMCHANDANI, Rohit, Lecturer, School of Public Health and Health Systems, September 1, 2018 – December 31, 2018.

Graduate Instruction

Ji, Kexin, Lecturer, School of Public Health and Health Systems, September 1, 2018 – December 31, 2018.

REBELLATO, Steven, Lecturer, School of Public Health and Health Systems, September 1, 2018 – December 31, 2018.

SAARI, Margaret, Lecturer, School of Public Health and Health Systems, September 1, 2018 – December 31, 2018.

VINE, Michelle, Lecturer, School of Public Health and Health Systems, September 1, 2018 – December 31, 2018.

Cross Reappointments

KELLER, Heather, Professor, Faculty of Applied Health Sciences, from Department of Kinesiology to School of Public Health and Health Systems, July 1, 2018 – June 30, 2023.

MIDDLETON, Laura, Assistant Professor, Faculty of Applied Health Sciences, from Department of Kinesiology to School of Public Health and Health Systems, August 1, 2018 – June 30, 2023.

Postdoctoral Appointments

BRADLEY, Ryan, Department of Kinesiology, June 1, 2018 – May 31, 2019.

LaMARRE, Andrea, Propel Centre, Faculty of Applied Health Sciences, June 27, 2018 – June 26, 2019.

Postdoctoral Reappointments

BELL, Kirsten, Department of Kinesiology, April 1, 2018 – March 31, 2021.

BEYER, Kit, Department of Kinesiology, July 1, 2018 – July 1, 2019.

FERNANDES, Maria, Department of Kinesiology, – July 1, 2018 - June 30, 2019.

QAZI, Hammad, School of Public Health and Health Systems, May 1, 2018 – August 31, 2019.

STRUICK, Laura, Propel Centre for Population Health Impact, Faculty of Applied Health Sciences, May 1, 2018 – January 31, 2019.

B. ADMINISTRATIVE APPOINTMENT

WILLIAMS, Diane, Associate Director, Undergraduate Studies, June 1, 2018 – June 30, 2020.

ADMINISTRATIVE REAPPOINTMENT

GARCIA, John, Associate Director, Professional Graduate Studies Program, July 1, 2018 – June 30, 2020.

C. SABBATICALS

Already approved by the Board of Governors

BOLUK, Karla, Assistant Professor, Department of Recreation and Leisure Studies, January 1, 2019 – June 30, 2019, six months at 100% salary.

SMALE, Bryan, Professor, Department of Recreation and Leisure Studies, September 1, 2018 – February 28, 2019, 1 year at 100% salary.

For approval by the Board of Governors

CHAUASIA, Ashok, Assistant Professor, School of Public Health and Health Systems, January 1, 2019 – June 30, 2019, 100% salary.

BARNETT-COWAN, Michael, Associate Professor, Department of Kinesiology, September 1, 2019 – August 31, 2020, 85% salary.

Already approved by the Board of Governors

D. ADMINISTRATIVE LEAVE

SMALE, Bryan, Professor, Department of Recreation and Leisure Studies, March 1, 2019 – June 30, 2019, 4 months at 100% salary.



Paul Stolee, Interim Dean
Faculty of Applied Health Sciences

UNIVERSITY OF WATERLOO
REPORT OF THE DEAN OF THE FACULTY OF ARTS TO SENATE
September 17, 2018

FOR INFORMATION

A. APPOINTMENTS

Tenure

CLARY-LEMON, Jennifer (BA 1998 University of Arizona, MA 2001 DePaul University, PhD 2006 Arizona State University), Associate Professor, Department of English Language and Literature, August 1, 2018. Joining UW from the University of Winnipeg, Dr. Clary-Lemon brings expertise in communications, materialist rhetoric, and rhetorical approaches to ecological problems. She is the co-author of two books and co-editor of a third. She will be integral to the Department's involvement with the University Communication Outcomes Initiative (UCOI).

FORTIN, Steve (BAccounting Sciences 1992 Université du Québec à Rimouski, PhD 1999 University of Waterloo), Associate Professor, School of Accounting and Finance, September 1, 2018. Dr. Fortin's research is interdisciplinary, in auditing and finance (published in the Journal of Accounting and Finance and Contemporary Accounting Research), tax and finance (published in the Journal of the American Taxation Association), and other combinations. He has spent his career at the Desautels Faculty of Management at McGill University, being tenured and promoted in 2007 and holding a variety of administrative roles including Associate Dean Undergraduate Programs, Academic Director of MBA and PMBA programs, and most recently Associate Dean of Graduate Programs. Steve returns to Waterloo with great enthusiasm as the Director of the School of Accounting & Finance, a role in which he looks forward to collaborating with faculty, staff, students, alumni, and supporters in executing the strategic plan for the school.

MEHLENBACHER, Brad (BA 1985 MA 1987 University of Waterloo, PhD 1992 Carnegie Mellon University), Associate Professor, Department of English Language and Literature, August 1, 2018. Joining UW from NC State University, Dr. Mehlenbacher brings expertise in technical communication, online education, and curriculum design. He is the author of two books, one of which won the 2012 NCTE/CCCC award for the "Best Book in Technical and Scientific Communication." He will be integral to the Department's involvement with the University Communication Outcomes Initiative (UCOI).

Probationary Term Reappointments

BOYLE, Philip (BA 2001 Mount Royal University, MA 2004 University of Windsor, PhD 2011 University of Alberta), Assistant Professor, Department of Sociology & Legal Studies, July 1, 2018 to June 30, 2021.

FEKE, Jacqueline (BA 2003 Brown University, MA 2004 PhD 2009 University of Toronto), Assistant Professor, Department of Philosophy, July 1, 2018 to June 30, 2021.

MEHLENBACHER, Ashley (BA 2008 MA 2010 University of Waterloo, PhD 2014 North Carolina State University), Assistant Professor, Department of English Language & Literature, July 1, 2018 to June 30, 2021.

NACKE, Lennart (Bakkalaureat 2005 Diplom-Ingenieur (Master's) 2005 Otto-von-Guericke University Magdeburg, PhD 2010 Blekinge Institute of Technology School of Computing), Associate Professor, Department of Communication Arts, July 1, 2018 to June 30, 2021.

NGUYEN, Tu (BS Foreign Trade University Hanoi 2004, MBA 2008 Boston University, PhD 2013 Drexel University), Assistant Professor, School of Accounting & Finance, July 1, 2018 to June 30, 2021.

WHITESIDE, Heather (BA 2004 University of Manitoba, MA 2006 Carleton University, PhD 2013 Simon Fraser University), Assistant Professor, Department of Political Science, July 1, 2018 to June 30, 2021.

WHITSON, Jennifer (BA 2004 MA 2006 University of Alberta, PhD 2012 Carleton), Assistant Professor, Department of Sociology & Legal Studies, July 1, 2018 to June 30, 2021.

WILKINS-LAFLAMME, Sarah, (BSocSc 2008 MA 2010 University of Ottawa, DPhil 2014 Oxford University), Assistant Professor, Department of Sociology & Legal Studies, July 1, 2018 to June 30, 2021.

Definite Term Appointments

BERGSTROM, Anders (BA 2005 University of Saskatchewan, MA 2006 University of Victoria, PhD 2017 Wilfrid Laurier University), Lecturer, Department of Drama and Speech Communication, August 1, 2018 to July 31, 2021. Anders studies film, communication, memory, and media history, and he brings extensive experience teaching a range of communication studies courses. In his role as Lecturer, Anders will help develop and teach communication courses for students in the faculties of Science and Engineering.

JANZEN, David (BA 2008 University of Alberta, MA 2011 Western University, PhD 2017 University of Alberta), Lecturer, Department of Drama and Speech Communication, August 1, 2018 to July 31, 2021. David's research analyzes how crises are communicated in political, rhetorical, and artistic terms. He brings extensive experience teaching a range of communication studies courses. In his role as Lecturer, David will use his expertise in crisis communication to help develop and teach communication courses for students in the faculties of Science and Engineering.

RAY, Nicholas (BA 2003 Wilfrid Laurier University, MA 2004 PhD 2012 Western University), Assistant Professor, Department of Philosophy, July 1, 2018 to June 30, 2020. Ray's research focuses on issues at the intersection of the Philosophy of Science, Philosophy of Mind, and Cognitive Science. He is an award winning teacher who has taught over two dozen different courses in various disciplines, including Philosophy, Knowledge Integration, Communication Studies, and History and Philosophy of Science. He will cover important departmental teaching commitments in the interdisciplinary Cognitive Science program and employ a suitably interdisciplinary approach to teaching in the new Arts First program. His appointment also increases the capacity for graduate supervision in the Philosophy MA program.

Definite Term Reappointments

BALABAN, Steven, Lecturer, School of Accounting and Finance, July 1, 2018 to June 30, 2019.

BERBERICH, Greg, Lecturer, School of Accounting and Finance, July 1, 2018 to June 30, 2019.

BLAIR, Garvin, Lecturer, School of Accounting and Finance, July 1, 2018 to June 30, 2019.

CARSON, Linda, Lecturer, Stratford School of Interaction Design and Business, August 1, 2018 to June 30, 2020.

CARTY, Lynn, Lecturer, School of Accounting and Finance, July 1, 2018 to June 30, 2019.

DELAMERE, D'Arcy, Lecturer, School of Accounting and Finance, July 1, 2018 to June 30, 2019.

ECCLESTONE, Andrew, Lecturer, School of Accounting and Finance, July 1, 2018 to June 30, 2019.

ETTINGER, Aaron, Assistant Professor, Department of Political Science, September 1, 2018 to August 31, 2020.

HA, David, Lecturer, School of Accounting and Finance, July 1, 2018 to June 30, 2019.

HAYES, Frank, Lecturer, School of Accounting and Finance, July 1, 2018 to June 30, 2019.

MANN, Shari, Lecturer, School of Accounting and Finance, July 1, 2018 to June 30, 2019.

Cross Appointment

MCWEBB, Christine, Professor, Department of French Studies, July 1, 2018 to June 30, 2021.

Transfer

MCWEBB, Christine, Professor, from Department of French Studies to Stratford School of Interaction Design and Business, effective July 1, 2018.

Adjunct Reappointments – Instruction

MALAMET, Elliott, Lecturer, Department of Religious Studies, May 1, 2018 to August 31, 2018.

Research Faculty

DRIEZEN, Peter, Research Assistant Professor, International Tobacco Control project, Department of Psychology, May 1, 2018 to April 30, 2023.

B. ADMINISTRATIVE APPOINTMENTS

CARTER, Angela, Associate Director, Arts First Program, August 1, 2018 to July 31, 2020.

FERRER, Ana, Associate Dean, Research, July 1, 2018 to June 30, 2020.

FORTIN, Steve, Director of School of Accounting & Finance, September 1, 2018 to August 31, 2022.

HARDIMAN, Craig, Associate Chair, Graduate and Undergraduate Studies, Department of Classical Studies, July 1, 2018 to June 30, 2019.

HULAN, Shelley, Chair, Department of English Language and Literature, July 1, 2018 to June 30, 2022.

LAMONT, Victoria, Associate Chair, Undergraduate Studies, Department of English Language and Literature, July 1, 2018 to June 30, 2021.

SMYTH, Heather, Director, Arts First Program, August 1, 2018 to July 31, 2021.

Administrative Reappointment

SEN, Anindya, Director, Master of Public Service, July 1, 2018 to June 30, 2020.

CHANGE in DATES

DANISCH, Robert, Director, Arts First Program, **from** September 1, 2016 to August 31, 2019 **to** September 1, 2016 to July 31, 2018.

ESSELMONT, Anna, Chair, Department of Political Science, **from** July 1, 2017 to August 31, 2018 **to** July 1, 2017 to August 31, 2019.

HULAN, Shelley, Associate Chair, Undergraduate Studies, Department of English Language and Literature, **from** July 1, 2017 to June 30, 2020 **to** July 1, 2017 to June 30, 2018.

LAWSON, Kate, Chair, Department of English Language and Literature, **from** July 1, 2015 to June 30, 2019 **to** July 1, 2015 to June 30, 2018.

RAVENHILL, John, Chair, Department of Political Science, **from** September 1, 2018 to August 31, 2022 **to** September 1, 2019 to August 31, 2022.

SMYTH, Heather, Associate Director, Arts First Program, **from** September 1, 2016 to August 31, 2018 **to** September 1, 2016 to July 31, 2018.

C. RESIGNATION

LIM, Jee-Hae, Associate Professor, School of Accounting & Finance, effective August 31, 2018.

D. SABBATICAL LEAVES

For approval by the Board of Governors:

CARVALHO, Emanuel, Associate Professor, Department of Economics, January 1, 2019 to December 31, 2019, twelve months at full salary.

CHEN, Tao, Associate Professor, Department of Economics, January 1, 2019 to June 30, 2019, six months at 85% salary.

COOKE, Martin, Associate Professor, Departments of Sociology & Legal Studies and School of Public Health and Health Systems, from January 1, 2019 to June 30, 2019 at 85% salary.

COOPER, Andrew, Professor, Department of Political Science, January 1, 2019 to June 30, 2019, six months at 85% salary.

COSKUN, Altay, Associate Professor, Department of Classical Studies, January 1, 2019 to June 30, 2019, six months at 85% salary.

GAUTHIER, Nicolas, Associate Professor, Department of French Studies, January 1, 2019 to June 30, 2019, six months at 85% salary.

HENDERSON, Heather, Professor, Department of Psychology, January 1, 2019 to June 30, 2019, six months at full salary.

HUNT, Andrew, Professor, Department of History, January 1, 2019 to June 30, 2019, six months at full salary.

MCWEBB, Christine, Professor, Stratford School of Interaction Design & Business, January 1, 2019 to June 30, 2019, six months at full salary.

NILSEN, Elizabeth, Associate Professor, Department of Psychology, January 1, 2019 to June 30, 2019, six months at full salary.

RUS, Horatiu, Associate Professor, Department of Economics, six months January 1, 2019 to June 30, 2019, at 100%.

RYBCZYNSKI, Kate, Associate Professor, Department of Economics, January 1, 2019 to December 31, 2019, twelve months at 90.6% salary.

SBARDELLATI, John, Associate Professor, Department of History, January 1, 2019 to June 30, 2019, six months at 85% salary.

A handwritten signature in orange ink, appearing to read 'Douglas M. Peers', with a stylized flourish at the end.

Douglas M. Peers
Dean, Faculty of Arts

UNIVERSITY OF WATERLOO
REPORT OF THE DEAN OF ENGINEERING TO SENATE

September 17, 2018

For information:

A. APPOINTMENTS

Probationary Term

ENNS, Jonathan, Assistant Professor, School of Architecture, August 1, 2018 – June 30, 2021. Master of Architecture Princeton University School of Architecture, Princeton, USA 2010; Bachelor of Architectural Studies University of Waterloo School of Architecture 2007. Jonathan Enns has a strong design and professional practice background that includes research on panelized building systems, real-space decision-making as well as flexible connections. His broad experience – working between craft and automated fabrication, between standardization and customization as well as with scales that range from medical devices to larger urban contexts – will enrich the digital fabrication and materials’ science stream in the School of Architecture and be invaluable to the new program in Architectural Engineering.

PHAM, Anh, Assistant Professor, Department of Civil & Environmental Engineering, January 1, 2019 – June 30, 2022. PhD University of California, Berkeley USA 2012; MS University of California, Berkeley 2007; BS Hanoi University of Science and Technology, Vietnam 2005. Pham applies aquatic chemistry and geochemistry principles, and employs analytical chemistry tools to investigate contaminant fate and transformation. The current research focuses on developing novel technologies for the remediation of contaminated soil and groundwater, treatment of oil sands process water, and removal of emerging contaminants. His expertise will fill a gap in our department’s world renowned environmental and water resources group.

YEUM, Chui Min, Assistant Professor, Department of Civil & Environmental Engineering, September 1, 2018 – June 30, 2021. PhD Purdue University, West Lafayette, IN, USA 2016; MS Korea Advanced Institute of Science & Technology (KAIST), South Korea 2010; BS KAIST, South Korea 2008. Yeum’s interests in structural Health monitoring, computer vision, machine Learning and big data analytics strengthen our expertise in the areas of smart structures and meets the university’s strategic objectives of developing multidisciplinary research which also focuses on AI as a strategic objective.

ZAHEDI, Seyed Majid, Assistant professor, Department of Electrical & Computer Engineering, August 1, 2018 – June 30, 2021. PhD Duke University 2018; MS University of Tehran, 2012; BS University of Tehran 2009. Dr. Seyed Majid Zahedi works in the area of software engineering. He completed his Ph.D. in Computer Science at Duke University. His research focuses on the intersection of computer architecture, computer systems, and economic game theory. His paper on the Amdahl bidding mechanism was nominated for the Best Paper Award at HPCA’18.

Definite Term Appointment (full-time)

HASHEMI, Ehsan, Research Assistant Professor, Department of Mechanical & Mechatronics Engineering, May 1, 2018 – April 30, 2021. PhD University of Waterloo 2017; MASc AmirKabir University, Tehran, Iran 2005; BASc Iran University of Science and Technology, Tehran, Iran 2002. Dr. Ehsan Hashemi's research is in the area of multi-body dynamics and control, with particular application to vehicles and multi-vehicle systems. He received his PhD in Mechanical Engineering from the University of Waterloo in 2017, following which he was a postdoctoral fellow with Prof. Khajepour in the MME department at UWaterloo. He joins the Automation & Control group and will strengthen our Autonomous Vehicles research capability, as well as teach Control Systems and Electromechanical Machine Design courses.

HOLT, Christopher, Lecturer, Conrad School of Entrepreneurship & Business, September 1, 2018 – August 31, 2019. PhD Candidate University of Toronto; MBA Duke University 1996; BA Queen's University 1992.

REDDY, Roopa, Lecturer, Conrad Business, Entrepreneurship and Technology Centre, July 1, 2018 – June 30 2021. BEd OISE, University of Toronto 2011; MSc London School of Economics 2009; BBA Honour, BMath Honours (Double Degree program), Wilfrid Laurier University, University of Waterloo 2006.

SCHMIDT, Philip, Research Assistant Professor, Department of Civil & Environmental Engineering, July 1, 2018 – June 30, 2019. PhD University of Waterloo 2011; BASc University of Waterloo 2005.

SOLEIMANI DAHAJ, Arash, Lecturer, Department of Management Sciences, September 1, 2018 – August 31, 2019. PhD University of Waterloo 2017; MSc Wilfrid Laurier University 2012; MBA University of Tehran 2010; BSc Sharif University of Technology 2006.

XU, Linlin, Definite Term Research Assistant Professor, Department of Systems Design Engineering, July 1, 2018 – June 30, 2021. PhD University of Waterloo 2014; MSc China University of Geosciences, Beijing 2010; BSc China University of Geosciences, Beijing 2007.

Definite Term Reappointment (full-time)

GIANNIKOURIS, Allyson, Lecturer, Department of Mechanical & Mechatronics Engineering, July 13, 2018 – July 12, 2021.

NORMANI, Stefano, Research Assistant Professor, Department of Civil & Environmental Engineering, June 1, 2018 – May 31, 2021.

PELDSZUS, Sigrid, Research Associate Professor, Department of Civil & Environmental Engineering July 1, 2018 – December 31, 2020.

Visiting Appointments

CAO, Qinghua, Scholar, Department of Electrical & Computer Engineering, November 1, 2018 – August 31, 2019.

CHENG, Jinshi, Scholar, Department of Management Sciences, June 1, 2018 – March 31, 2019

CHOI, Yejung, Scholar, Department of Chemical Engineering, August 31, 2018 – February 14, 2019.

DAS, Taylan, Scholar, Department of Mechanical & Mechatronics Engineering, June 30, 2018 – June 29, 2019.

DOU, Haozhen, Scholar, Department of Chemical Engineering, October 31, 2018 – May 31, 2020.

HAMMAD, May, Scholar, Department of Electrical & Computer Engineering, June 18, 2018 – September 30, 2018.

HAMMAD, Menatallah, Scholar, Department of Electrical & Computer Engineering, June 18, 2018 – September 30, 2018.

HATEF, Nader, Researcher, Department of Civil & Environmental Engineering, October 1, 2018 – September 30, 2019.

HU, Jiayin, Scholar, Department of Mechanical & Mechatronics Engineering, August 1, 2018 – January 31, 2019.

KONG, Zhe, Scholar, Department of Electrical & Computer Engineering, July 16, 2018 – July 15, 2019.

LI, Xu, Researcher, Department of Chemical Engineering, October 10, 2018 – April 9, 2019.

LIU, Guocheng, Scholar, Department of Electrical & Computer Engineering, June 2, 2018 – May 31, 2019.

LIU, Youlin, Scholar, Department of Chemical Engineering, September 1, 2018 – August 31, 2019.

LIU, Zhaoting, Scholar, Department of Electrical & Computer Engineering, July 9, 2018 – July 8, 2019.

LU, Jing, Scholar, Department of Systems Design Engineering, September 3, 2018 – September 2, 2019.

NG, Dawn, Scholar, Department of Chemical Engineering, July 1, 2018 – June 30, 2020.

QIAO, Yan, Scholar, Department of Systems Design Engineering, October 1, 2018 – March 31, 2020.

RABIEE, Sayedmahmood, Scholar, Department of Mechanical & Mechatronics Engineering, May 8, 2018 – November 30, 2018.

ROHANI, Arash, Scientist, Department of Electrical & Computer Engineering, May 16, 2018 – December 31, 2018.

SALIMI-KENARI, Hamed, Assistant Professor, Department of Chemical Engineering, September 1, 2018 – September 30, 2019.

SHAFIEE, Mohammad Saeed, Scholar, Department of Systems Design Engineering, July 7, 2018 – December 31, 2018.

SHARIF, Farhad, Associate Professor, Department of Chemical Engineering, August 1, 2018 – April 30, 2019.

SUN, Haifeng, Scholar, Department of Electrical & Computer Engineering, September 1, 2018 - August 1, 2019

SUN, Qian, Researcher, Department of Mechanical & Mechatronics Engineering, October 1, 2018 – September 30, 2019.

TAN, Senqi, Researcher, Department of Mechanical & Mechatronics Engineering, October 1, 2018 – September 30, 2020.

TAO, Tianyang, Scholar, Department of Systems Design Engineering, October 22, 2018 – October 21, 2019.

YAN, Jia, Scholar, Department of Electrical & Computer Engineering, July 21, 2018 – July 15, 2019.

WAN, Yingying, Scholar, Department of Systems Design Engineering, October 22, 2018 – April 21, 2020.

WANG, Hai Quan, Scholar, Department of Electrical & Computer Engineering, August 1, 2018 – August 31, 2018.

WANG, Xiaonan, Researcher, Department of Mechanical & Mechatronics Engineering, October 1, 2018 – September 30, 2019.

WU, Jingda, Scholar, Department of Mechanical & Mechatronics Engineering, June 6, 2018 – September 6, 2018.

XIAO, Tonghu, Associate Professor, Department of Chemical Engineering, September 27, 2018 – May 26, 2019.

YANG, Yang, Scholar, Department of Electrical & Computer Engineering, October 1, 2018 – September 30, 2019.

YU, Houyong, Scholar, Department of Chemical Engineering, October 1, 2018 – September 30, 2019.

ZHANG, Zheng, Scholar, Department of Mechanical & Mechatronics Engineering, June 6, 2018 – September 6, 2018.

Visiting Reappointments

FATHI, Ehsanollah, Researcher, Department of Electrical & Computer Engineering, June 1, 2018 – May 31, 2019.

SAFFIH, Faycal, Researcher, Department of Systems Design Engineering, July 8, 2018 – January 31, 2019.

Special Appointments – Undergraduate Instruction

AGNAOU, Mehrez, Lecturer, Department of Chemical Engineering, September 1, 2018 – December 31, 2018.

ALAM, Md. Razib, Lecturer, Department of Management Sciences, September 1, 2018 – December 31, 2018.

ALZAYAT, Ayman, Lecturer, Department of Management Sciences, September 1, 2018 – December 31, 2018.

DEAN, Tom, Lecturer, Department of Chemical Engineering, September 1, 2018 – December 31, 2018.

HASSAN, Fathy, Lecturer, Department of Chemical Engineering, September 1, 2018 – December 31, 2018.

KARIMINIA, Hamid-Reza, Lecturer, Department of Chemical Engineering, September 1, 2018 – December 31, 2018.

KEBLAWI, Amer, Lecturer, Department of Mechanical & Mechatronics Engineering, May 1, 2018 – August 31, 2018.

MANNING, Thomas, Lecturer, Department of Management Sciences, September 1, 2018 – December 31, 2018.

MURESAN, Matthew, Lecturer, Department of Civil & Environmental Engineering, September 1, 2018 – December 31, 2018.

OKYAY, Ahmet, Lecturer, Department of Mechanical & Mechatronics Engineering, May 1, 2018 – August 31, 2018.

PENDAR, Mahmoudi, Lecturer, Department of Chemical Engineering, May 1, 2018 – August 31, 2018.

RANJRAM, Mark, Lecturer, Department of Civil & Environmental Engineering, September 1, 2018 – December 31, 2018.

SHAMS, Shoeleh, Lecturer, Department of Civil & Environmental Engineering, September 1, 2018 – December 31, 2018.

TAHEKHANI, Gita, Lecturer, Department of Management Sciences, September 1, 2018 – December 31, 2018.

ZHENG, Yaxin, Lecturer, Department of Electrical & Computer Engineering, May 1, 2018 – August 31, 2018.

Special Appointments – Graduate Instruction

ALAEFOUR, Ibrahim, Lecturer, Department of Mechanical & Mechatronics Engineering, May 1, 2018 – August 31, 2018.

BARTHOLOMEW, Rachel, Lecturer, Conrad Business Entrepreneurship and Technology Centre, May 1, 2018 – August 31, 2018.

FADER, Christina, Lecturer, Department of Management Sciences, September 1, 2018 – December 31, 2018.

HIASSAT, Abdelhalim, Lecturer, Department of Management Sciences, September 1, 2018 – December 31, 2018.

MARTIN, Tim, Lecturer, Conrad Business Entrepreneurship and Technology Centre, May 1, 2018 – June 30, 2018.

ORDOUEI, Hossein, Lecturer, Department of Chemical Engineering, September 1, 2018 – December 31, 2018.

ROHANI-TABATAI, Mina, Lecturer, Department of Management Sciences, September 1, 2018 – December 31, 2018.

SALVINI, Paul, Lecturer, Conrad Business Entrepreneurship and Technology Centre, May 1, 2018 – June 30, 2018.

Special Appointments – Other

BEYNON, Doug, Entrepreneur-in-Residence, Conrad Business Entrepreneurship and Technology Centre, September 1, 2018 – August 31, 2019.

Special Reappointments – Undergraduate Instruction

BYSKAL, Daniel, Lecturer, Department of Mechanical & Mechatronics Engineering, September 1, 2018 – December 31, 2018.

LIM TUNG, Fiona, Lecturer, School of Architecture, September 1, 2018 – December 31, 2018.

Special Reappointments – Graduate Instruction

ALLARAKHIA, Minna, Lecturer, Department of Management Sciences, September 1, 2018 – December 31, 2018.

DOWLING, Paul, Lecturer, School of Architecture, September 1, 2018 – December 31, 2018.

Adjunct Appointments – Graduate Supervision & Research

EL-HAKIM, Mohab, Assistant Professor, Department of Civil & Environmental Engineering, October 1, 2017 – September 30, 2019.

GINZEL, Edward, Assistant Professor, Department of Civil & Environmental Engineering, September 1, 2018 – August 31, 2019.

GU, Frank, Professor, Department of Chemical Engineering, July 1, 2018 – June 30, 2021.

HILAL, Allaa, Assistant Professor, Department of Electrical & Computer Engineering, May 1, 2018 – April 30, 2021.

KARRAY, Salma, Associate Professor, Department of Management Sciences, September 1, 2018 - August 31, 2021.

KOZINSKI, Janusz, Professor, Department of Chemical Engineering, August 1, 2018 – July 31, 2021.

MOSHIRI, Behzad, Professor, Department of Electrical & Computer Engineering, May 1, 2018 – April 30, 2019.

OSEI, Ernest, Assistant Professor, Department of Systems Design Engineering, June 1, 2018 – May 31, 2021.

PHAM, Anh, Assistant Professor, Department of Civil & Environmental Engineering, July 1, 2018 – December 31, 2018.

RIZNIC, Jovica, Professor, Department Civil & Environmental Engineering, June 1, 2018 – May 31, 2020.

SACCOMANNO, Frank, Professor, Department of Civil & Environmental Engineering, July 1, 2018 – June 30, 2020.

SCHARFENBERGER, Christian, Assistant Professor, Department of Systems Design Engineering, June 1, 2017 – May 30, 2020.

SHAHI, Arash, Assistant Professor, Department of Civil & Environmental Engineering, September 1, 2018 – August 31, 2020.

WEI, Daniel, Associate Professor, Department of Mechanical & Mechatronics Engineering, August 1, 2018 – July 31, 2021.

WINGER, Lowell, Assistant Professor, Department of Systems Design Engineering, June 1, 2018 – May 31, 2021.

Adjunct Appointments – Graduate Supervision

ELLIS, Donna, Assistant Professor, Department of Management Sciences, August 1, 2018 – July 31, 2021.

KASAEZADEH MAHABADI, SeyedAlireza, Assistant Professor, Department of Mechanical & Mechatronics Engineering, September 1, 2018 – August 31, 2021.

SUNDARAM, Shreyas, Professor, Department of Electrical & Computer Engineering, January 1, 2018 – December 31, 2020.

THE, Jesse, Professor, Department of Mechanical & Mechatronics Engineering, May 1, 2018 – April 30, 2021.

Adjunct Reappointments – Graduate Supervision

APLEVICH, Dwight, Professor, Department of Electrical & Computer Engineering, August 1, 2017 – July 31, 2020.

Adjunct Reappointments – Graduate Supervision & Research

BARLATT, Ada, Assistant Professor, Department of Management Sciences, September 1, 2018 – August 31, 2021.

FULLER, David, Professor, Department of Management Sciences, September 1, 2018 – August 31, 2021.

KOUWEN, Nick, Professor, Department of Civil & Environmental Engineering, July 1, 2018 – June 30, 2020.

REYNOLDS, David, Assistant Professor, Department of Civil & Environmental Engineering, May 1, 2018 – April 30, 2020.

Adjunct Reappointments – Research

LAWSON, Scott, Associate Professor, Department of Mechanical & Mechatronics Engineering, May 1, 2018 – April 30, 2021.

MACPHIE, Robert, Professor, Department of Electrical & Computer Engineering, October 1, 2017 – September 30, 2020.

Cross Appointments

AL-MAYAH, Adil, Associate Professor, Department of Civil & Environmental Engineering to Mechanical & Mechatronics Engineering, June 1, 2018 – May 31, 2021.

CHEN, Zhongwei John, Associate Professor, Department of Chemical Engineering to Mechanical & Mechatronics Engineering, June 1, 2018 – May 31, 2021.

FRASER, Roydon, Professor, Department of Mechanical & Mechatronics Engineering to Chemical Engineering, July 1, 2018 – June 30, 2021.

POLAK, Maria Anna, Professor, Department of Civil & Environmental Engineering to Department of Mechanical & Mechatronics Engineering, July 1, 2018 – June 30, 2021.

Cross Reappointment

HIPEL, Keith, Professor, Department of Systems Design Engineering to Department of Management Sciences, September 1, 2018 – August 31, 2021.

Changes in Appointments

BLACKWELL, Adrian, Administrative Appointment, Associate Director, Graduate Studies and Research, School of Architecture, was September 1, 2018 – August 31, 2019 changed to September 1, 2017 – August 31, 2018.

FOWLER, Michael, Sabbatical, Professor, Department of Chemical Engineering, July 1, 2018 – December 31, 2018 has been cancelled.

ADMINISTRATIVE APPOINTMENTS

ABDEL-RAHMAN, Eihab, Associate Chair, Graduate Studies, Department of Systems Design Engineering, January 1, 2018 – December 31, 2020.

HE, Qi-Ming, Chair, Department of Management Sciences, September 1, 2018 – August 31, 2022.

HUTTON, Jane, Associate Director, Graduate Studies and Research, School of Architecture, September 1, 2018 – August 31, 2020.

PATEL, Hiren, Undergraduate Studies Committee (USC) Chair, Department of Electrical & Computer Engineering, June 1, 2018 – June 30, 2019.

PRZYBYLSKI, Maya, Associate Director, Undergraduate Studies, School of Architecture, September 1, 2018 – August 31, 2020.

ADMINISTRATIVE REAPPOINTMENTS

BARBY, James, Senior Associate Chair, Department of Electrical & Computer Engineering, September 1, 2018 – August 31, 2019.

DOUGLAS, Peter, Associate Dean, Undergraduate Studies, Faculty of Engineering, July 1, 2018 – June 30, 2020.

HELLINGA, Bruce, Associate Dean, Graduate Studies, Faculty of Engineering, October 1, 2018 – July 31, 2019.

SHEPPARD, Lola, Associate Director, Undergraduate Studies, School of Architecture, July 1, 2018 – August 31, 2018.

C. *RESIGNATIONS*

GU, Frank, Professor, Department of Chemical Engineering, June 30, 2018.

SHARDT, Yuri, Assistant Professor, Department of Chemical Engineering, August 31, 2018.

XU, Linlin, Research Associate, Department of Systems Design Engineering, June 30, 2018.

D. *DEATHS*

SOULIS, Eric, Professor, Department of Civil & Environmental Engineering, June 21, 2018.

FOR APPROVAL BY THE BOARD OF GOVERNORS

E. *SABBATICALS*

ABUKHDEIR, Nassar, Associate Professor, Department of Chemical Engineering, March 1, 2019 – August 31, 2019, six months at 85% salary.

RAMAHI, Omar, Professor, Department of Electrical & Computer Engineering, January 1, 2019 – December 30, 2019, twelve months at 93.3% salary.

ALREADY APPROVED BY THE BOARD OF GOVERNORS

BACHMANN, Chris, Assistant Professor, Department of Civil & Environmental Engineering, September 1, 2018 – February 28, 2019, six months at 100% salary.

PRZYBYLSKI, Maya, Assistant Professor, School of Architecture, January 1, 2018 – June 30, 2018, six months at 100% salary.



Pearl Sullivan
Dean, Faculty of Engineering

University of Waterloo
REPORT OF THE DEAN OF ENVIRONMENT TO SENATE
September 17, 2018

FOR INFORMATION

A. APPOINTMENTS

Definite Term Appointments

BEEBE, John, Associate Professor, Department of Geography and Environmental Management, July 1, 2018 to June 29, 2020: PhD, Wilfrid Laurier University, 1997; MA, Wilfrid Laurier University, 1992; BA, Wilfrid Laurier University, 1982. Dr. Beebe is well-qualified to teach physical geography courses and to work with the Department in developing two new programs/streams of study [a BSc in Geography and Environmental Management, and a dual degree stream with Shandong University of Finance and Economics in China].

MURRAY, Daniel, Lecturer, School of Environment, Enterprise and Development, July 16, 2018 to July 15, 2021: PhD, Griffith University, Australia, 2007; BHons, Griffith University, 2000. Dr. Murray is an essential addition for SEED to remain effective in the delivery of its core undergraduate Environment and Business program. His prior teaching experience within the Faculty of Environment and his thoughtful treatment of experiential learning will greatly enhance the student experiential learning opportunities in SEED.

Adjunct Appointments

Graduate Supervision

MARSCHKE, Melissa, Associate Professor, Faculty of Environment, November 1, 2017 to December 31, 2020.

ROBSON, Laura, Graduate Committee Member, School of Environment, Resources and Sustainability, March 1, 2018 to December 31, 2019.

Graduate Supervision and Research

GARRICK, Dustin, Assistant Professor, School of Environment, Resources and Sustainability, October 1, 2017 to September 30, 2020.

McALLISTER, Mary Louise, Associate Professor [Emerita], School of Environment, Resources and Sustainability, September 1, 2018 to August 31, 2021.

Special Appointments

Instruction

CASTON, Wayne, Lecturer, School of Planning, September 1, 2018 to December 31, 2018.

JOHANNSON, Lynn, Lecturer, School of Environment, Enterprise and Development, September 1, 2018 to December 31, 2018.

KNAFELC, Paul, Lecturer, School of Environment, Enterprise and Development, September 1, 2018 to December 31, 2018.

LEHMAN, Robert, Lecturer, School of Planning, September 1, 2018 to December 31, 2018.

LORENA, Giancarlo, Lecturer, School of Environment, Enterprise and Development, September 1, 2018 to December 31, 2018.

PUNJABI, Bharat, Lecturer, School of Environment, Enterprise and Development, September 1, 2018 to December 31, 2018.

RATCLIFFE, William, Lecturer, School of Environment, Enterprise and Development, September 1, 2018 to December 31, 2018.

SCHUMILAS, Theresa, Lecturer, School of Environment, Enterprise and Development, September 1, 2018 to December 31, 2018.

TURLEY-McINTYRE, Barbara, Lecturer, School of Environment, Enterprise and Development, September 1, 2018 to December 31, 2018.

ZOLFAGHARI, Kiana, Lecturer, Department of Geography and Environmental Management, September 1, 2018 to December 31, 2018.

Cross Appointment

AUGUST, Martine, Assistant Professor, School of Planning to the Department of Geography and Environmental Management, June 1, 2018 to May 31, 2023.

SAARI, Rebecca, Assistant Professor, Department of Civil and Environmental Engineering to the Department of Geography and Environmental Management, July 1, 2018 to June 30, 2023.

VINODRAI, Tara, Associate Professor, Department of Geography and Environmental Management to the School of Planning, July 1, 2018 to June 30, 2021.

Cross Re-appointment

OELBERMANN, Maren, Associate Professor, School of Environment, Resources and Sustainability to the Department of Geography and Environmental Management, July 1, 2018 to August 31, 2019.

Graduate Student Appointed as Part-Time Lecturer

ELALFY, Amr, School of Environment, Enterprise and Development, September 1, 2018 to December 31, 2018.

Postdoctoral Fellow Appointed as Part-Time Lecturer

DAVIDSON, Scott, Department of Geography and Environmental Management, September 1, 2018 to December 31, 2018.

B. ADMINISTRATIVE APPOINTMENTS

FILION, Pierre, Interim Associate Director, Graduate Studies, School of Planning, July 1, 2018 to October 31, 2018.

QIAN, Zhu [Joe], Associate Director, Graduate Studies, School of Planning, November 1, 2018 to June 30, 2021.

ADMINISTRATIVE REAPPOINTMENTS

McKENZIE, Ian, Director, Aviation Program [Geography and Science], Department of Geography and Environmental Management, July 1, 2018 to June 30, 2019.

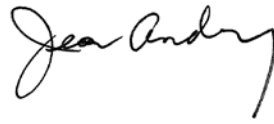
McKENZIE, Ian, Associate Chair for Undergraduate Studies, Aviation & Geomatics Programs, Department of Geography and Environmental Management, July 1, 2018 to June 30, 2019.

C. SABBATICAL LEAVES

For Approval by the Board of Governors

FEDY, Brad, Associate Professor, School of Environment, Resources and Sustainability, July 1, 2019 to December 31, 2019, at 85% salary.

QUILLEY, Stephen, Associate Professor, School of Environment, Resources and Sustainability,
July 1, 2019 to June 30, 2020, at 91.9% salary.

A handwritten signature in black ink, reading "Jean Andrey". The signature is fluid and cursive, with the first name "Jean" and last name "Andrey" clearly distinguishable.

Jean Andrey
Dean

University of Waterloo
REPORT OF THE DEAN OF MATHEMATICS TO SENATE
September 17, 2018

FOR INFORMATION

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

Probationary-Term Appointments

HE, Xi (BS, 2012, National University of Singapore; PhD, 2018 (exp), Duke University), Assistant Professor, David R. Cheriton School of Computer Science, January 1, 2019 – June 30, 2022. Xi He is completing her PhD at Duke University in Computer Science, following a Bachelor's double degree in Mathematics and Computer Science at the National University of Singapore. Her research interests span the areas of privacy and security for big data analysis and management. Ms. He focuses on understanding the theoretical trade-offs between privacy and usability of applications, and on building practical systems that enable learning of useful information from the data while provably ensuring an individual's privacy. Her work takes a multi-disciplinary approach, involving machine learning, cryptography, and public policy. Ms. He has contributed to this area with multiple strong publications demonstrating an enthusiasm for solving real world privacy problems, and work with collaborators from diverse research fields.

SUN, Chengnian (BSc, 2007, Northeastern University; PhD, 2013, National University of Singapore), Assistant Professor, David R. Cheriton School of Computer Science, July 1, 2019 – June 30, 2022. Chengnian Sun is currently a software engineer at Google, in Mountain View, California. Prior to that, he was a postdoctoral researcher at the University of California, Davis. Dr. Sun's research interests lie in software engineering and programming languages. His research focus is on how to improve software reliability and developers' productivity by designing and developing novel, practical techniques, models, and tools. During his PhD, he designed and developed effective algorithms to analyze software engineering data and leverage discovered knowledge to facilitate various software engineering tasks. Dr. Sun already has an exceptional number of top-tier conference and journals papers in software engineering and programming language venues.

Probationary-Term Reappointments

LAW, Edith, Assistant Professor, David R. Cheriton School of Computer Science, July 1, 2018 – June 30, 2021.

Definite Term - Appointments

DELCOURT, Michelle (BS, 2011, Georgia Institute of Technology; MS, 2012; PhD, 2017 both from the University of Illinois at Urbana-Champaign), Research Assistant Professor, Dept. of Combinatorics & Optimization, September 1, 2018 – August 31, 2021. Dr. Delcourt will conduct independent research and teach between 2-3 courses per year.

MADILL, Blake (BSc, 2012, University of Winnipeg; MMath, 2013; PhD, 2017, both from the University of Waterloo), Lecturer, Dept. of Pure Mathematics, September 1, 2018 – August 31, 2021. Dr. Madill will teach six courses per year and participate in departmental duties as requested.

PAYNE, Ian (BSc (Hons), 2011, Memorial University; MMath, 2012; PhD, 2017, both from the University of Waterloo), Lecturer, Office of the Dean, September 1, 2018 – August 31, 2020. Dr. Payne will teach four courses per year, participate in contest preparation, school visits and online material presentation.

REETZ, Adrian (Diplom (TU), 2018, Darmstadt University of Technology; PhD, 2016, University of Saskatchewan), Lecturer, David R. Cheriton School of Computer Science, September 1, 2018 – August 31, 2020. Dr. Reetz will teach six courses per year and assigned service tasks as required.

Definite Term - Reappointments

GESHNIZJANI, Ghazal, Research Associate Professor, Dept. of Applied Mathematics, September 1, 2018 – August 31, 2021.

ROBERTS, Collin, Lecturer, David R. Cheriton School of Computer Science, September 1, 2018 – August 31, 2020.

Visiting Appointments

ASHRAFI, Nahid (Semnan University), Researcher, Dept. of Pure Mathematics, July 1, 2018 – February 27, 2019.

ASKEW, Stephen (Intellitix), Researcher, David R. Cheriton School of Computer Science, September 1, 2018 – August 31, 2020.

CASIEZ, Gery (University of Lille), Professor, David R. Cheriton School of Computer Science, September 1, 2018 – December 31, 2018.

GORELICK, Yelena (University of Western Ontario), Research Associate, David R. Cheriton School of Computer Science, August 1, 2018 – July 31, 2020.

GUO, Yanni (Civil Aviation University of China), Researcher, Dept. of Applied Mathematics, January 1, 2019 – December 31, 2019.

KAISTER, Daniel (University of Londrina), Professor, David R. Cheriton School of Computer Science, January 7, 2019 – December 20, 2019.

MARZOUK, Mirette, Research Associate, David R. Cheriton School of Computer Science, September 1, 2018 – April 30, 2019.

ORTEGA GONZALEZ, Alvaro (Polytechnic University of Catalonia), Scholar, Dept. of Applied Mathematics, September 1, 2018 – April 30, 2019.

TONG, Xinle (Nanjing University of Finance and Economics), Researcher, Dept. of Statistics and Actuarial Science, August 20, 2018 – August 19, 2019.

XIE, Xiang (Huazhong University of Science and Technology), Scholar, Dept. of Applied Mathematics, September 1, 2018 – August 31, 2019.

XU, Ning (National University of Defense Technology), Scholar, Dept. of Applied Mathematics, September 1, 2018 – February 29, 2020.

YANG, Jun (Southwest Minzu University), Scientist, Dept. of Applied Mathematics, September 1, 2018 – August 31, 2019.

ZHANG, He (Nanjing University of Science & Technology), Scholar, Dept. of Applied Mathematics, October 1, 2018 – September 30, 2019.

Adjunct Appointments

Instructor

DVORSKI, Dalibor, Lecturer, David R. Cheriton School of Computer Science, September 1, 2018 – December 31, 2018.

ISTEAD, Joe, Lecturer, David R. Cheriton School of Computer Science, September 1, 2018 – December 31, 2018.

Research

SMALL, Christopher, Professor Emeritus, Dept. of Statistics and Actuarial Science, May 1, 2018 – April 30, 2021.

TORNATORE, Massimo (Politecnico di Milano), Associate Professor, David R. Cheriton School of Computer Science, August 1, 2018 – July 31, 2020.

Grad Committee

TAGLIASACCHI, Andrea (University of Victoria), Associate Professor, David R. Cheriton School of Computer Science, July 1, 2018 – June 30, 2021.

Adjunct Reappointments

Instructor

AKHTER, Tahmina, Lecturer, Office of the Dean, September 1, 2018 – December 31, 2018.

AKINYEMI, John, Lecturer, David R. Cheriton School of Computer Science, September 1, 2018 - December 31, 2018.

BROWN, Janice, Lecturer, David R. Cheriton School of Computer Science, September 1, 2018 – December 31, 2018.

BURY, Thomas, Lecturer, Dept. of Applied Mathematics, September 1, 2018 – December 31, 2018.

CRAMER, Zachery, Lecturer, Dept. of Pure Mathematics, September 1, 2018 – December 31, 2018.

CRAWFORD-BROWN, Jessica, Lecturer, Office of the Dean, September 1, 2018 – December 31, 2018.

DESCHAMPS, Ryan, Lecturer, David R. Cheriton School of Computer Science, September 1, 2018 – December 31, 2018.

ELMA, Ertan, Lecturer, Dept. of Pure Mathematics, September 1, 2018 – December 31, 2018.

FERNANDES, Brian, Lecturer, Office of the Dean, September 1, 2018 – December 31, 2018.

HAMDY MAHMOUD, Mohammad, Lecturer, Dept. of Pure Mathematics, September 1, 2018 – December 31, 2018.

HOLTBY, Dan, Lecturer, David R. Cheriton School of Computer Science, September 1, 2018 – December 31, 2018.

HOSSAIN, Ehsaan, Lecturer, Dept. of Pure Mathematics, September 1, 2018 – December 31, 2018.

IBRAHIM, Ahmed, Lecturer, David R. Cheriton School of Computer Science, September 1, 2018 – December 31, 2018.

KAMAL, Zille Huma, Lecturer, David R. Cheriton School of Computer Science, September 1, 2018 – December 31, 2018.

KARABINA, Burcu, Lecturer, Office of the Dean, September 1, 2018 – December 31, 2018.

KESHAV, Nicole, Lecturer, David R. Cheriton School of Computer Science, September 1, 2018 – April 30, 2019.

KHARAL, Rosina, Lecturer, David R. Cheriton School of Computer Science, September 1, 2018 – December 31, 2018.

KOHLER, Dave, Lecturer, Dept. of Statistics and Actuarial Science, September 1, 2018 – December 31, 2018.

LAROCQUE, Luc, Lecturer, Office of the Dean, September 1, 2018 – December 31, 2018.

LEE, Brenda, Lecturer, Office of the Dean, September 1, 2018 – December 31, 2018.

MARTIN, Robert, Lecturer, Dept. of Applied Mathematics, September 1, 2018 – December 31, 2018.

MOLKARAIE, Mehdi, Lecturer, Dept. of Statistics and Actuarial Science, September 1, 2018 – December 31, 2018.

NIJJAR, Paul, Lecturer, David R. Cheriton School of Computer Science, September 1, 2018 – 31, 2018.

MARTIN, Robert, Lecturer, Dept. of Applied Mathematics, September 1, 2018 – December 31, 2018.

SANTOS CASTENADA, Diana, Lecturer, Dept. of Pure Mathematics, September 1, 2018 – December 31, 2018.

SMITH, Paula, Lecturer, Office of the Dean, September 1, 2018 – December 31, 2018.

TURNER, Graeme, Lecturer, Office of the Dean, September 1, 2018 – December 31, 2018.

VICENTE-COLMENARES, Alejandra, Lecturer, Office of the Dean, September 1, 2018 – December 31, 2018.

Research

BENNETT, Gregory, Associate Professor Emeritus, Dept. of Statistics and Actuarial Science, October 1, 2018 – September 30, 2021.

HU, Shengda, Professor, Dept. of Pure Mathematics, July 1, 2018 – June 30, 2021.

Grad Committee

MERCER, Robert (Western University), Professor, David R. Cheriton School of Computer Science, July 1, 2018 – June 30, 2021.

Cross Appointments

FLETCHER, Christopher (Associate Professor, Dept. of Geography and Environmental Management), in the Dept. of Applied Mathematics, July 1, 2018 – June 30, 2021.

YU, Alfred (Professor, Dept. of Electrical and Computer Engineering), in the Dept. of Applied Mathematics, June 1, 2018 – May 31, 2021.

Cross Reappointments

HUDSON, Michael (Professor, Dept. of Physics and Astronomy), in the Dept. of Applied Mathematics, September 1, 2017 – August 31, 2020.

JAO, David (Professor, Dept. of Combinatorics & Optimization), in the David R. Cheriton School of Computer Science, July 1, 2018 – June 30, 2021.

LUKASZ, Golab (Associate Professor, Dept. of Management Sciences), in the David R. Cheriton School of Computer Science, July 1, 2018 – June 30, 2020).

MENEZES, Alfred (Professor, Dept. of Combinatorics & Optimization), in the David R. Cheriton School of Computer Science, July 1, 2018 – June 30, 2021.

Graduate Students appointed as Part-time Lecturers

De JONG, Jamie, Dept. of Combinatorics and Optimization, September 1, 2018 – December 31, 2018.

FOROUZANNIA, Farinaz, Dept. of Applied Mathematics, September 1, 2018 – December 31, 2018.

Graduate Students reappointed as Part-time Lecturers

AKBARI, Kamran, Dept. of Applied Mathematics, September 1, 2018 – December 31, 2018.

GRAF, Alexxandra, Dept. of Combinatorics & Optimization, September 1, 2018 – December 31, 2018.

GRANVILLE, Kevin, Dept. of Statistics and Actuarial Science, September 1, 2018 – December 31, 2018.

GUO, Danqiao, Dept. of Statistics and Actuarial Science, September 1, 2018 – December 31, 2018.

HACKMAN, Robert, David R. Cheriton School of Computer Science, September 1, 2018 – December 31, 2018.

HARRIS, Matthew, Dept. of Applied Mathematics, September 1, 2018 – December 31, 2018.

LI, Yinan, Dept. of Applied Mathematics, September 1, 2018 – December 31, 2018.

MAHMOUD, Ali, Dept. of Combinatorics and Optimization, September 1, 2018 – December 31, 2018.

MAHMOUD, Amena, Dept. of Combinatorics and Optimization, September 1, 2018 – December 31, 2018.

McINTYRE, Stephanie, David R. Cheriton School of Computer Science, September 1, 2018 – December 31, 2018.

OSUMANU, Abdulmajid, Dept. of Applied Mathematics, September 1, 2018 – December 31, 2018.

PELLOWE, Moriah, Dept. of Applied Mathematics, September 1, 2018 – December 31, 2018.

PHILLIPS, Brendon, Dept. of Applied Mathematics, September 1, 2018 – December 31, 2018.

SHAW, Justin, Dept. of Applied Mathematics, September 1, 2018 – December 31, 2018.

SHI, Yidan, Dept. of Statistics and Actuarial Science, September 1, 2018 – December 31, 2018.

WANG, Xiaojing, Dept. of Combinatorics & Optimization, September 1, 2018 – December 31, 2018.

WEI, Yunran, Dept. of Statistics and Actuarial Science, September 1, 2018 – December 31, 2018.

Postdoctoral Fellows appointed as Part-time Lecturers

ABELARD, Simon, David R. Cheriton School of Computer Science, September 24, 2018 – September 23, 2019.

BASERI, Yaser, David R. Cheriton School of Computer Science, July 1, 2018 – June 30, 2019.

DAS, Pranabesh, Dept. of Pure Mathematics, June 7, 2018 – May 31, 2020.

Postdoctoral Fellow reappointed as part-time Lecturers

FREIBERG, Tristan, Dept. of Pure Mathematics, September 1, 2018 – June 30, 2019.

JAMSHIDPEY, Armin, David R. Cheriton School of Computer Science, October 1, 2018 – September 30, 2019.

NG, Timothy, David R. Cheriton School of Computer Science, September 7, 2018 – September 6, 2019.

TRAN, Ngoc Hieu, David R. Cheriton School of Computer Science, August 1, 2018 – July 31, 2019.

A.1. Change

DAWOUD, Dina, Lecturer, Dept. of Statistics and Actuarial Science (*ref.* Dean's Report to Senate, March, 2017)

From: April 28, 2017 – April 26, 2019

To: September 1, 2018 – August 31, 2021

FOUNTOULAKIS, Kimon, Assistant Professor, David R. Cheriton School of Computer Science (*ref.* Dean's Report to Senate, June 2018)

From: July 1, 2018 – June 30, 2021

To: January 1, 2019 – June 30, 2022

GARBARY, Robert, Lecturer, Office of the Dean (*ref.* Dean's Report to Senate, January 2017)

From: July 31, 2017 – July 29, 2019

To: September 1, 2018 – August 31, 2020

ISTEAD, Lesley, Lecturer, David R. Cheriton School of Computer Science (*ref.* Dean's Report to Senate, September 2017)

From: July 1, 2017 – June 29, 2019

To: July 1, 2018 – August 31, 2021

KOZLOWSKI, Emily, Lecturer, Dept. of Statistics and Actuarial Science (*ref.* Dean's Report to Senate, June 2017)

From: September 1, 2017 – August 30, 2019

To: September 1, 2018 – August 31, 2021

McGRATH, Paul, Lecturer, Office of the Dean (*ref.* Dean's Report to Senate, May 2018)

From: August 31, 2018 – August 29, 2020

To: September 1, 2018 – August 31, 2020

B. ADMINISTRATIVE APPOINTMENTS

LI, Pengfei, Associate Chair, Undergraduate Studies, Dept. of Statistics and Actuarial Science, September 1, 2018 – June 30, 2020.

ÖZSU, Tamer, Director, Waterloo/Huawei Joint Innovation Lab, David R. Cheriton School of Computer Science, June 27, 2018 – June 26, 2021.

WILLARD, Ross, Associate Chair, Undergraduate Studies, Dept. of Pure Mathematics, July 1, 2018 – June 30, 2021.

WU, Changbao, Associate Chair, Research, Dept. of Statistics and Actuarial Science, July 1, 2018 – June 30, 2021.

ADMINISTRATIVE REAPPOINTMENTS

ATLEE, Jo, Director of Women in Computer Science, David R. Cheriton School of Computer Science, July 1, 2018 – December 31, 2018.

HARMSWORTH, David, Assistant Dean – Students, Office of the Dean, May 1, 2018 – April 30, 2020.

MARRIOTT, Paul, Associate Chair, Graduate Studies, Dept. of Statistics and Actuarial Science, January 1, 2019 – June 30, 2019.

SKRZYDLO, Diana, Director, Master of Actuarial Science Program, Dept. of Statistics and Actuarial Science, January 1, 2019 – December 31, 2021.

C. RESIGNATIONS

MOHAMMAD, Nagham, Dept. of Statistics & Actuarial Science, effective August 31, 2018.

D. RETIREMENT

CHAN Edward Ping-Fung, David R. Cheriton School of Computer Science, June 30, 2018.

E. SABBATICALS (for approval by the Board of Governors)

MORARU, Ruxandra (Associate Professor), Dept. of Pure Mathematics, January 1, 2019 – June 30, 2019, at 85% salary. This is an early sabbatical.

SCOTT, Matthew (Associate Professor), Dept. of Applied Mathematics, January 1, 2019 – December 31, 2019 at 85% salary.

F. SPECIAL LEAVE

COOK, William (Professor), Dept. of Combinatorics and Optimization, September 1, 2018 – August 31, 2019. This is an unpaid leave.



Stephen M. Watt
Dean

UNIVERSITY OF WATERLOO
REPORT OF THE DEAN OF SCIENCE TO SENATE
September 17, 2018

For information:

A. APPOINTMENTS

Probationary Term

HAINES, Lacey, Assistant Clinical Professor, School of Optometry and Vision Science, July 1, 2019 to June 30, 2022. [B.Sc., Memorial University of Newfoundland (2008); OD, University of Waterloo (2012); Residency Diploma, University of Waterloo (2013).]

HUG, Laura, Assistant Professor, Department of Biology, July 1, 2019 to June 30, 2022. [B.Sc., University of Guelph (2005); M.Sc., Dalhousie University (2007); Ph.D., University of Toronto (2012).]

KATZENBACK, Barbara, Assistant Professor, Department of Biology, July 1, 2019 to June 30, 2022. [B.Sc., University of Alberta (2006); Ph.D., University of Alberta (2002).]

STANBERRY, Andre, Associate Clinical Professor, School of Optometry and Vision Science, July 1, 2019 to June 30, 2022. [B.Sc., University of Western Ontario (2004); OD, State University of New York (SUNY) College of Optometry (2008).]

TSEN, Wei (Adam), Assistant Professor, Department of Chemistry, July 1, 2019 to June 30, 2022. [B.S., Electrical Engineering and Computer Sciences with Honors and Engineering Physics with Honors, University of California, Berkeley (2006); Ph.D., Cornell University (2012).]

WONG, William L., Assistant Professor, School of Pharmacy, July 1, 2019 to June 30, 2022. [B.Sc., York University (1999); M.Math, University of Waterloo (2000); Ph.D., University of Waterloo (2009).]

Definite Term Appointment – Full-time

DIXON, D. George, Research Professor, Department of Biology, July 1, 2018 to June 30, 2020. [B.Sc., Sir George Williams (Concordia) (1972); M.Sc., Concordia University (1975); Ph.D., University of Guelph (1980).] Following his term as Interim Vice-President, Academic and Provost, Dr. Dixon will be continuing to do research in the Department of Biology as well as some service duties for the University of Waterloo.

STEELMAN, Colby, Lecturer, Earth and Environmental Sciences, September 1, 2018 to August 31, 2019. [B.Sc., University of Waterloo (2007); Ph.D., University of Waterloo (2012).] Dr. Colby Steelman is joining the Earth and Environmental Sciences Department in a one year appointment as Lecturer. He has a strong background in applied geophysics and hydrology. He will take over teaching Hydrogeology Field Methods courses at the undergraduate level (Earth 223, 458L) and graduate level (Earth 671) and provide team teaching (Earth 260, 460, 461) and research support to the Geophysics Program at both levels in the department.

Adjunct Appointments
Graduate Supervision

COUTURE, Raoul-Marie, Associate Professor, Department of Earth and Environmental Sciences, June 1, 2018 to May 31, 2021.

DÜRR, Hans, Assistant Professor, Department of Earth and Environmental Sciences, August 1, 2018 to July 31, 2021.

LAPEN, David R., Professor, Department of Earth and Environmental Sciences, June 1, 2018 to May 31, 2021.

SUDICKY, Edward, (Professor Emeritus), Professor, Department of Earth and Environmental Sciences, May 1, 2018 to April 30, 2021.

Research

CHEONG, Allen, Associate Professor, School of Optometry and Vision Science, July 1, 2018 to June 30, 2021.

LAM, Carly S.Y., Professor, School of Optometry and Vision Science, July 1, 2018 to June 30, 2021.

Other

POLONENKO, Tanya, Assistant Clinical Professor, School of Optometry and Vision Science, July 1, 2018 to June 30, 2021.

Undergraduate Instruction

LILLIE, Elaine, Lecturer, School of Pharmacy, September 10, 2018 to December 31, 2019.

Graduate Supervision and Research

HAYWARD SIERENS, Lauren, Assistant Professor, Department of Physics and Astronomy, July 1, 2018 to August 31, 2023.

SMITH, Ralph, (Professor Emeritus), Professor, Department of Biology, September 1, 2018 to August 31, 2021.

Adjunct Reappointments
Graduate Supervision

CHERRY, John, (Distinguished Professor Emeritus), Professor, Department of Earth and Environmental Sciences, August 1, 2018 to July 31, 2021.

FURMAN, Alex, Professor, Department of Earth and Environmental Sciences, July 1, 2018 to June 30, 2021.

GILLHAM, Robert W., (Distinguished Professor Emeritus), Professor, Department of Earth and Environmental Sciences, September 1, 2018 to August 31, 2021.

HIGGINS, Scott, Professor, Department of Earth and Environmental Sciences, April 1, 2018 to March 31, 2021.

JOHNSON, Clark M., Professor, Department of Earth and Environmental Sciences, January 1, 2018 to December 31, 2020.

RODEN, Eric, Professor, Department of Earth and Environmental Sciences, January 1, 2018 to December 31, 2020.

STUMPF, Andrew, Professor, Department of Earth and Environmental Sciences, October 1, 2018 to September 30, 2021.

Undergraduate Instruction

TOLMIE, Bronwyn, Assistant Clinical Professor, School of Pharmacy, July 1, 2018 to December 31, 2019.

Graduate Supervision and Research

ALMEIDA, Quincy, Professor, School of Optometry and Vision Science, June 1, 2018 to May 31, 2021.

CHOU, B. Ralph, (Professor Emeritus), Professor, School of Optometry and Vision Science, June 1, 2018 to May 31, 2021.

FAST, Mark, Professor, Department of Biology, October 1, 2018 to September 30, 2021.

SCHNEIDER, Eric, Associate Professor, School of Pharmacy, September 1, 2018 to August 31, 2021.

TAYLOR, William D., (Distinguished Professor Emeritus), Professor, Department of Biology, July 1, 2018 to June 30, 2021.

VANDERKOOY, John, (Distinguished Professor Emeritus) Professor, Department of Physics and Astronomy, July 1, 2018 to August 31, 2022.

Research and Other

PEDDLE, Angela, Assistant Clinical Professor, School of Optometry and Vision Science, August 1, 2018 to July 31, 2021.

SEMPLE, John, (Professor Emeritus), Professor, Department of Biology, September 1, 2018 to August 31, 2021.

Graduate Supervision and Other

GILBERT, Janice, Assistant Professor, Department of Biology, September 16, 2018 to September 15, 2021.

RENNIE, Michael D., Associate Professor, Department of Biology, September 1, 2018 to August 31, 2021.

Graduate Instruction, Graduate Supervision and Research

MYERS, Robert, Professor, Department of Physics and Astronomy, September 1, 2018 to August 31, 2023.

STUDENIKIN, Sergei, Associate Professor, Department of Physics and Astronomy, May 1, 2018 to August 31, 2024.

Cross Appointments

BACKHOUSE, Chris, Professor, Department of Electrical and Computer Engineering cross appointed to Department of Biology, September 1, 2018 to August 31, 2021.

MIELKE, John, Associate Professor, School of Public Health and Health Systems cross appointed to Department of Biology, September 1, 2018 to August 31, 2021.

PETERSON, Sean, Associate Professor, Department of Mechanical and Mechatronics Engineering cross appointed to School of Optometry and Vision Science, August 1, 2018 to July 31, 2021.

Cross Reappointments

DUNCAN, Robin, Assistant Professor, Department of Kinesiology cross appointed to Department of Biology, October 1, 2018 to September 30, 2021.

EMERSON, Joseph, Associate Professor, Department of Applied Mathematics cross appointed to Department of Physics and Astronomy, May 1, 2018 to April 30, 2021.

MARTIN-MARTINEZ, Eduardo, Assistant Professor, Department of Applied Mathematics cross appointed to Department of Physics and Astronomy, May 1, 2018 to April 30, 2021.

REIMER, Michael, Assistant Professor, Department of Electrical and Computer Engineering cross appointed to Department of Physics and Astronomy, April 1, 2018 to March 31, 2021.

ROY, Pierre-Nicholas, Professor, Department of Chemistry cross appointed to Department of Physics and Astronomy, May 1, 2018 to April 30, 2021.

Changes in Appointment

DELANEY, Keith, appointed Full-time, Definite Term Lecturer, Department of Earth and Environmental Sciences, May 1, 2018 end date changed from April 30, 2019 to April 29, 2020.

DUNCKER, Bernard, Associate Dean Research, Faculty of Science, end date changed from December 31, 2018 to August 31, 2018.

MÜLLER, Kirsten, Associate Dean Graduate Studies, Faculty of Science, end date changed from August 31, 2021 to October 31, 2018.

WETTIG, Shawn, Associate Director, Research and Graduate Studies, September 1, 2018 to August 31, 2019 – Administrative Appointment Cancelled.

Special Appointments
Undergraduate Instruction

TARIO, Allison, Lecturer, School of Pharmacy, September 1, 2018 to December 31, 2018.

Special Reappointments
Undergraduate Instruction

AHMAD, Jauher K., Lecturer, School of Pharmacy, September 1, 2018 to December 31, 2018.

FENG, Lucy, Lecturer, School of Pharmacy, September 1, 2018 to December 31, 2018.

HUGHES, Dave, Lecturer, School of Pharmacy, September 1, 2018 to December 31, 2018.

McARTHUR, Robyn, Lecturer, School of Pharmacy, October 1, 2018 to December 31, 2018.

PACEY, Dean, School of Pharmacy, September 1, 2018 to December 31, 2018.

WONG, Jeffrey, Lecturer, School of Pharmacy, September 1, 2018 to December 31, 2018.

B. ADMINISTRATIVE APPOINTMENTS

RICHARD, Cynthia, Associate Director, Curriculum, School of Pharmacy, September 1, 2018 to August 31, 2019.

WETTIG, Shawn, Associate Dean, Graduate Studies, Faculty of Science, October 1, 2018 to September 30, 2021.

ADMINISTRATIVE REAPPOINTMENTS

BEAZELY, Michael, Associate Director, Curriculum, School of Pharmacy, July 1, 2018 to August 31, 2018.

JONES, Debbie, Associate Director, Academics, School of Optometry and Vision Science, July 1, 2018 to August 31, 2018.

MARSDEN, Mungo, Associate Chair, Graduate Studies, Department of Biology, September 1, 2018 to August 31, 2021.

MOFFATT, Barbara, Associate Dean, Student Relations, Faculty of Science, September 1, 2018 to August 31, 2021.

RICHARDSON, Jean, Director, Science and Business Program, Faculty of Science, July 1, 2018 to June 30, 2021.

SPAFFORD, Marlee, Associate Dean, Undergraduate Studies, Faculty of Science, April 1, 2019 to March 31, 2022.

TANG, Xiao-wu (Shirley), Associate Dean, Research, Faculty of Science, September 1, 2018 to August 31, 2021.

THOMPSON, Ben, Associate Director, Research, School of Optometry and Vision Science, July 1, 2018 to August 31, 2018.

C. *RESIGNATION*

CONANT Jr., Brewster, Lecturer, Department of Earth and Environmental Sciences, effective September 1, 2018.

COUTURE, Raoul-Marie, Research Associate Professor, Department of Earth and Environmental Sciences, effective May 1, 2018.

SRINIVASAN, Sruthi, Research Assistant Professor, School of Optometry and Vision Science, effective August 7, 2018.

D. *RETIREMENT*

SMITH, Ralph, Professor, Department of Biology, effective September 1, 2018.

FOR APPROVAL BY THE BOARD OF GOVERNORS

E. *SABBATICAL*

BEAZELY, Michael Andrew, Associate Professor, School of Pharmacy, January 1, 2019 to December 31, 2019, 100% salary arrangements.

MURPHY, Paul, Professor, School of Optometry and Vision Science, split sabbatical leave, January 1, 2019 to June 30, 2019 and January 1, 2020 to June 30, 2020, 100% salary arrangements.

CHANGES IN SABBATICAL

MCMAHON, Terrance, Professor, Department of Chemistry, leave dates changed from September 1, 2017 to August 31, 2019 to September 1, 2017 to August 31, 2018; and Administrative 4 for 4 exchange September 1, 2019 to December 31, 2019 cancelled.

SERVOS, Mark, Professor, Department of Biology, Administrative 4 for 4 exchange January 1, 2019 to April 30, 2019 cancelled.



R.P. Lemieux
Dean

University of Waterloo
SENATE GRADUATE & RESEARCH COUNCIL
Report to Senate
17 September 2018

Senate Graduate & Research Council met on 11 June 2018 and agreed to forward the following item to Senate for approval as part of the regular agenda.

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

FOR APPROVAL

NEW RESEARCH CENTRE

Global Health Policy and Innovation Research Centre

- 1. Motion:** To approve the establishment of the Global Health Policy and Innovation Research Centre, as presented in Attachment 1.

Rationale: The mission of the Global Health Policy and Innovation Research Centre is to enhance the health and wellbeing of populations internationally; to alleviate global health inequities by creating solutions that target underserved and vulnerable communities; and to provide training and mentoring to create the health leadership the world needs to continue to meet global health challenges in the future. This mission sits at the intersection of two of the University of Waterloo's eight strategic research objectives—enhancing quality of life (health and well-being) and supporting change (society, culture and governance). As well, it supports two of the eight themes of the university's strategic plan (transformational research; global prominence and internationalization) and is consistent with some key themes in the Faculty of Applied Health Science (partnerships and collaboration, leveraging technology and innovation, and international impact).

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

Charmaine Dean
Vice President, University Research

Proposal for Global Health Policy and Innovation Research Centre at University of Waterloo

May 2, 2018.

Overview

Globalization has brought great benefits and great threats to human health. The heavy focus on maternal and child health as well as major infectious diseases in the Millennium Development Goals (MDGs: 2000-2015) was associated with large declines in maternal, infant and child deaths, with sharp increases in funding available for international health, and with new institutions such as the three Global Funds/Alliances.

The Sustainable Development Goals (SDGs: 2015-2030) have more ambitious health goals and a broader perspective than the MDGs, with the focus on progress towards Universal Health Coverage and 26 health indicators (more than for any other individual SDG). There is strong focus on improving health systems (including providing financial protection) whereas the MDGs had more of a focus on specific key diseases.

At the same time, with increased travel new threats have emerged and spread rapidly internationally, such as SARS, MERS, Ebola and the Zika virus. This is occurring at the same time as slowing population growth is leading to population aging, with corresponding increases in non-communicable diseases. Profound inequities in health exist globally, and concerning signs are visible (such as the recent decline in international funding for HIV/AIDS after years of a trend increase). Work on global health policy is therefore very timely.

Work on global health policy is inherently multi-disciplinary. The University of Waterloo has faculty in at least three different Faculties currently working on the topic, as well as linkages with a similar group at Laurier which have been further fostered by activities at the Balsillie School. Last year, the group came together (along with colleagues from McMaster University, University of Guelph and Brock University) with the support of the Canadian Coalition for Global Health Research to run a very successful “Ontario Coalition Institute” at the Balsillie School September 29 to October 2 2016, which brought together 25 new scholars at four different universities, with mentors and resource persons working in global health from the University of Waterloo, Laurier, and three other nearby institutions.

This recent initiative has led to a number of additional efforts by participants and colleagues to advance global health research and policy. For example, Sue Horton and Craig Janes from University of Waterloo, and Karen Grépin from Wilfrid Laurier University received, a CIHR-ICS Planning and Dissemination grant focused on access to diagnostic technology in LMIC settings, and Craig Janes and Plinio Morita have developed programs focused on addressing adolescent mental health issues in Mongolia. Susan Elliott, as well as key researchers from the Water Institute, continues to lead a capacity building initiative among young scholars through the Queen Elizabeth Scholars Program. She also applied for a CIHR Planning and Dissemination grant to develop a water-health research program with a government funded water institute in Cancun, Mexico.

There is strong student interest in global health. There is an undergraduate chapter of the Canadian Coalition for Global Health Research at the University of Waterloo which had about 60 members last academic year, and which held a number of successful events on campus and also participated in a larger end-of-year conference with student colleagues from McMaster, Guelph and Brock Universities. At the graduate level there are a group of students pursuing Master's and PhD degrees with a global health focus, as well as in the Master's and PhD programs in Global Governance at the Balsillie School, and the Master's of Development Practice in the Faculty of Environment. The School is currently augmenting the existing courses in global health to build a stream of graduate courses in Global Health which could be used as the basis for a research field in the area, or a graduate diploma. The School also just made a new tenure-stream appointment in global health that will help to augment the availability of courses in the area. Development of courses and programming in global health is very much complementary to development of a research centre.

This is therefore an opportune time at which to propose a research centre in Global Health Policy and Innovation. This is initially planned as a centre in Applied Health Sciences, reporting to the Dean of Applied Health Sciences, with participation from members of other Faculties at the University of Waterloo, and active involvement of colleagues affiliated with the Global Governance programs at the Balsillie School (including colleagues from Laurier).

Mission

The Research Centre for Global Health Policy and Innovation aims:

- To enhance the health and wellbeing of populations internationally
- To alleviate global health inequities by creating solutions that target underserved and vulnerable communities
- To provide training and mentoring to create the health leadership the world needs to continue to meet global health challenges in the future

This mission sits at the intersection of two of the University of Waterloo's eight strategic research objectives, namely enhancing quality of life (health and well-being), and supporting change (society, culture and governance) (University of Waterloo, undated). The mission supports two of the eight themes of the university's strategic plan (2013), namely transformational research and global prominence and internationalization. It is also consistent with some key themes in the Faculty of Applied Health Science including partnerships and collaboration, leveraging technology and innovation, and international impact.

Objectives

To meet this mission, objectives of the centre are:

- Facilitating joint research projects by faculty members working across faculties;
- Raising the profile of global health policy research by hosting high profile events such as visiting speakers and film screenings to present on topics of global interest

- Training and mentoring students, e.g. by offering opportunities as assistants on research projects, by providing information about experiential opportunities off campus, and (when funding is available) supporting students in innovative projects in health
- Raising the profile of global health policy at the university, and linking with other groups engaged in similar work (other research organizations, government and non-government organizations engaged in promoting global health, other research groups at the university with activities in global health, organizations such as the Canadian Coalition of Global Health Research (CCGHR; <http://www.ccghr.org>) and the Canadian Society for International Health (<http://www.csih.org/en>).
- Contributing to the generation of applied research by responding selectively to requests-for-proposals related to global health policy of interest to centre members
- Hosting occasional public events, depending on interest of faculty members

In order to document success of the Centre in these objectives, we will maintain information on:

- Numbers of graduate students involved with the Centre and receiving information about activities related to global health. Undergraduate students will also receive information, and are already organized through the chapter of the Canadian Coalition for Global Health Research.
- Numbers of events organized by the Centre
- Applications for and receipt of grants involving more than one member of the Centre
- Applications for and receipt of contracts involving more than one member of the Centre
- Other linkages in global health promoted by the Centre

Related initiatives in Applied Health Sciences

Two other new initiatives in AHS will also help to raise the profile of global health. One is an initiative to promote student innovations with a global health focus (in development) and the other is an initiative to provide modest seed funding for graduate students to undertake international research. Although these initiatives are not connected directly with the Research Centre, many of the same faculty members are likely to be involved in the three initiatives. All three initiatives can help raise the profile of global health.

Global Health/Policy Research at other institutions

A number of units work on global health at other Canadian universities. Most of the other research-intensive universities have one (or more) global health units, offering academic programs or conducting research (or both). Examples include:

- University of British Columbia: Global Health Research Program in the School of Public Health
- University of Manitoba: Centre for Global Public Health

- Western University: Africa Centre and Global Health Conversations Series in the Schulich School of Medicine and Dentistry
- University of Ottawa: Centre for Global Health
- Dalhousie University: Global Health Office
- University of Toronto: Institute for Global Health Equity and Innovation in the Dalla Lana School; and in the affiliated medical institutions the Centre for Global Health Research (St. Michael's Hospital), the Centre for Global Child Health (Hospital for Sick Children), Office of Transformative Global Health (CAMH)
- University of Alberta School of Public Health: MSc in Global Health
- University of Calgary School of Medicine: Global Health and International Partnerships
- McMaster University: global health research in Family Medicine; Global Health Office and MSc in Faculty of Health Sciences
- Université de Montréal: Unité de Santé Internationale
- McGill University: Global Health Office, Faculty of Medicine

Some universities without medical schools also have programs and research, e.g.:

- Ryerson University: Centre for Global Health and Health Equity
- York University: BA, BSc in Global Health

There are also a select group of units focusing on health policy across Canada. These include:

- University of British Columbia: Centre for Health Services and Policy Research
- University of Toronto Institute for Health Policy, Management and Evaluation
- McMaster University Centre for Health Economics and Policy Analysis

And these units engage in international research, although their primary focus is domestic; however, there are few if any units in Canada working explicitly on global health policy.

Examples of other groups working on global health policy internationally include the Centre for Global Development in Washington DC, the Centre for Disease Dynamics Economics and Policy in Washington DC and the Institute of Cancer Policy at King's College London. There are teaching programs in global health policy at a variety of universities (Edinburgh, Harvard, Princeton, London School of Tropical Medicine and Hygiene, for example).

Examples of global policy research of centre participants

Tobacco policy: Geoff Fong heads the International Tobacco Control (ITC) Project which conducts research in 28 countries to evaluate the impact of the WHO Framework Convention on Tobacco Control, the global tobacco control treaty; the ITC Project is the world's largest tobacco research program. David Hammond has collaborated on papers from the project, and also independently advised governments in half-a-dozen countries on tobacco control. Kitty Corbett has worked on tobacco use (as well as alcohol and marijuana use) in youth, with a particular focus on differences between men and women, as well as among visible minorities in North America.

Food policy: David Hammond works on obesity prevention and topics such as food labelling and taxation of sugar-sweetened beverages (primarily in Canada); Rhona Hanning works on healthy eating in youth, with projects focusing on Aboriginal peoples in Canada and community-level

determinants of maternal child health and nutrition in Africa. Susan Horton works on nutritional status and micronutrients, also in Africa and her findings have been used to strengthen international advocacy efforts around improved nutrition. Susan Elliott works on allergens, many of which are in food. Shannon Majowicz works on food safety, with a focus on synthesizing evidence to inform national and international food standards, including via the Codex Alimentarius Commission.

Environment and resources issues: Susan Elliott works on policies for clean water and adequate sanitation, particularly in sub-Saharan Africa. Brian Laird works on contaminants in the environment, such as arsenic in rice and mercury in seafood, and many of the policy solutions to these problems require concerted international action. Craig Janes has worked with a team in Mongolia to build capacity to undertake health assessments in the mining sector. Working with partners from the World Health Organisation, civil society and several government Ministries, they have achieved success in improving policy, including two important new pieces of legislation.

Infectious disease: Kitty Corbett and Craig Janes have worked on emerging infectious disease; Alan Whiteside (Laurier) has a long-standing program of working on policy for HIV-AIDS in sub-Saharan Africa. Shannon Majowicz works on infections transmitted via food and water, with both a Canadian and a global burden focus, and has consulted for the World Health Organization and the Food and Agriculture Organization of the United Nations in this regard.

Evaluation of health programs/interventions: Karen Grépin (Laurier) and Susan Horton (both economists) have worked on evaluating health programs and interventions, and have interests in health systems in low- and middle-income countries. As noted above, the ITC Project (Geoff Fong and David Hammond) has conducted evaluation studies of tobacco control policies; these evaluations have also included evaluation of policies in low- and middle-income countries.

The faculty group bring a range of disciplinary expertise to bear on health issues. This includes medical anthropology (Kitty Corbett, Craig Janes, Jennifer Liu); psychology (David Hammond, Geoff Fong); sociology (John Hirdes), economics (Karen Grépin, Susan Horton, Alan Whiteside); geography (Susan Elliott), tourism (Karla Boluk), nutrition (Rhona Hanning), health studies (Kelly Skinner), environmental science (Brian Laird), epidemiology and public health practice (Shannon Majowicz), and engineering (Plinio Morita).

Constitution

The constitution of the centre is governed by Policy 44 of the University Secretariat. <https://uwaterloo.ca/secretariat-general-counsel/policies-procedures-guidelines/policy-44-research-centres-and-institutes>

Organizational and Reporting Structure

The centre is composed of Regular Members and Limited-Term Members (defined below). Centre members meet at least once a year (Annual General Meeting) and more frequently as required. At the Annual General Meeting which is chaired by the Dean of Applied Health Sciences, all Members are entitled to speak (as recognized by the chair of the meeting), and

decisions are preferably made by consensus. Where a formal vote is required (e.g. on matters such as appointing a Director, disposition of budget, or amending the constitution of the centre), only Regular Members can vote. Quorum at the Annual General Meeting requires that 50% plus one of voting members are faculty members of the University of Waterloo.

Membership

The membership of the centre consists of Regular Members and Limited Term Members whose interests are in accordance with the centre's mission.

Regular Members are full-time faculty members at either University of Waterloo or another university. Limited-Term Members include students, postdoctoral fellows, staff or non-full-time faculty at University of Waterloo or another university, subject to the restriction that the majority of Limited Term Members shall be from the University of Waterloo. Regular and Limited-Term Members from another university are limited to those actively involved in centre activities. Applications for Membership will be reviewed at the Annual Meeting of Members, and in between such meetings, by the Executive Committee (below).

Non-university members are invited to participate in activities of the centre, but not accorded membership.

Committees

Executive Committee

An Executive Committee will carry out business of the centre in between General Meetings of the members. The Executive Committee is chaired by the Dean or his/her delegate, and includes the Director, the Scientific Director (if one is appointed in the future), and others as determined by the Dean. The Executive Committee provides advice to the Dean, Director and (if one is appointed in the future), the Scientific Director.

Other committees can be set up by decision of the Annual General Meeting, as needed.

Meetings of the Executive Committee and the Membership require circulation of an agenda to all Members one week in advance; following the meeting minutes will be circulated promptly.

Director

The Director of the Centre reports to the Dean of Applied Health Sciences. The Dean of Applied Health Sciences will also consult as needed with the relevant Deans from other Faculties at University of Waterloo from which Regular Members are drawn (initially Arts and Environment). The Director shall normally be a full-time faculty member from the Faculty of Applied Health Sciences at the University of Waterloo, but by decision of the Dean can also be a staff member of the University or an external appointee.

A nominating committee chaired by a faculty member nominated by the Dean of the Faculty, will provide advice to the Dean on the appointment or reappointment of the Director. This committee will consist of representatives of the Membership, as approved by the Dean, and may

include a range of participants in the centre (i.e. Regular Members, Limited Term Members, staff, students may be selected).

The Director is appointed for an initial term of up to three years and may normally be reappointed once only for a term of up to three years.

The Director is responsible for the overall management of the Institute, the preparation of the annual budget, and supervision for Institute employees (if any). Unless a Scientific Director is appointed, the Director is also responsible for guiding the research agenda of the centre, with input from the Executive Committee and from the Membership.

Budget

The Centre will receive modest seed support from the Faculty Dean, of \$10,000/year for five years (2018-2022). The intention is to use this to raise profile and collaboration, and to facilitate applications for external funding.

It is proposed to allocate \$7000 per year to administrative support (web page, organizing events, etc.) and \$3000 per year to funding events (public events, film screenings, networking events, etc.)

Short Biographies of Proposed Regular Members

Karla Boluk

Kitty Corbett

Warren Dodd

Susan Elliott

Geoff Fong

Karen Grépin

David Hammond

Rhona Hanning

John Hirdes

Susan Horton

Craig Janes

Brian Laird

Jennifer Liu

Shannon Majowicz

Plinio Morita

Kelly Skinner

Alan Whiteside

[Volume of Biographies found here](#)

MEMORANDUM

TO: Dr Susan Horton

FROM: James W.E. Rush, Dean

DATE: May 7, 2018

SUBJECT: Global Health Policy Research Centre

I wish to commend you and your colleagues for taking the initiative, through your engagement, discussions and planning, to propose the Global Health Policy Research Centre at University of Waterloo.

I fully support this proposal as its mission and objectives are focused on providing impactful solutions to issues of local, national and global importance, and the proposal is based on a strong foundation of expertise, and a model which envisions openness to bringing in expertise from a variety of disciplines, and growing in scope and intensity as such partnerships continue to develop and thrive at UW and beyond. As the Centre is to be initially Faculty-based Centre (though encouraging and including cross-Faculty participation) I am pleased that this proposal enjoys the support of Faculty Council which endorsed this at its April 2018 meeting, and I am also pleased to provide some seed support.

As Dean of the Faculty of Applied Health Sciences, I commit seed support of \$ 10,000/year for each of the first five years of the Centre's activity, with the intention that this will aid the Centre in raising profile and collaboration during this initial phase, and will facilitate applications for external funding, and the growth in scope and intensity of the Centre.

With confidence in the success in the Centre, and excitement to follow its achievements,



James W.E. Rush, PhD
Dean, Faculty of Applied Health Sciences



MEMORANDUM

DATE: September 5, 2018
TO: Members of Senate
FROM: James Rush, vice-president, academic & provost
SUBJECT: University Research Chair – Revised Policy

Following discussion at the June Senate meeting, the Faculty Relations Committee was engaged. As a result, there are no changes to the consultation path for these designations, but in order to retain the usual approval process for University Research Chairs, the following change to the policy is proposed.

Motion: To approve a change in the selection process (as provided in the attached memorandum in **bold/underlined** text) such that the final decision will be made by the Vice-President, Academic & Provost.

THE UNIVERSITY OF WATERLOO

University Research Chairs

The University of Waterloo owes much of its reputation and stature to the quality of its professors and their scholarly accomplishments. Waterloo recognizes exceptional achievement and pre-eminence in a particular field of knowledge through the designation “University Research Chair.”

University Research Chair

A faculty member with the University Research Chair title will receive either an annual stipend of \$10,000 or a teaching reduction of one course per year, allocated to the Department/School, for the duration of the University Research Chair appointment. The University Research Chair title and benefits will be relinquished if a Canada Research Chair or other major research chair is awarded. It is anticipated that there will be a limited number of University Research Chairs; at steady state, the intention is to make at most five appointments each year. The number of appointments will be reviewed annually by the Vice-President, Academic & Provost in consultation with Deans’ Council. A title may be held for up to seven (7) years, with the possibility of a re-nomination.

The selection process is as follows:

1. A faculty Dean may forward one [Applied Health Sciences, Environment] or two [Arts, Engineering, Mathematics, Science] nominations of CRC-eligible faculty members to the Vice-President, Academic & Provost, who will make the final decision.
2. A nomination must be accompanied by a curriculum vitae and short, non-technical description of the nominee’s scholarly contributions, together with any other documentation the Dean considers necessary to make a compelling case.

University Research Chair in recognition of exemplary trajectory after the second term of a Tier 1 Canada Research Chair

A faculty member at the conclusion of the second term as a Tier 1 Canada Research Chair, may also be considered for a University Research Chair. The award recognizes distinguished record of accomplishments and a continued outstanding trajectory of excellence in research and scholarship, as well as research leadership. The successful candidate will receive either an annual stipend of \$10,000 or a teaching reduction of one course per year, allocated to the Department/School, for the duration of the University Research Chair appointment, with this support provided by the faculty Dean. The University Research Chair title may be held for up to seven (7) years, and is not renewable.

The selection process is as follows:

1. A faculty Dean may forward nominations for individuals to the Vice-President, University Research, **who will make a recommendation to the Vice-President, Academic & Provost, who in turn will make the final decision.**
2. A nomination must be accompanied by a curriculum vitae and short, non-technical description of the nominee’s scholarly contributions, together with any other documentation the Dean considers necessary to make a compelling case of exceptional achievement over the term of the Tier 1 Canada Research Chairship as well as an accelerated trajectory in the final years of the Chairship.

The Vice-President, Academic & Provost will consult with the President of the Faculty Association before announcing any University Research Chair appointments.

Course Evaluation Project Report to Senate

September 17, 2018

Presented by: David DeVidi
Department of Philosophy
Chair, CEPT



Progress since previous report

1. Senior Research Specialist/Project Manager began full-time work on May 1.
2. “Point person” appointed in each Faculty
3. Research Project 1: Student Focus Groups
 - Project completed, first draft of analysis completed
4. Research Project 2: Pilot Testing
 - Planning stage: what will be feasible and meaningful
 - Consulting with other Canadian universities, SCCR Unit, etc.



Sonya Buffone

Focus Groups

- One focus group in each Faculty
 - Over 250 students volunteered to take part (in July!)
 - Invitations aimed at representation: different years of study, programs, genders in each Faculty group
- What we hoped to learn
 - What are students thinking when they fill in questionnaires?
 - What leads to high scores/low scores?
 - What's the difference, for them, between scores of 4 and 5? What does a 3 mean?
 - Do students understand the questions in the way we intend them?

Results: tweaking of draft instrument, will inform “Users Guides”

To Do List

1. Recommendations about software needs, governance, etc.
 - Preliminary research and consulting are underway
2. “Users Guides” for Chair/PRCs/TPCs, instructors
 - Will begin writing these, but can’t be finalized until results of Pilot Testing are known
3. Coordination with Complementary Methods committee: Ongoing

Goal: Recommendations to Senate by next May or June

Arbitration at Ryerson

Key Findings:

- SETs not to be used for performance review, T&P, until repaired
- Ryerson must put in place complementary methods to supplement SETs



Relevance for Waterloo?

Arbitration at other Canadian universities count as precedents

- so would matter if FAUW took a case to arbitration

But ...

- Ryerson Admin did not call expert witnesses
- Arbitration is inherently unpredictable
- Expert opinion, even the RUFA experts, is that SETs are important
“Student ratings of teaching are valuable when they ask the right questions, report response rates and score distributions, and are balanced by a variety of other sources and methods to evaluate teaching.” (Stark and Frishtat, 2014)

Concrete Implications

1. Ryerson's instrument was out of date
 1. They now must do what CEPT has been doing for past few years
 2. Some practices at Waterloo will need to change
2. Waterloo is ahead of the curve
 1. CEPT, Phase 1, recommended investigating complementary methods
 2. Senate struck special committee to do just that

Overall lesson: Waterloo is well-placed to implement changes that will prevent any plausible arbitration (by having sensible practices!)

Report of the Vice-President, University Research to Senate

September 2018

Tri-Agency

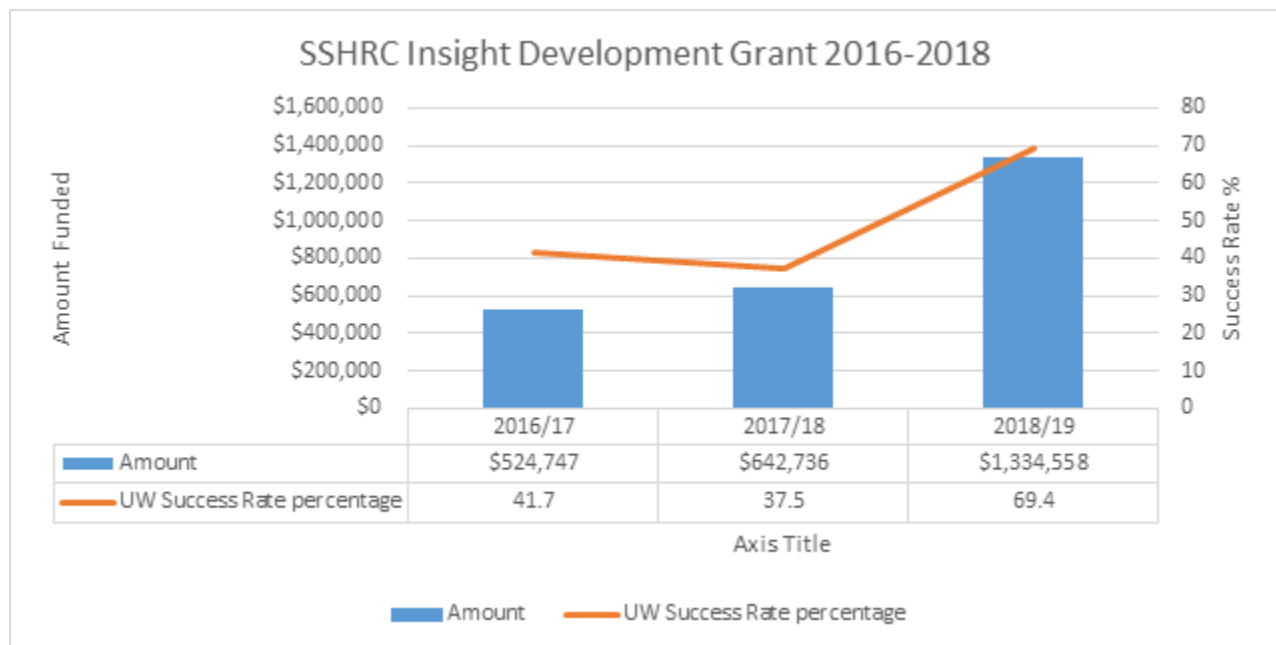
Waterloo has been chosen by the Tri-Agency as one of twelve pilot sites to implement its renewed Tri-Agency Administration guide and engagement sessions will be occurring in the fall with grant recipients from the pilot sites. The initiative focuses on the following three key areas:

- Moving to a less directive approach for the administration and use of grant funds;
- Renewing the Agencies' approach to Financial Monitoring reviews; and
- Increasing the overall effectiveness of the post-award administration of grants.

SSHRC Results

1. Insight Development Grants

Waterloo submitted 36 applications and was successful on 25, achieving a 69.4% success rate for a total of \$1,334,558. Our average amount awarded is \$53,382. The national success rate was 59.4% with the average awarded \$56,202.



2. Partnership Grant – Stage One

Waterloo submitted four applications at Stage One. We have one researcher moving on to Stage Two. The typical success rate for Stage One is between 16-20%. The applicant will receive \$20,000 to help complete the full application due on November 1.

3. Partnership Engage Grant

Waterloo submitted two applications and was successful on one for a total of \$22,086.

CIHR Results

1. March 2018 Project Grant Competition

Waterloo submitted 25 applications and received 3 full grants for a 12% success rate, and 1 bridge grant (resulting in a 16% total success rate). A total of \$2,187,533 was awarded to Waterloo.

- Jamie Joseph (Pharmacy): \$699,976 over 5 years for project entitled: Role of prolyl hydroxylase in the regulation of insulin release
- Tom Willett (Systems Design Eng): \$653,157 over 4 years for project entitled: Oxidative damage of bone collagen as a mechanism of bone fragility
- Mohammad Kohandel (Applied Math): \$734,400 over 3 years for project entitled: Theoretical, experimental, and preclinical studies of heterogeneity-driven adaptive resistance to chemotherapy: Implications for multimodal targeted therapeutics
- Richard Cook (Statistics): \$100,000 for 1 year (bridge grant) for project entitled: Biostatistical methods for outcome-dependent selection and observation schemes in the study of complex chronic diseases

Institutional Research

1. Early Researcher Award (ERA)

The ERA program funds are to be used over a period of five years to fund eligible expenses for a research team of undergraduates, graduate students, post-doctoral fellows, research assistants, associates, and technicians. In addition, the ERA provides \$100,000/award and up to \$40,000 will be provided by the Ministry to the institution for indirect costs. Each Award must be matched by an additional \$50,000 from the institution.

On August 7, 2018, the University of Waterloo submitted 29 ERA applications to the Ministry of Economic Development, Job Creation and Trade. The total requested amount = \$4,060,000 (\$2,900,000 direct costs; plus \$1,160,000 overhead). The institution provided a total of \$1,450,000 in matching funds towards the 29 submitted applications.

2. Unaffiliated Canada Foundation for Innovation – John R. Evans Leaders Fund (CFI-JELF)

Applications are offered three times a year (February, April and October). The funding is a strategic investment tool that is designed to help institutions to attract and retain the very best researchers.

In June 2018, three applications were submitted for the CFI-JELF's for a total requested amount of \$321,830.