University of Waterloo  
SENATE  
Notice of Meeting  

Date: Monday 22 February 2016  
Time: 3:30 p.m.  
Place: Needles Hall, room 3407  

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<tr>
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<td>Consent Agenda</td>
<td>Motion: To approve or receive for information by consent items 2-5 below.</td>
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<td>2. Minutes of the 18 January 2016 Meeting</td>
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<td>3. Reports from Committees and Councils</td>
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<td>4. Report of the President</td>
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<td>a. Recognition and Commendation</td>
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<td>5. Reports from the Faculties</td>
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| Regular Agenda |  |
| 3:35 | 6. Business Arising from the Minutes  |
| a. Evolution of Senate Membership | Information  |
| b. Residency language in Graduate Studies Calendar | Information  |
| 3:50 | 7. Research Presentation –  |
| Alex Wong, Canada Research Chair in Medical Imaging Systems, Director, Vision and Image Processing Research Group, Systems Design Engineering | Information  |
| 4:05 | 8. Reports from Committees and Councils  |
| a. Executive Committee | Decision  |
| 4:10 | 9. Presentation – Working Group on Bibliometrics’ White Paper* Tamer Özsu, Associate Dean, Research, Faculty of Mathematics | Information  |
| 4:25 | 10. Report of the President  |
| 4:35 | 11. Q&A Period with the President  |
| 4:45 | 12. Report of the Vice-President, Academic & Provost  |
| a. 2015-2016 Operating Budget Update | Information  |
| 4:55 | 13. Report of the Vice-President, University Research  |
| 5:00 | 14. Other Business  |
| 5:05 | 15. Conflict of Interest  |
| Declaration |  |

<p>| CONFIDENTIAL SESSION |  |
| 5:05 | 1 |</p>
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<thead>
<tr>
<th>Time</th>
<th>Item</th>
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<tr>
<td>5:10</td>
<td>16. Minutes of the 18 January 2016 Meeting</td>
<td>Decision</td>
</tr>
<tr>
<td>5:15</td>
<td>17. Business Arising from the Minutes</td>
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<td>5:20</td>
<td>18. Report of the Vice-President, Advancement</td>
<td>Information</td>
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<tr>
<td></td>
<td>a. Donor List – New Gifts and Pledges $250,000+</td>
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<tr>
<td>5:25</td>
<td>19. Other Business</td>
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21 January 2016

Logan Atkinson
University Secretary & General Counsel

University of Waterloo
SENATE
Minutes of the Monday 18 January 2016 Meeting


Guests: Bruce Campbell, Dawn Charlton, Mahejabeen Ebrahim, Donna Ellis, Rocco Fondacaro, Sacha Forester, Stéphane Hamade, Sarah Hildebrandt, Jennifer Kieffer, Derek Madge, Nick Manning, Amanda McKenzie, Christine Moresoli, Ellen Réthoré, Daniela Seskar-Hencic, Allan Starr, Brandon Sweet, Marilyn Thompson

Secretariat & Office of General Counsel: Logan Atkinson, Karen Jack, Emily Schroeder


*regrets

Organization of Meeting: Feridun Hamdullahpur, chair of Senate, took the chair, and Logan Atkinson, secretary of Senate, acted as secretary. Atkinson advised that due notice of the meeting had been given, a quorum was present, and the meeting was properly constituted.

Kroeker made an announcement on the “Caring Quilts for UW” project and asked all those present to consider contributing if they are able.

OPEN SESSION

1. DECLARATIONS OF CONFLICT OF INTEREST
Senators were asked to declare any interests they may have in relation to the items on the agenda in open session. No conflicts were declared.

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

Kroeker and Busch.

In response to a question, Atkinson explained the rationale for Senate Executive Committee acting on behalf of Senate to approve the addition of a candidate to the honorary degrees pool. He advised that he is working with Senate Executive Committee to clarify the committee’s power and authority in this respect.

The question was called, and the motion carried.
2. REPORTS FROM COMMITTEES AND COUNCILS

Executive Committee. Senate received the report for information.

Graduate & Research Council. Senate approved changes to course drop/add dates as presented and received the remainder of the report for information.

Undergraduate Council
- Changes to Standard Language on Course Syllabi. Senate approved changes to the standard language utilized in course syllabi as presented in the report.
- Undergraduate Admission Requirements. Senate approved the undergraduate admission requirements for 2016 as presented in the report.
- Academic Program Review Reports (aviation). Senate approved the Final Assessment Report for aviation plans as presented in the report.
- Academic Program Review Reports (cognitive science). Senate approved the Two-Year Report for cognitive science as presented in the report.
- Academic Program Review Reports (medieval studies). Senate approved the Two-Year Report for medieval studies plans as presented in the report.
- Academic Program Review Reports (peace and conflict studies). Senate approved the Final Assessment Report for peace and conflict studies as presented in the revised report.

Senate received the remaining items in the report for information.

3. REPORT OF THE PRESIDENT

Recognition and Commendation. Senate received the report for information.
Tenure and Promotion. Senate received the report for information.

4. REPORTS FROM THE FACULTIES

Senate received the reports for information.

5. COMMITTEE AND COUNCIL APPOINTMENTS/REAPPOINTMENTS [revised report at senators’ places]

Senate approved the following appointments:
- Senate
  - Marlene Epp (faculty representative from Conrad Grebel College)
- Graduate & Research Council:
  - Mike Stone (geography and environmental management)
- Undergraduate Council:
  - Veronica Austen (English language and literature)

The question was called, and the motion carried.

Regular Agenda

6. BUSINESS ARISING FROM THE MINUTES

There was no business arising.

7. TEACHING PRESENTATION

DR. CHRISTINE MORESOLI, ASSOCIATE DEAN CO-OP EDUCATION & PROFESSIONAL AFFAIRS, Faculty of Engineering

Coniglio introduced Dr. Moresoli, a professor in the Department of Chemical Engineering. She has been at Waterloo since 1998 and is currently engineering’s Associate Dean of Co-operative Education and Professional Affairs. Her research focuses on biomaterials; food products and
processing; protein products and processes; drying and baking processes; membrane filtration processes. She teaches courses on food processing, bioproducts and processes. In 2011, she won engineering’s Teaching Excellence Award. In today’s teaching presentation, Dr. Moresoli discussed her approach to engaging students and the lessons learned from using special case studies in a 4th year chemical engineering technical elective course.


8. REPORTS FROM COMMITTEES AND COUNCILS

Executive Committee.

Senate Bylaw 3, A bylaw relating to the selection of members of Senate. On the recommendation of Executive Committee, a proposed amendment to Bylaw 3 was read for the first time.

The proposed bylaw amendment relates to the process by which community-at-large governors will be selected for service on Senate. In response to a question, Atkinson advised that, while The University of Waterloo Act, 1972 provides for three community-at-large members in addition to the chair of the Board of Governors ex officio, the Act gives Senate the power to adjust the numbers of its elected members proportionately as additional ex officio Senate seats are created. Pursuant to this power, the number of community-at-large members was increased by Senate to four in 1975.

Atkinson undertook to post online a summary of the evolution of Senate membership to accompany the Act.

Graduate & Research Council.

Senate heard a motion to the following effects:

- Faculty of Applied Health Sciences, School of Public Health Systems
  To approve changes to the doctoral comprehensive examination procedures as presented in the report.

- Faculty of Arts, English Language and Literature
  To amend the name of the area examination from “Multimedia Critique, Design and Theory” to “New Media”.

- Faculty of Arts, Sociology
  To approve the deletion of the existing masters and doctoral fields and the addition of new fields in sociology as presented in the report.

Frank and Rush.

With respect to that part of the motion proposing to change the doctoral comprehensive examination procedures in the School of Public Health Systems, it was pointed out that such changes ought not to have application for those students registered in the program prior to the changes taking effect. This change was moved as an amendment to the motion by D’Alessio and Henderson, and accepted as a friendly amendment by Frank and Rush.

The question was called on the motion as amended, and it carried.
In response to a question, Rush agreed to make some slight changes to the proposal to clarify the roles of the chair in the comprehensive examination and dissertation supervision processes.

**English Language Proficiency**

**Motion:** Senate heard a motion to approve changes to regulations pertaining to English language proficiency as presented in the report.

Frank and Porreca.

It was pointed out that, despite the changes proposed by this motion, paper-based applications will still be acceptable, and this will be signaled in the calendar language.

Carried.

- **Enrolment Time Limits**

  **Motion:** Senate heard a motion to approve changes to the graduate enrolment regulations and time limits as presented in the report.

  Frank and DeVidi.

  Senate discussed the residency requirements and whether the document as presented is sufficiently clear for graduate students. Frank undertook to report back to Senate to more fully explain the language choice around residency. It was also confirmed that the changes proposed by this motion are not yet in the calendar and have not yet been implemented, meaning there is no intent that they have retroactive effect.

  The question was called, and the motion carried.

**Undergraduate Council.**

**Faculty of Science, Articulation Agreements**

Senate heard a motion to approve two articulation agreements with Conestoga College as presented in the report.

Coniglio and Lemieux. Carried.

9. **REPORT OF THE PRESIDENT**

Hamdullahpur presented a short report on recent activities at the University, including the federal focus on funding of economic opportunities based in the sector; some possible changes at the federal level with respect to research funding, especially with respect to indirect costs; potential removal of some impediments to securing tri-council funding; federal stimulus package actually may get implemented for universities before the next federal budget. At the provincial level, there has been some minor movement on the work to amend the funding formula. The administration continues to work diligently on our student recruitment process; we continue to be in a strong position relative to the sector on applications, without compromising our entrance averages. The Toronto/Waterloo corridor continues to attract a great deal of interest at Queen’s Park. This year, for the first time, we will host a joint research/teaching reception for the purpose of recognizing excellence across our Faculties’ activities, likely to be held in early May.
The president asked Orchard to summarize current developments in Waterloo International. Orchard advised that temporary changes in the unit’s structure have been made now, with the unit reporting in the main to the Vice-President, University Research, while the “Global Learning” group is reporting into the Student Success Office. An interim leader will soon be identified and a review of the operation will be done, following which a search for a new Associate Vice-President will be conducted.

10. Q&A PERIOD WITH THE PRESIDENT
There were no questions of the president.

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

This is an initiative that emerged from the Academic Programming theme of the strategic plan, with the involvement of all stakeholders in the process. Coniglio summarized the project objectives, the key messages, progress made since the last report to Senate in October and progress intended to be made over the balance of 2016. Launch of the new course evaluation process is tentatively planned for 2017. Coniglio commented on the biases that are inherent in any sort of evaluation process such as this, and indicated that the research analyst position to support the project will help us in controlling these biases to the extent that we can.

Coniglio was asked whether we will be looking at ways to control bias, or merely whether conventional approaches to course evaluation are in fact biased. In response, he indicated that we recognize that there are biases inherent in the process, and our hope is that we will more fully understand and control for those biases to the extent possible. We must be cautious in relying too heavily on studies done at other institutions in different contexts.

Consideration ought to be given to using panel data to follow students emerging from classes with particular instructors to determine the extent to which teaching by those instructors improves the performance of the students subsequent to the course.

The research analyst position has yet to be fully described, but generally this will have to be someone with a high level of comfort with statistical methods and the various tools that will be necessary to move this project forward. Some senators commented that we have considerable expertise at the University and we should not hesitate to draw on that expertise. At least, such experts ought to be involved in designing the position. Coniglio indicated that there is strong expertise on the project committee and the position will be reviewed carefully before being posted.

Course evaluations are not the only method used to measure instructor effectiveness, and some other methods can be used to temper the biases that appear in the evaluation process. Further caution was expressed about biases inherent in the process, especially as they affect women and visible minorities, and the danger of using these outcomes in salary progression.

Coniglio confirmed that the project team is intent on getting the outcome right for this campus, and that the project will not be rushed.

Overview of Quality Assurance of Academic Programs. Coniglio briefly updated Senate on the utility of the quality assurance program and the impact the program has on academic program improvement. Slides used in his presentation may be seen here: https://prezi.com/ynnp9ysl-h-i/copy-of-quality/?utm_campaign=share&utm_medium=copy.
12. REPORT OF THE VICE-PRESIDENT, UNIVERSITY RESEARCH

Senate received the report for information. Dixon advised that we will hear about the acceptability of our Notice of Intent under the second round of the Canada First Research Excellence Fund very soon. Results were intended to be released in the middle of January.

In response to a question, Dixon advised that the changes to the procedures mentioned in the first part of his report extend only to the Canadian Institutes for Health Research, and not to the other federal funding agencies.

13. REPORT OF THE VICE-PRESIDENT, UNIVERSITY RELATIONS

Banks introduced Ellen Réthoré, Associate Vice-President, Communications and Strategic Initiatives, and Dawn Charlton, Associate Director, Marketing and Communications. They advised Senate about work being done on brand refinement, the project design, timing, deliverables and campus engagement. Slides used in the presentation may be seen here: https://uwaterloo.ca/secretariat-general-counsel/sites/ca.secretariat-general-counsel/files/uploads/files/2016jan_brand.pdf.

Hamdullahpur commented on the comprehensive nature of the project.

In response to a question about the need for this project, Réthoré advised that this question is best answered through seeing the entire presentation, but we are not seen as clearly from outside the institution as we might anticipate. We must do what we can to better articulate what we know to be true, so as to ensure that the views of others match our understanding of the institution.

Senate heard additional comments from members, including: thanks to the office of the Vice-President, University Relations for the promotion of student entrepreneurship; unhappiness among graduate students with the project, with the view that internal communications ought to be a higher priority; the rationale for selecting an external consultant as opposed to using university resources.

14. OTHER BUSINESS

There was no other business.

Senate convened in confidential session.

19 January 2016

Logan Atkinson
University Secretary & General Counsel
Secretary to Senate
Senate Graduate & Research Council met on 11 January 2016, and agreed to forward the following item to Senate for information. This item is recommended for inclusion in the consent agenda.

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

FOR INFORMATION

RENEWAL OF CENTRE

Centre for Computational Mathematics in Industry and Commerce
The Mathematics Faculty’s vision for computational mathematics always included the establishment of a formal centre so as to manage, develop, and promote undergraduate and graduate plans in computational mathematics, provide education opportunities for Faculty of Mathematics students and to serve as a catalyst for collaborative research activity within the Faculty and the University in all areas of computational mathematics. In 2005, the UW Senate approved the creation of the Centre for Computational Mathematics in Industry and Commerce (CCMIC or simply the centre) for this purpose. At the inception of the Centre, the Faculty of Mathematics had hired 11 Faculty complement for computational mathematics to support the new initiative and to have more faculty computationally oriented research and interests across the academic units. Since this time, three of the complement have left the University, leaving the centre with a complement of eight. In addition to the CM complement, membership of the centre is open to any faculty members on campus who have interests and expertise in computational mathematics. Currently 60 regular faculty members from all academic areas across the Faculty and from engineering and science are affiliated with the centre and participate in centre activities. These include: the development, promotion, and management of honours undergraduate and graduate programs in computational mathematics; promoting and facilitating collaborative research activity in computational mathematics, across departmental boundaries within the Faculty, and across the University; facilitating the development of research relationships with government and the private sector.

In view of the success of the centre to date and its strong future prospects, on behalf of Senate council approved its renewal for a five-year term ending January 2021.

/kj  Jim Frank       George Dixon
    Associate Provost, Graduate Studies    Vice President, University Research
Senate Undergraduate Council met on 12 January 2016, and on behalf of Senate approved new courses, course changes, and Faculty regulation changes. Council agreed to forward the following items to Senate for approval and for information. As well, Senate Graduate & Research Council met on 11 January 2016 and jointly with Senate Undergraduate Council recommends approval of motion 3 of this report. Council recommends that these items be included in the consent agenda.

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

FOR APPROVAL

CHANGES TO ACADEMIC PROGRAM

1. **Motion:** To approve changes to the minimum major average for combinatorics and optimization, including mathematical optimization plans as described below. [Note: new text = bold.]

   New calendar text in ‘Degree Requirements’:

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Four-Year Honours Plans</th>
<th>Double Degree Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Major Average (MAV)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All AMATH (including Mathematical Physics), C&amp;O (including Mathematical Optimization), PMATH, and STAT plans</td>
<td>65%</td>
<td>60%</td>
</tr>
<tr>
<td>Mathematical Finance</td>
<td>70%</td>
<td>70%</td>
</tr>
<tr>
<td>All other plans</td>
<td>60%</td>
<td>60%</td>
</tr>
</tbody>
</table>

   In addition, a minimum special major average (SMAV) may apply. Please see the more comprehensive table of major averages.

   New calendar text in ‘Faculty Policies’

<table>
<thead>
<tr>
<th>Major/Plan</th>
<th>Averages</th>
<th>Relevant Courses</th>
<th>Minimum required average</th>
<th>Minimum courses for MAV or SMAV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Mathematics, Combinatorics and Optimization (including Mathematical Optimization), Pure Mathematics, Mathematical Physics, Statistics</td>
<td>MAV</td>
<td>All math courses at any level</td>
<td>65%</td>
<td>3</td>
</tr>
</tbody>
</table>

   **Rationale:** Consistency with updates made to other Math plans including Applied Math, Pure Math, and Statistics and Actuarial Science.

UNDERGRADUATE ADMISSION REQUIREMENTS

2. **Motion:** Council recommends approval of the proposed changes to the English language requirements for 2017 as described in Attachment #1.

APPROVAL OF ACADEMIC PROGRAM REVIEW REPORTS

3. **Motion:** To approve the Two-Year Report for Germanic and Slavic studies (Attachment #2).
4. **Motion:** To approve the Two-Year Report for Bachelor of Social Work (Attachment #3).

**Rationale for motions 2 and 3:** Senate Undergraduate Council has reviewed the reports and is satisfied with the assessment and future directions outlined in them.

**FOR INFORMATION**

**CURRICULAR MODIFICATIONS**

New courses, course changes and inactivations were approved for the faculties of arts (classical studies, English language and literature, history, psychology, social development studies, religious studies, women’s studies); mathematics (combinatorics and optimization, mathematics, mathematics electives, statistics and actuarial science); science (chemistry, earth and environmental sciences, science).

Mario Coniglio  
Associate Vice-President, Academic

/kj
Memo

To: Senate Undergraduate Council
From: André Jardin, Associate Registrar, Admissions
Date: January 4, 2016
Re: Undergraduate Admission Requirements for 2017

For your consideration and approval, amendments to the 2017 admission requirements:

**Recommendation**

That the English language requirements for undergraduate admissions be amended to require IELTS scores of:
- 6.5 overall, 6.5 writing, 6.5 speaking, 6.0 reading and 6.0 listening.

And that the notes section be amended to add the following text: “Students with an overall IELTS score of 7.0 and no band score below 6.0 may be given individual consideration for admission to full-time undergraduate studies.”

**Rationale**

The Registrar’s Office consulted Judi Jewinski, Tanya Missere-Mihas and Chris Buuck (Conestoga College) regarding the band scores they would recommend if the university were to accept an overall IELTS score of 6.5, below the current 7.0. We also had to ensure that the recommended scores are in line with our requirements for other English Language Proficiency tests. Citing their own experience and a variety of additional sources, the scores recommended were: 6.5 overall, 6.5 writing, 6.5 speaking, 6.0 reading, and 6.0 listening. It should be noted that the band scores are actually more important than the overall score; students achieving our band scores should have no trouble achieving a 6.5 overall, but the reverse is not necessarily true.

When reviewing our incoming students we found that many of those who achieve a score of 7.0 overall do so with high scores in the ‘passive skills’ (listening and reading) and low scores in writing and speaking. This does not align with the fact that the writing and speaking scores are arguably the most important for success at Waterloo, and particularly in co-op plans.

The Registrar’s Office reviewed all of the students for whom band scores were available and assessed where they landed with our current requirements and prospective new requirements, keeping in mind that only their IELTS results were considered and assuming that they would be academically admissible for our purposes. The results were clear: more students who qualify for full-time studies currently would require BASE or ELAS if we applied the new scores and a much smaller number would have been admitted to full-time studies rather than BASE or ELAS with the new scores. The majority of students would have seen no change.

Our conclusions – the new scoring framework would attract more well-rounded students than our current score of 7.0 – and possibly in larger numbers. This change would not amount to lowering the university’s standards; in fact, the new framework can be considered more rigid since it applies multiple filters. Publishing the band scores (along with the recommended text) will allow us to attract and admit the students we believe have the skills for success, and to properly assess those who do not.

English Language Requirements  [https://uwaterloo.ca/find-out-more/admissions/english-language-requirements](https://uwaterloo.ca/find-out-more/admissions/english-language-requirements)
Two Year Progress Report for
Germanic and Slavic Studies (BA, MA, PhD)
November 2015

Introduction

This report follows on the 2012-13 augmented review for programs in Germanic and Slavic Studies. After the review, several meetings and discussions addressing the implementation plan have taken place. Most notably, the department held a retreat in April 2013 as well as several departmental and working group meetings, and had discussions and visits with our partners on programs at the University of Mannheim, Germany. The current report summarizes the outcomes, and was prepared under the direction of the chair with input from faculty members in the department.

The first part of this report directly addresses the assessors’ recommendations as stated in their report from the 2012-13 augmented review. It is followed by additional information regarding the progress achieved on the implementation plan that was outlined in the departmental response to the assessors’ report from March 2013, in which the department translated recommendations into concrete goals.

**Recommendation 1:** A faculty hire of heritage language research or immigrant identity, possibly focused on Slavic languages and cultures, possibly a Canada Research Chair to strengthen the emerging focus on multilingualism and multiliteracy.
Status: Not done.
Details: The Department of Germanic and Slavic Studies strongly supports this recommendation because it would anchor the department’s research and teaching direction (multilingualism, transculturality and intercultural studies). A position in Slavic Studies would also stabilize Russian and East European Studies at UW. Funding for a position is tied to resources and decisions at the university level.

**Recommendation 2:** Sign agreement for undergraduate student exchange with Tomsk Polytechnic University.
Status: Not done.
Details: In discussing this with several constituencies (department, faculty Dean), it was decided to not to pursue this any more.

**Recommendation 3:** Institute undergraduate scholarships ($2,000/semester) for study abroad.
Status: In progress.
Details: This item is now part of the fundraising campaign in Arts.
Recommendation 4: Ease burden on overworked departmental staff.
Status: Partly done.
Details: Adjustments were made to shift some work to faculty members (e.g. website, recruitment, marketing). Increasing the staff positions from 1.5 FTE back to 2 FTE has not happened but has been discussed with the Dean of Arts.

Recommendation 5: Increase the quality of classrooms, especially multi-media resources, and make progress on ‘language commons’ initiative.
Status: Pending
Details: The department is working with other units to develop a plan for a “language commons” (a multi-media “active learning” classroom) to be considered by the Faculty as part of its development plans.

Status: Done and continuing.
Details: The department received the requested yearly $500 budget from the Dean of Arts for two years and will continue to request funds as needed. A personal film library donation by one of GSS’s professors (Alice Kuzniar) was made.

Recommendation 7: Sessional instructors need better computers.
Status: Done.
Details: The possibility for a sessional (online) instructor to borrow a departmental laptop for use during the teaching terms has been arranged, and such arrangements will continue to be made whenever possible. Stand-alone office computers were up-graded.

The following provides an elaboration on the goals the department developed in its implementation plan from March 2013 as part of the response to the assessors’ report. These goals were encouraged by the assessors’ more general recommendation for the department to “take a much more prominent place in its intellectual context,” especially with regard to the solidification of the multilingualism/ multiliteracy/ multiculturalism theme.

1) Progress achieved on the various action items in the original implementation plan (as outlined in the response to the assessors’ report submitted in March 2013):

With regard to the direction towards the multilingualism theme, encouraged by the assessors, this perspective has been integrated more strongly into current undergraduate courses (GER 211, GER 212) and the department created a new course (GER 200: Transcultural German Studies). On the graduate level, we have developed some new courses that are tailored to this focus, especially for the MA in Intercultural German Studies; e.g. GER 623 (Transnationalism in Film & Literature) and GER 612 (Multilingualism and Intercultural Communication).
Multilingualism (and likewise transculturalism and intercultural studies) has become a stronger interest of faculty and student research (e.g. research on intercultural experiences in study abroad with the help of LITE grants received by a team of colleagues, and MA/PhD projects on transcultural literature and film), and a focus of guest speakers in the GSS lecture series. As part
of our multilingualism/internationalisation strategy, we have increased our ongoing visiting
professor exchange with the University of Mannheim to 3 exchanges over the past 4 years.

In terms of **links with other departments**, GSS has continued to teach courses for other units
(e.g. Alice Kuzniar for Fine Arts/VCULT and English, Barbara Schmenk for APPLS). The
exploration of teaching and research links with other departments is ongoing (e.g. with
Women’s Studies, due to our department’s teaching and research interest in gender; with Fine
Arts because of our involvement in the Visual Culture Minor; with other language and culture
departments’ Chairs; with Medieval Studies due to the hire of Ann Marie Rasmussen who is a
medievalist; and with departments that have an interest in linguistics, exploring new program
possibilities).

The department has invested considerable effort into **marketing and recruitment**. Graduate
recruitment letters were sent to departments across Canada (including new MA posters, and
letters with personal quotes by current students). The new PhD Cotutelle with the University of
Mannheim (Germany) acquired its first two students. The department has increased its
recruitment efforts at the undergraduate level through visits to local schools (e.g. Concordia
German Language School), and through increasing our visibility on campus (e.g. by participating
in the Study Abroad Fair, and in an Engineering event for local high school students). The
departamental website has been improved as a recruitment and communication tool. The
department has converted its website to WCMS and added a number of features: profiles of all
faculty members and students; news and events listings for all activities taking place in the
department; a blog featuring reports on guest lectures and opinion pieces, written primarily by
graduate students; and a Twitter feed and Facebook account to keep students, alumni, and
friends informed about what is going on in the department.

2) **Proposed amended implementation schedule due to circumstances that have altered the
original implementation plan and/or make actions no longer appropriate:**

The **Multilingualism Conference** was postponed to 2017 due to input wanted by the new
Diefenbaker Memorial Chair for German Literary Studies. The previous Diefenbaker Chair (John
Smith) vacated the position in 2013; recruitment for the position took place in 2014, and new
hire Professor Ann Marie Rasmussen (previously at Duke University) started at UW in January
2015. The REES (Russian and East European Studies) Major was discontinued, since the 2-year
definite-term position for Russian ended in 2014, and no replacement was made. No progress
was made on the proposed Canada Research Chair in Multilingualism Studies, or on links with
international units (e.g. 2plus2 with China); these are tied to resources and decisions at the
university level.

3) **New initiatives that were not contemplated during the program review progress:**
The department started a German Language Summer School for second-year German that was
held successfully in 2014 and 2015 at Mannheim (Germany). The Croatian Visiting Lecturer
funded by the Croatian government was secured for 5 years until 2017/18 through a
Memorandum of Agreement. Some entry graduate scholarships to top up graduate funding for
the German program could be secured through fundraising. The department competed for and successfully received two Ontario Universities Online grants in 2014 to develop a third-year German online course in collaboration with Guelph, and online modules for German Studies. The department has started to implement alt-ac/post-ac modules for career awareness in regular workshops for our graduate students, and in UG/MA/PhD courses as part of a Faculty of Arts pilot project. A large number of faculty and graduate students in the department are working together on a research project on German in Waterloo region largely funded by the Waterloo Centre for German Studies. This project has provided important professionalization, research, and writing activity for our graduate students (over 100 interviews conducted and transcribed, and a book publication in progress).
Two Year Progress Report for Bachelor of Social Work (BSW) Program

November 2015

Introduction

The Bachelor of Social Work (BSW) program in the School of Social Work at Renison University College was externally reviewed in November 2013 by the Commission on Accreditation (COA) of the Canadian Association of Social Work Education (CASWE). The self-study that was prepared for that was used for the internal report of the University. Two reviewers from the COA were joined by a third reviewer who was internal to the University but external to the School.

The site visit was conducted on October 21-22, 2013. The review team included two assessors representing the CASWE’s COA (Dr. Ross Klein, Memorial University, Newfoundland and Dr. Siu Ming Kwok, Kings University College, London) and a University of Waterloo faculty member (Dr. Nancy Waite, School of Pharmacy). The review team’s report was received on November 11, 2013, and the School’s response and implementation plan were received on March 4, 2014. The Principal of Renison University College indicated his endorsement of the plan on March 5, 2014, adding that the addition of full time faculty requires approval of the Renison Board of Governors.

Since that time, there have been no major changes in the BSW program beyond those outlined below. We hired an additional tenure-track assistant professor, who started July 1, 2015. Edwin Ng teaches in both the BSW and the MSW programs. More recently, we have begun restructuring the School of Social Work and have eliminated the position of Director, Program and Field. We are in the process of hiring new administrative and field positions.

Response to Requirements and Recommendations from the 2013 Review of the BSW

Several elements in the Social Work field program were out of compliance with accreditation standards. The re-accreditation report stated three requirements must be met:

Requirement 1: That the School of Social Work formally convey to students the parameters of responsibility in the process of locating, arranging, and implementing a field placement. Different parameters based on the location of the desired placement (e.g., a placement in Toronto or out of province) should also be stated.

Response: We recognize the importance of this clarification, and the work was undertaken immediately. Both the BSW student and the practicum manuals were simplified, and we ensured that both manuals accurately reflect the parameters of responsibility. A separate field document that clearly outlines procedures was used at the 2014 information session and the orientation to highlight
the changes. This document was then incorporated into the practicum manual. In addition, our website was updated to reflect this. The text and the link are below. The manuals are reviewed yearly to ensure that they remain up to date.

**Do I choose my own practicum?**

No. Students do not select their own practicum settings. Practicum settings and field instructors are chosen according to the criteria outlined earlier in the Practicum Manual. However, the School of Social Work is open to learning about new settings to negotiate and approve for future placements.

**Full-time** students have the opportunity to learn about potential field placements through a Placement Fair and pre-placement interviews. Students identify their learning goals and choices of potential practica with the School of Social Work. The School determines the placement of students.

**Part-time** students may suggest potential settings that interest them and meet for pre-placement interviews with such settings. The School of Social Work determines the placement of students.


**Requirement 2:** That the School of Social Work set minimum standards for frequency and type of contact between the Faculty Field Consultants and agency-based field instructors.

**Response:** We recognized that these standards were inconsistently communicated in the practicum manual and the contracts of the part-time (then) Faculty Field Consultants. We have since then changed the position title to Field Consultant: they are part-time contract staff who are hired to teach the BSW Integration Seminar September to June. They also are required to maintain a relationship with the students and field instructors at the partner agency sites. We are grateful that this requirement has underlined the need to be clearer about these requirements with both the Field Consultants and our agency-based field instructors. Now the contracts for this important role specify telephone and in-person visits. A telephone call is given at the very beginning of the practicum to establish contact and an in-person visit happens within the first month. Following that, one more phone call and one more visit occur. The timing of these varies according to the choice of the agency in which the practicum is taking place: some choose to have the additional in-person visit in the Winter term and others, during Spring term. In addition, the contract clearly outlines that other visits may be necessitated if problems arise in the practicum.

**Requirement 3:** That the School of Social Work have a formal policy with regard to the protocol for supervision of field agency supervisors who do not possess a BSW (Section 3.2.22 of the CASWE Accreditation Standards).
Response: We recognize the importance of meeting this standard. The BSW Practicum Manual now specifies the following on page 10:

In exceptional circumstances, if a professional social worker (i.e., BSW, MSW or RSW) is not available at the agency, special arrangements will be made to provide the required social work instruction for the student.

For instance, we have a group of students who are placed at an agency in the community. In this agency, the placement students work with social workers with various degrees but are supervised by someone with a Master’s of Divinity. Additional social work supervision is provided once a month for two hours by the School’s BSW Field Education Coordinator, who holds an MSW. In another instance, we have hired an external field instructor, who has an MSW, to provide social work supervision to a student placed in a long term care facility that does not have social workers.

In addition to the above requirements, the review team made seven recommendations:

Recommendation 1: That a formal structure be established for the process to be followed for revision or change of a social work course in SDS whereby the School of Social Work actively participates in those changes (Section 2.17 of the CASWE Accreditation Standards).

Response: The Chair of SDS and the Director of the School of Social Work met with the Dean to discuss options. A subcommittee consisting of two faculty members from each department was established. One SDS faculty member subsequently withdrew; the remaining three considered options and developed a proposed procedure, which was then presented to SDS and School of Social Work meetings. Once approved by both departments, it was then presented to Academic Council for information. The approved procedure is attached in Appendix One.

Recommendation 2: That a formal structure of collaboration be established (a common curriculum committee, for example) for the purpose of mutual understanding of social work courses in SDS versus the School of Social Work and of how these courses fit together as a curriculum.

Response: The Chair of SDS and the Director of the School of Social Work met with the Dean to discuss options. A subcommittee consisting of two faculty members from each department was established. One SDS faculty member subsequently withdrew; the remaining three considered options and developed a proposed procedure, which was then presented to SDS and School of Social Work meetings. It was approved by both departments and then presented to Renison’s Academic Council for information in February 2015. The approved procedure is attached in Appendix One.

Recommendation 3: That the School of Social Work hire a senior social work academic (Associate or junior-Full Professor) who is able to support and mentor junior colleagues.
Response: This continues to be recognized as an urgent need. When we were hiring in both 2013 and 2014, we advertised for an assistant or associate professor but were unable to hire at the associate level. When the MSW program was approved in partnership with AHS, an agreement was made to seek a faculty member who would be joint between the School and the AHS. This could be senior level position. The joint position is still in process. The members of the School recently applied to have Dr. Wendy Fletcher’s cross-appointment transferred to the School of Social Work. This would provide additional support and mentorship for the junior colleagues.

Recommendation 4: That the School of Social Work hire one additional tenure stream faculty member in order to reduce the large reliance on sessionals/per-course instructors.

Response: Edwin Ng joined the School July 1, 2015. He teaches in both the BSW and MSW programs.

Recommendation 5: That the School of Social Work continue to work to standardize course content and student learning across multiple sections of the same course.

Response: We recognized the need for this, both from this recommendation and from student feedback. In the Fall of 2014, a program of mentorship was put in place. For each of the three BSW courses taught to the two sections of the full-time cohort, one full-time faculty member worked with a sessional. This assured that there was consistency across the two sections as the instructors worked closely together. In addition, it had the added benefit of ensuring that the full-time BSW students were getting more exposure to the full-time faculty members. There has been an additional effort to coordinate the full-time offering with a part-time offering when they occur in the same term (which does not always happen. The part-time BSW takes up to three years to complete; please see the schedule in Appendix Two of when part-time BSW courses are offered). We also now hold an orientation session for the teaching staff in the School after the students have been oriented. This ensures that all instructors, both full-time and part-time, get to know one another and who is teaching what.

Recommendation 6: That the School of Social Work undertake an evaluation with students to determine what they are learning in what courses (and what they are not learning), perceived overlap between courses, and to ensure adequate macro-practice content per Core Learning Objectives for Students #7 and #8.

(Note: the CASWE Standards specify nine Core Learning Objectives. Numbers 7 and 8 pertain to macro Social Work practice: 7. Participate in policy analysis and development 8. Engage in organizational and societal systems’ change through professional practice)

Response: Current practice of getting feedback from students verbally to a fellow student who sits on the curriculum committee is in revision already as we recognize the need for better mechanisms. We have instituted collection of this data via online mechanisms. An additional question about overlap of courses has been added. The curriculum committee student representatives are now responsible for
promoting this activity rather than gathering the actual data on paper. The student reps will continue to be involved in the curriculum committee meetings. The model of PT and FT faculty teaming, as described above, will aid in ensuring adequate macro practice coverage.

**Recommendation 7:** That the School of Social Work ensure policies and practices with full-time students and part-time students are the same. Where they must vary, this should be clearly stated in the Student Manual and in admission materials.

**Response:** This recommendation principally centered around the practice of the Reduction of Hours for part-time BSW students. The possibility of reducing practicum hours has now been eliminated for part-time BSWs as it had never been available to full-time students. The change in this offering was highlighted in the offer letters that went out to incoming students as well as in the Practicum manual. In addition, the other procedures were reviewed in order to ensure that all were aligned.
Appendix One

Proposal for a formalized, inter-departmental mechanism for identification, review and resolution of SDS-BSW prerequisite curriculum and accreditation issues

Submitted for SDS Department Meeting (Jan. 16, 2015) by Robert Case (on behalf of the ad hoc interdepartmental working group: Robert Case (SDS), Colleen MacMillan (SSW) and Alice Schmidt Hanbidge (SSW)). Submitted for SSW Meeting January 21. Approved by both bodies.

Context
This proposal specifically concerns the 10 SOCWK/SWREN courses taught in SDS that are prerequisites for Renison's BSW program. The CASWE Commission on Accreditation had three requirements and several recommendations concerning Renison's BSW program, two of which relate to the relationship between SDS and SSW in regards to these 10 courses:

Recommendation (not requirement) 1: That a formal structure be established for the process to be followed for revision or change of a social work course in SDS whereby the SSW actively participates in those changes.

Recommendation 2 – That a formal structure of collaboration be established (a common curriculum committee, for example) for the purpose of mutual understanding of social work courses in SDS versus the SSW, and how these courses fit together as a curriculum.

Proposed mechanism and process
1. The Chair ("the Chair") of Social Development Studies and the Director ("the Director") of the School of Social Work will meet annually to review the 10 SDS courses that are BSW pre-requisite courses (the "pre-requisites") in relation to BSW accreditation standards and the overall BSW curriculum. Prior to each annual review meeting, the Chair and Director will consult relevant faculty members in each department to identify any possible conflicts, gaps or overlaps in curriculum between the prerequisite courses and BSW courses, and to identify any possible BSW accreditation issues associated with the pre-requisites.

Issues identified at the annual review meeting as in need of action will be resolved either directly by the Chair and Director or through an ad hoc inter-departmental committee convened at the discretion of the Chair and Director:

a) In the case of SDS-BSW prerequisite courses identified as possibly not meeting CASWE accreditation standards, the ad hoc committee will be chaired by the Chair of SDS and comprised of the SDS faculty member(s) responsible for the course, at least one SSW faculty member, and the SSW's accreditation resource person (in an ex officio, advisory capacity). This committee identifies the changes that are required and the SDS Chair submits the proposed changes to SDS department for approval and implementation. (Recommendation 2)

b) In the case of conflicts, gaps or overlaps in curriculum between the prerequisite courses and BSW courses, the ad hoc committee will be chaired by a SSW faculty member, and will be comprised of the SDS and SSW faculty members teaching the particular courses identified as problematic. This committee identifies the changes needed to the courses in question. The relevant committee members submit the proposed course changes to the relevant department(s) for approval and implementation. (Recommendation 1)
2. The Chair of SDS will notify the Director of the School of Social Work of any changes being made to any of the 10 SDS courses prior to submission for approval at the Curriculum Committee or Academic Council. (Recommendation 1)
# Appendix Two

## DRAFT

## School of Social Work Course Rotation

### BSW Part Time February 2014

<table>
<thead>
<tr>
<th>Year</th>
<th>Semester</th>
<th>On Campus</th>
<th>Multi-Modal</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>Fall</td>
<td>SWREN 422R: Advanced Macro Practice</td>
<td>SWREN 441R, 442R, 443R: Integration Seminars SWREN 431R: Fields of Practice</td>
</tr>
<tr>
<td>2016</td>
<td>Spring</td>
<td>SWREN 431R: Fields of Practice</td>
<td>SWREN 441R, 442R, 443R: Integration Seminars SWREN 422R: Advanced Macro Practice</td>
</tr>
<tr>
<td>2017</td>
<td>Fall</td>
<td>SWREN 422R: Advanced Macro Practice</td>
<td>SWREN 441R, 442R, 443R: Integration Seminars SWREN 470R: Mental Health and Addictions</td>
</tr>
<tr>
<td>2018</td>
<td>Fall</td>
<td>SWREN434: Selected Theories</td>
<td>SWREN 441R, 442R, 443R: Integration Seminars SWREN 414R: Interviewing and Assessment in Social Work Practice</td>
</tr>
<tr>
<td>Year</td>
<td>Semester</td>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>------</td>
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</tr>
<tr>
<td>2019</td>
<td>Winter</td>
<td>SWREN 471R</td>
<td>Critical Issues and Future Trends in Gerontology Elective</td>
</tr>
<tr>
<td>2019</td>
<td>Spring</td>
<td>SWREN 441R, 442R, 443R: Integration Seminars</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>Fall</td>
<td>SWREN 422R</td>
<td>Advanced Macro Practice</td>
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<tr>
<td>2019</td>
<td></td>
<td>SWREN 441R, 442R, 443R: Integration Seminars</td>
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<tr>
<td></td>
<td></td>
<td>SWREN 470R: Mental Health and Addictions</td>
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<tr>
<td></td>
<td></td>
<td>SWREN 431R: Fields of Practice</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>Fall</td>
<td>SWREN 423R: Advanced Social Group Work</td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td></td>
<td>SWREN 441R, 442R, 443R: Integration Seminars</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>SWREN 424R: Diversity and Empowerment</td>
<td></td>
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<tr>
<td>2020</td>
<td>Winter</td>
<td>SWREN 411R: Integrated Practice Aboriginal Perspectives on Social Work Practice</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>SWREN 472R: On Campus/International International Context of Practice: An Experiential Learning Opportunity</td>
<td></td>
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<tr>
<td>2020</td>
<td>Winter</td>
<td>SWREN 441R, 442R, 443R: Integration Seminars</td>
<td></td>
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<tr>
<td>2020</td>
<td>Spring</td>
<td>SWREN 414R: Interviewing and Assessment in Social Work Practice</td>
<td></td>
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<tr>
<td>2020</td>
<td>Fall</td>
<td>SWREN 423R: Advanced Social Group Work</td>
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<tr>
<td>2020</td>
<td></td>
<td>SWREN 441R, 442R, 443R: Integration Seminars</td>
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<tr>
<td>2020</td>
<td></td>
<td>SWREN 434: Selected Theories</td>
<td></td>
</tr>
</tbody>
</table>

Please Note: Semester offering and the teaching mode being employed may change as resources are available. Each elective is offered once every two years. Core courses offered once every 4 or 5 semesters.
Recognition and Commendation
Waterloo chemical engineering student Kaveh Sarikhani has been accepted into the RISE professional program, a scholarship offered by the German Academic Exchange Service (Deutscher Akademischer Austauschdienst or DAAD). DAAD is the German national agency for the support of international academic co-operation and is the largest funding organization in the world supporting the international exchange of students and scholars. Sarikhani was one of a number of recipients of scholarships and grants for the 2015-2016 academic year. (Daily Bulletin, 18 November 2015)

A program at the University of Waterloo that promotes a culture of inclusion has received a national award. The Institute of Performance and Learning awarded the Silver Award for Training Excellence to the Office of Organizational & Human Development for the Principles of Inclusivity program, a seven-part certificate program that develops and reinforces inclusive behaviours and skills. Organizational & Human Development is Waterloo’s non-academic support unit dedicated to personal and professional learning and development. The program, launched in 2011, consists of an experiential introductory workshop to promote communication skills and create a facilitated learning dialogue about the behaviours, actions, and attitudes that support inclusivity. It also includes six additional workshops to cover the dimensions of diversity, such as age, mental and physical ability, ethnicity, religion and sexual orientation. “The Principles of Inclusivity program is a cornerstone of staff learning and development at Waterloo, and ties into the sound value system that is a key component of the University's strategic plan,” said Katrina Di Gravio, director of the Office of Organizational & Human Development at Waterloo. “We are excited to receive this honour, and proud to contribute to the culture of excellence, innovation and inclusiveness at Waterloo.” The Institute of Performance and Learning is Canada’s largest association dedicated to training and employee learning and development. Judges consider six criteria for this award: needs analysis, learning objectives and evaluation, design, quality of material, impact and originality. (Daily Bulletin, 23 November 2015)

HealthIM, a software company seeking to improve the emergency treatment of people with mental illness, was among the big winners at the Velocity Fund Finals held Thursday 26 November 2015. Founded by two Waterloo graduates from computer science and the psychology and business program, HealthIM synchronizes law enforcement and health care systems. Their software is based on the interRAI brief mental health screener. “We’re essentially translating the officers’ observations into clinical language for the health practitioners, giving hospital staff a glimpse of what happened at the scene of an incident,” said Daniel MacKenzie, co-founder of HealthIM. “Today’s win will help us to grow our team and bring this to as many police services as possible.” The following three companies were also grand-prize winners of $25,000 and space at Velocity. They are all members of the Velocity Science community.

- **Acorn Cryotech** preserves the cells of youthful people today as a resource to draw from for personalized medical therapy in the future. This provides a bank of youthful cells, for use in genetic therapies that reverse damage that occurs with age.
- **Sweat Free Apparel** is a high-tech company for apparel, producing under-garments that prevent sweat stains from reaching and ruining your clothes.
- **Thalo** is building a new display technology to increase the battery life and daylight visibility of mobile devices. Today’s win gives them an additional $10,000 awarded to hardware or life sciences companies to help cover additional startup costs.

“The exciting startups that won today are a small sample of tomorrow’s innovative companies created on the Waterloo campus,” said Mike Kirkup, director of Velocity. “We look forward to guiding them to
success within the expanded Velocity Garage, which will soon grow to five times its size and support up to 120 companies.” During the VFF event, an additional 10 teams of University of Waterloo students competed for three prizes of $5,000 and access to Velocity workspaces. The winners of the Velocity $5K are:

- Most innovative: **BioFlex Implant** seeks to fix two major issues with current titanium intramedullary implants by using biodegradable polymers to create flexible intramedullary nails for pediatric orthopedic surgery.
- Best pitch: **Finuvo** is developing an automated painting station to enable hobbyists and designers to create visually stunning parts by applying a variety of colors and patterns to the surface.
- People's choice: **Hash** is an iPhone application that connects to your desktop device and web extensions in order to successfully authenticate several user accounts seamlessly using your fingerprint via touch ID. *(Daily Bulletin, 30 November 2015)*

**Arthur Carty**, inaugural director of the Waterloo Institute for Nanotechnology, has been honoured as a fellow of the American Association for the Advancement of Science (AAAS). Carty will be officially inducted as a fellow at the 2016 AAAS Annual Meeting on 13 February 2016 in Washington, DC. The American Association for the Advancement of Science, founded in 1848, is the world’s largest general scientific society and the publisher of the high impact journal *Science*. Election as a fellow is an honour bestowed upon members by their peers. Fellows are recognized for their meritorious efforts to advance science or its applications. Carty is cited for his enlightened scientific leadership, his seminal role as science advisor to governments and his contributions to organometallic chemistry. Dr. Carty is also a fellow of the Royal Society of Canada and an Officer of the Order of Canada. *(Daily Bulletin, 1 December 2015)*

**Eric Choi**, a senior technical associate at the Institute for Quantum Computing (IQC), has won the 2015 Prix Aurora Award in the category of Best Short Fiction English for his short story “Crimson Sky”. The Aurora is Canada’s national prize for excellence in science fiction and fantasy, awarded annually by the members of the Canadian Science Fiction and Fantasy Association (CSFFA) for exceptional works of speculative literature. This year’s Aurora Award ceremony was held in Toronto on 22 November 2015. In 2009, he was one of the Top 40 finalists (out of 5,351 applicants) in the Canadian Space Agency’s astronaut recruitment campaign. This is the second time Choi has received this award: in 2011, Choi and fellow writer Derwin Mak jointly won an Aurora in the category of Best Related Work English for co-editing *The Dragon and the Stars*, the first collection of science fiction and fantasy stories written by authors of the Chinese diaspora. *(Daily Bulletin, 6 January 2016)*
To: Board of Governors  
Senate  

From: Feridun Hamdullahpur, President and Vice-Chancellor  

Date: 2 February 2016  

Subject: Call for Nominations – Honorary Degrees and Convocation Speakers  

An honorary degree is the highest honour conferred by the University. Through the conferring of honorary degrees, the University of Waterloo seeks to recognize outstanding achievement, whether academic or through service to society. The Honorary Degrees Committee seeks input from all members of our University community for the names of prospective honorands who have displayed outstanding scholarly or professional achievement, or who have given exceptional service to society.

Guidelines for the awarding of honorary degrees, including selection guidelines, procedures, considerations to make in assessing a candidate’s qualifications, and details on what to submit in a nomination package, can be found at https://uwaterloo.ca/secretariat-general-counsel/committees-and-councils/honorary-degrees-committee/guidelines-awarding-honorary-degrees.

As well, the President’s Advisory Committee on Convocation Speakers invites input from the community to generate and maintain a pool of names of distinguished individuals who may or may not receive an honorary degree and who would potentially be outstanding convocation speakers, bearing in mind (i) scholarly or professional achievement, (ii) outstanding service to society, (iii) unique contribution to the arts or sciences, (iv) social, technological or entrepreneurial innovation, and (v) such other characteristics as the committee shall consider worthy. Members of the community are asked to submit a short (250 word) abstract/précis on any such individual to secretariat@uwaterloo.ca.

Please take time to consider forwarding the names of any outstanding candidates for potential nominations, and consider that the University embraces and appreciates diversity and wants to ensure a diverse pool of candidates, with particular attention to women and minority candidates that can be underrepresented in these circumstances. With the community’s input we can continue to maintain a substantial pool of deserving individuals whose achievements the University would be delighted to celebrate and honour.

Thank you in advance for your contribution to this important process.
FOR INFORMATION

A. APPOINTMENTS/REAPPOINTMENTS

Definite term reappointment - full-time
FRANK, James, Professor, Department of Kinesiology, July 1, 2016 – October 31, 2016.

Adjunct appointments
Graduate Supervision
ANDREW, Melissa, Associate Professor, School of Public Health and Health Systems, December 1, 2015 – December 31, 2016.

CARSON, Valerie, Assistant Professor, School of Public Health and Health Systems, October 15, 2015 – August 31, 2016.

RAMCHANDANI, Rohit, Assistant Professor, School of Public Health and Health Systems, January 1, 2016 to December 31, 2017.

VINE, Michelle, Assistant Professor, School of Public Health and Health Systems, January 1, 2016 – December 31, 2016.

WOODRUFF, ATKINSON, Sarah, Associate Professor, School of Public Health and Health Systems, February 1, 2016 – December 31, 2016.

Special appointments
BURNS, Robert, Lecturer, Department of Kinesiology, January 1, 2016 – April 30, 2016.

CAMBRIDGE, Edward, Lecturer, Department of Kinesiology, January 1, 2016 – April 30, 2016.

GOOYERS, Chad, Lecturer, Department of Kinesiology, January 1, 2016 – April 30, 2016.

HYNDMAN, Brian, Lecturer, School of Public Health and Health Systems, May 1, 2016 – August 31, 2016.

Postdoctoral fellows appointed as research
VALAITIS, Renata, Department of Kinesiology, October 1, 2015 – September 30, 2016.

Postdoctoral fellows reappointed as research
YAZDANI, Amin, Department of Kinesiology, January 1, 2016 – February 29, 2016.

B. ADMINISTRATIVE REAPPOINTMENT

MOCK, Steven, Interim Director, Network in Aging Research, Faculty of Applied Health Sciences, Department of Recreation and Leisure Studies, January 1, 2016 – June 30, 2016.

C. RETIREMENT

MYERS, Anita, Professor Emerita, School of Public Health and Health Systems, January 1, 2016.
ALREADY APPROVED BY THE BOARD OF GOVERNORS

D. SABBATICAL

MEYER, Samantha, Assistant Professor, School of Public Health and Health Systems, July 1, 2016 – December 31, 2016, special early six month leave, 100% salary.

James W.E. Rush, Dean
Faculty of Applied Health Sciences
FOR INFORMATION

A. APPOINTMENTS

Adjunct Appointments – Instruction

BEANGE, Pauline, Lecturer, Department of Political Science, January 1, 2016 to April 30, 2016.

BERGSTROM, Anders, Lecturer, Department of Drama and Speech Communication, January 1, 2016 to April 30, 2016.

HOURIE, Troy, Lecturer, Department of Drama and Speech Communication, January 1, 2016 to April 30, 2016.

JANZEN, Janet, Lecturer, Department of Germanic and Slavic Studies, January 1, 2016 to April 30, 2016.

KNOX, Rochelle, Lecturer, Department of Drama and Speech Communication, January 1, 2016 to April 30, 2016.

MANJI, Noorin, Lecturer, Department of Sociology and Legal Studies, January 1, 2016 to April 30, 2016.

NG, Yvonne, Lecturer, Department of Drama and Speech Communication, January 1, 2016 to April 30, 2016.

ROOPRA, Shaweta, Lecturer, School of Accounting and Finance, January 1, 2016 to April 30, 2016.

SELLERY, Janet, Lecturer, Department of Drama and Speech Communication, January 1, 2016 to April 30, 2016.

Adjunct Reappointments – Instruction

BALABAN, Steven, Lecturer, School of Accounting and Finance, January 1, 2016 to April 30, 2016.

BALAISIS, Nicholas, Lecturer, Department of Drama and Speech Communication, January 1, 2016 to April 30, 2016.

BALTRUSAITIS, Jonathan, Lecturer, Faculty of Arts, Stratford Programmes, January 1, 2016 to April 30, 2016.

BULLOCH, Dean, Lecturer, Department of Psychology, January 1, 2016 to April 30, 2016.

CHAPUT, Louise, Lecturer, Department of Political Science, Master of Public Service, January 1, 2016 to April 30, 2016.

DE ROOIJ-MOHLE, Margreet, Lecturer, Department of Germanic and Slavic Studies, January 1, 2016 to April 30, 2016.

FEUER, Menachem, Lecturer, Department of Religious Studies, January 1, 2016 to April 30, 2016.

GLADKOVA, Olga, Lecturer, Department of Drama and Speech Communication, January 1, 2016 to April 30, 2016.
HARVIE, Jo, Lecturer, Department of Drama and Speech Communication, January 1, 2016 to April 30, 2016.

HILL, Heather, Lecturer, Department of Drama and Speech Communication, January 1, 2016 to April 30, 2016.

IV, Kieng, Lecturer, School of Accounting and Finance, January 1, 2016 to April 30, 2016.

LAM, Ibis, Lecturer, Department of Spanish and Latin American Studies, January 1, 2016 to April 30, 2016.

LAZAR, Karen, Lecturer, Department of Drama and Speech Communication, January 1, 2016 to April 30, 2016.

LEUNG, May, Lecturer, School of Accounting and Finance, January 1, 2016 to April 30, 2016.

LOPES, Maria, Lecturer, School of Accounting and Finance, January 1, 2016 to April 30, 2016.

MACINNIS, Matthew, Lecturer, School of Accounting and Finance, January 1, 2016 to April 30, 2016.

MALONE, Toby, Lecturer, Department of Drama and Speech Communication, January 1, 2016 to April 30, 2016.

MANNING, Thomas, Lecturer, School of Accounting and Finance, January 1, 2016 to April 30, 2016.

MEINYKEVYCH, Viktoriya, Lecturer, Department of Germanic and Slavic Studies, January 1, 2016 to April 30, 2016.

MOISSEYKIN, Vlad, Lecturer, School of Accounting and Finance, January 1, 2016 to April 30, 2016.

RAHMAN, Fiona, Lecturer, Department of English Language and Literature, January 1, 2016 to April 30, 2016.

RICHARDS, Edward, Lecturer, Department of Philosophy, January 1, 2016 to April 30, 2016.

RIVA, Lori, Lecturer, Department of Fine Arts, January 1, 2016 to April 30, 2016.

SIEBEL-ACHENBACH, Sebastian, Lecturer, Faculty of Arts, Stratford Programmes, January 1, 2016 to April 30, 2016.

STEVENSON, Michael, Lecturer, Department of Political Science, January 1, 2016 to April 30, 2016.

STUMPF, Andrew, Lecturer, Department of Philosophy, January 1, 2016 to April 30, 2016.

THARMALINGAM, Pirapa, Lecturer, Department of Economics, January 1, 2016 to April 30, 2016.

THOMPSON, Craig, Lecturer, Department of History, January 1, 2016 to April 30, 2016.

TRAVERS, Dan, Lecturer, Department of History, January 1, 2016 to April 30, 2016.
WILKINS-LAFLAMME, Sarah, Lecturer, Department of Sociology and Legal Studies, January 1, 2016 to April 30, 2016.

ZIMMERMAN, Amber, Lecturer, Department of Drama and Speech Communication, January 1, 2016 to April 30, 2016.

**Graduate Students Appointed as Part-Time Lecturers**
CHESSER, Stephanie, Women’s Studies, January 1, 2016 to April 30, 2016.

DOYLE, Jennifer, Department of Drama and Speech Communication, January 1, 2016 to April 30, 2016.

MATSINHE, Daniel, Department of French Studies, January 1, 2016 to April 30, 2016.

ROSS, George, Department of Drama and Speech Communication, January 1, 2016 to April 30, 2016.

SEYLER, Caroline, Department of French Studies, January 1, 2016 to April 30, 2016.

SHAY, Virginia, Department of English Language and Literature, January 1, 2016 to April 30, 2016.

WILCOX, Stephen, Women’s Studies, January 1, 2016 to April 30, 2016.

**Staff Appointments to Faculty**
KOERNE, Stephanie, Lecturer, Faculty of Arts, Stratford Programmes, January 1, 2016 to April 30, 2016.

**B. ADMINISTRATIVE APPOINTMENTS**

**Administrative Appointments**
HOCHSTETLER, Kathy, Associate Director, PhD in Global Governance, November 1, 2015 to December 31, 2018.

ROBERTS-SMITH, Jennifer, Acting Associate Director, Academic Program (UW-Stratford), January 1, 2016 to May 31, 2016.

**Administrative Appointments – Change in Dates**
GORMAN, Dan, Associate Director of PhD in Global Governance, from January 1, 2014 to December 31, 2016 to January 1, 2014 to October 31, 2015.

THOMPSON, Jessica, Associate Director, Academic Programs, UW-Stratford, from September 1, 2015 to December 31, 2016 to September 1, 2015 to December 31, 2015.

**C. RETIREMENT**

RUSSELL, Grant, Associate Professor, School of Accounting & Finance, effective July 1, 2016.
UNIVERSITY OF WATERLOO
REPORT OF THE DEAN OF ENGINEERING TO SENATE
February 22, 2016

FOR INFORMATION

A. APPOINTMENTS

Definite Term Appointment – full-time

KWAN, Charles, Lecturer, Department of Mechanical & Mechatronics Engineering, July 1, 2016 – June 30, 2018. PhD University of Toronto 2011; BASc University of Toronto 2011. Since 2013 Dr, Kwan has been a Visiting Assistant Professor/Lecturer in the Department of Mechanical & Aerospace Engineering at Hong Kong University of Science and Technology (HKUST). Dr. Kwon will join the Materials research group in the MME department as definite term lecturer, offering courses in both Materials and Solid Mechanics to the Mechanical and Mechatronics Engineering programs.

Visiting Appointments

ATAEIAN, Parinaz, Scholar, Department of Chemical Engineering, December 16, 2015 - April 30, 2016.

BABAIE, Morteza, Scholar, Department of Systems Design Engineering, March 1, 2016 – August 31, 2016.


LIU, Yong-Jun, Scholar, Department of Chemical Engineering, June 1, 2016 – May 31, 2017.


Visiting Reappointments


Special Appointments

Undergraduate Instruction

CHEN, Wei-Ting (Scott), Lecturer, Department of Electrical & Computer Engineering, January 1, 2016 – April 30, 2016.

NGUYEN, Tam, Lecturer, Department of Mechanical & Mechatronics Engineering, January 1, 2016 – April 30, 2016.
SABISTON, Trevor, Lecturer, Department of Mechanical & Mechatronics Engineering, January 1, 2016 – April 30, 2016.

UNSWORTH, Grant, Lecturer, Department of Mechanical & Mechatronics Engineering, January 1, 2016 – April 30, 3016.

**Adjunct Appointments**
Graduate Supervision & Research
ROTHENBURG, Leo, Professor (Professor Emeritus), Department of Civil & Environmental Engineering, January 1, 2016 – December 31, 2018.

**Changes in Appointments**
AL-MAYAH, Adil, Probationary Term (2), Assistant Professor, Department of Civil & Environmental Engineering, was July 1, 2014 – June 30, 2017 changed to July 1, 2014 – June 30, 2018.

CHEN, Zhongwei, Administrative Appointment, Director, Nanotechnology Graduate Program, Department of Chemical Engineering, was June 1, 2014 - May 30, 2017 changed to June 1, 2014-December 31, 2015.

MAHMOUDZADEH, Houra, Probationary Term, Assistant Professor, Department of Management Sciences, was August 1, 2015 – June 30, 2018 changed to August 1, 2015 – June 30, 2019.

**B. ADMINISTRATIVE APPOINTMENTS**
TSUI, Ting, Director, Nanotechnology Graduate Program, Department of Chemical Engineering, January 1, 2016 – December 31, 2016.

**C. RESIGNATIONS**
NEALE, Adam, Definite Term Lecturer, Department of Electrical & Computer Engineering, January 31, 2016.

**D. RETIREMENTS**
ROTHENBURG, Leo, Professor, Department of Civil & Environmental Engineering, January 1, 2016.

**E. SABBATICAL LEAVES**
*For Approval by the Board of Governors*
HE, Qi-Ming, Professor, Department of Management Sciences, September 1, 2016 – August 31, 2017, twelve months at 86.4% salary.

HO, Pin-Han, Professor, Department of Electrical & Computer Engineering, May 1, 2016 – April 30, 2017, twelve months at 85% salary.

MAZUMDAR, Ravi, Professor, Department of Electrical & Computer Engineering, September 1, 2016 – February 28, 2017, six months at 85% salary.
F. SPECIAL LEAVE

BANSAL, Harvir, Associate Professor, Conrad Business, Entrepreneurship & Technology Centre, May 1, 2016 – December 31, 2016, eight months unpaid.

Wayne Parker
Acting Dean, Faculty of Engineering
A. APPOINTMENTS

Adjunct Appointments

Graduate Supervision

PLUMMER, H. Ryan, Professor, School of Environment, Resources and Sustainability, November 1, 2015 to December 31, 2018.

SONNEMANN, Guido, Professor, School of Environment, Enterprise and Development, November 1, 2015 to October 31, 2019.

Graduate Supervision and Research

ABERNETHY, Paivi, Assistant Professor, School of Environment, Resources and Sustainability, February 1, 2016 to January 31, 2018.

COOPER, David, Professor, Department of Geography and Environmental Management, November 1, 2015 to October 31, 2018.

Special Appointments

Instruction

FARD, Pedram, Lecturer, Faculty of Environment, January 1, 2016 to April 30, 2016.

FORD, Victoria, Lecturer, School of Environment, Enterprise and Development, January 1, 2016 to April 30, 2016.

Jean Andrey
Dean
A. APPOINTMENTS

Definite Term - Reappointments

KATSURAGAWA, Keiko, Assistant Professor, David R. Cheriton School of Computer Science, November 1, 2016 – December 31, 2016.

NAEEM, Normair, Lecturer, David R. Cheriton School of Computer Science, September 1, 2016 – August 31, 2019.

TOMPKINS, Dave, Lecturer, David R. Cheriton School of Computer Science, September 1, 2016 – August 31, 2019.

Visiting Appointments

MARZOUK, Mirette, Research Associate, David R. Cheriton School of Computer Science, March 1, 2016 – February 28, 2017.

ZAPATA, Jose (Universidad Nacional Autonoma de Mexico), Researcher, Dept. of Applied Mathematics, August 1, 2016 – July 31, 2017.

Adjunct Appointments

Instructor

AKINYEMI, John, Lecturer, David R. Cheriton School of Computer Science, January 1, 2016 – April 30, 2016.


BEDAWI, Safan, Lecturer, David R. Cheriton School of Computer Science, January 1, 2016 – April 30, 2016.

Adjunct Reappointments

Instructor

HOLTBY, Dan, Lecturer, David R. Cheriton School of Computer Science, January 1, 2016 – April 30, 2016.

KHARAL, Rosina, Lecturer, David R. Cheriton School of Computer Science, January 1, 2016 – April 30, 2016.

KOU, Tian, Lecturer, David R. Cheriton School of Computer Science, January 1, 2016 – April 30, 2016.

LANCTOT, Kevin, Lecturer, David R. Cheriton School of Computer Science, January 1, 2016 – April 30, 2016.
ROBERTS, Collin, Lecturer, David R. Cheriton School of Computer Science, January 1, 2016 – April 30, 2016.

Research

Cross Appointments
UNGER, Andre (Associate Professor, Dept. of Earth Science), in the David R. Cheriton School of Computer Science, January 1, 2016 – June 30, 2018.

Graduate Students appointed as Part-time Lecturers
MEHIDI, Karimi, Dept. of Combinatorics and Optimization, January 1, 2016 – April 30, 2016.
SCHLUNTZ, Robert, David R. Cheriton School of Computer Science, January 1, 2016 – April 30, 2016.
SZEPESI, Tyler, David R. Cheriton School of Computer Science, January 1, 2016 – April 30, 2016.

Graduate Students reappointed as Part-time Lecturers
HACKMAN, Robert, David R. Cheriton School of Computer Science, January 1, 2016 – April 30, 2016.
HEINLE, Albert, David R. Cheriton School of Computer Science, January 1, 2016 – April 30, 2016.
HSU, Wei-Shou, David R. Cheriton School of Computer Science, January 1, 2016 – April 30, 2016.
ISTEAD, Lesley, David R. Cheriton School of Computer Science, January 1, 2016 – April 30, 2016.

Postdoctoral Fellows appointed as Part-time Lecturers

Postdoctoral Fellow reappointed as part-time Lecturers
NEKRITCH, Iakov, David R. Cheriton School of Computer Science, January 1, 2016 – April 30, 2016.

B. ADMINISTRATIVE APPOINTMENTS


Stephen M. Watt
Dean
For information:

A. APPOINTMENTS

Adjunct Appointments

Graduate Supervision

MOLOT, Lewis, Professor, Department of Earth and Environmental Sciences, December 1, 2015 to November 30, 2018.

QUEZADA-CALVILLO, Roberto, Professor, Department of Biology, January 1, 2016 to December 31, 2018.

Graduate Supervision and Research

FRENCH, Robert, Professor, Department of Biology, April 1, 2015 to March 31, 2018.

Adjunct Reappointments

Graduate Supervision

VALLEY, Benoit, Professor, Department of Earth and Environmental Sciences, December 1, 2015 to November 30, 2018.

Graduate Supervision and Research

REIST, James D., Professor, Department of Biology, January 1, 2016 to December 31, 2018.

SHEARDOWN, Heather, Professor, School of Optometry and Vision Science, September 1, 2015 to August 31, 2018.

Special Reappointments

Postdoctoral Fellows Appointed as Lecturers

DELANEY, Keith, Lecturer, Department of Earth and Environmental Sciences, January 1, 2016 to April 30, 2016.

McCANNA, David J., Lecturer, School of Optometry and Vision Science, January 1, 2016 to April 30, 2016.

R.P. Lemieux
Dean
To: Senate

From: Senate Executive Committee

Date: 25 January 2016

Subject: Proposed Amendment – Bylaw #3 – Second Reading

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*The University of Waterloo Act, 1972* (the “Act”), paragraph 18(a), provides that the chair of the board of governors is a member of Senate *ex officio*. Paragraph 18(b)(1) of the Act provides for four additional members of the board to sit as senators, such members to be elected from the community-at-large members of the board. In the lead-in to paragraph 18(b), it says that elected members referred to in section 18 “shall be elected in such manner and in accordance with such procedures as are determined and established by the Senate.”

We have been advised by the University Secretary & General Counsel that the board may want to identify community-at-large members of the board to fill one or more of the seats referred to in paragraph 18(b)(1). We are unaware of any procedures determined and established by Senate to accomplish this.

Senate Bylaw #3 is the elections bylaw for Senate. It is proposed that Bylaw #3 be amended by adding the following as section 4.

“4. BOARD OF GOVERNORS REPRESENTATION

4.01 Each year the USGC shall request the Board of Governors to elect from among its community-at-large members as many as four individuals to serve as members of Senate pursuant to paragraph 18(b)(1) of The University of Waterloo Act, 1972. The USGC shall be informed of the results of such election promptly following its completion, and shall so inform Senate.”

If this proposed amendment to Bylaw #3 is ultimately passed by Senate at two readings in January and February 2016, then the Board of Governors will be so advised. Elections would be held at the Board of Governors meeting scheduled for 5 April 2016. It is therefore the request of Senate Executive Committee that the within proposed amendment to Senate Bylaw #3 be received by Senate for first reading at its meeting of 18 January 2016.

Please see proposed amended Bylaw #3 attached, with the added section highlighted in red.

Dr. Logan Atkinson
University Secretary & General Counsel
Secretary to the Senate Executive Committee
Senate Bylaw 3

A bylaw relating to the selection of members of Senate of the University of Waterloo.

BE IT ENACTED as a bylaw of Senate of the University of Waterloo as follows:

1. **CHIEF RETURNING OFFICER**

1.01 The university secretary & general counsel (USGC) or designate shall act as chief returning officer for the purpose of conducting the election of members of Senate. As chief returning officer, the USGC or designate has overall responsibility for the general conduct of such elections and by-elections, which shall be by secret ballot. Without restricting the generality of the foregoing, the chief returning officer shall:

a. Establish the timing of Senate elections and by-elections, subject to the provisions described in sections 2 and 4 below.

b. Call for nominations and when doing so inform the university community of the names of those members of Senate whose terms of office expire on 30 April of that year and whether such members are eligible for a further term of service.

c. Verify the eligibility of nominees and nominators.

d. For undergraduate student elections, provide nomination information to the Federation of Students Election Committee.

e. Distribute ballots and balloting information to eligible voters, allowing at least one week for the polling period.

f. Announce the results to the university community, and resolve ties, as necessary.

2. **ELECTIONS**

2.01 Elections

a. The election of faculty and student members to Senate shall be completed by the regular March meeting of Senate each year. Undergraduate student elections shall be held in conjunction with the annual elections conducted by the Federation of Students in February. Faculty and graduate student elections are conducted by the Secretariat & Office of General Counsel.

b. The nomination period for faculty constituencies and graduate students is at least twenty-one (21) days. For undergraduate student constituencies the nomination period is determined in consultation with the Federation of Students. The chief returning officer shall call for
nominations from those faculty and student constituencies that have members whose terms are expiring by placing a suitable notice in such places and ways as may be designated from time to time by Senate, with copies to the appropriate faculties and constituency presidents. Nomination forms shall be made available by the Secretariat & Office of General Counsel. Nominations shall be submitted in writing to the chief returning officer. Each nomination shall be signed by the required number of members of the constituency from which the member is to be elected and shall include a signed statement from the nominee agreeing to serve if elected. For faculty and graduate students, the required number of members is five; for undergraduate students elected from a single faculty, the required number is twenty-five; for undergraduate students elected at large, the required number is one hundred.

c. Undergraduate student nominees, or their representatives, shall attend an all candidates’ mandatory meeting held by the Federation of Students. The chief returning officer, or designate, shall also be present.

d. For faculty and graduate student elections, the chief returning officer shall publish the candidates’ statements in such places and ways as may be designated from time to time by Senate.

2.02 Campaigning/Voter Eligibility

a. Public campaigning shall not take place before the close of nominations. For faculty and graduate student elections, nominees are to provide a brief statement (100 words maximum) to appear with the ballot.

b. The Federation of Students election rules regulating campaigning for undergraduate student elections, except for spending limits, shall be followed. The Federation of Students Election Committee decisions may be appealed to the USGC, who shall act as chief returning officer, and whose decision is final.

c. The campaign spending limit for undergraduate students shall be: up to $100 for constituency seats and $200 for at-large seats, with all campaign costs to be borne by the candidate.

d. In a faculty constituency, all faculty members who hold a regular faculty appointment in that constituency are eligible to vote. In a graduate student constituency, all full-time and part-time graduate students registered in a degree program in that constituency are eligible to vote. In an undergraduate student constituency, all full-time students registered in a degree program in that constituency are eligible to vote; this includes students whose academic programs require a prolonged absence from campus such as a co-op work term or an approved study term abroad.

2.03 By-Elections

a. The USGC shall declare a Senate seat vacant:

   i. upon receipt of a written resignation from a member of Senate.
   ii. when a member of Senate ceases to be eligible to represent the constituency that elected the member, for example when a faculty member ceases to hold a regular faculty
appointment, or when a student graduates or otherwise ceases to be registered in the constituency that elected the student.¹

b. If, within any year, a member of the Senate or any of its committees or councils, not having been granted permission to be absent by such body, attends less than 50 per cent of the regular meetings of such body, the member’s office shall be by that very fact considered to be vacated and a confirmatory resolution shall be passed by Senate declaring the membership vacant. The Senate or its committee or council may grant such permission to members who are going on an approved sabbatical, on a co-op term, or any similar such absence related to the members’ employment and/or educational program.

c. Subject to the provisions noted below, the chief returning officer shall call by-elections to fill vacancies as soon as feasible and shall place a suitable notice in such places and ways as may be designated from time to time by Senate, with copies to the appropriate faculties and constituency presidents. Nominations shall remain open for at least one week and shall be submitted in writing to the chief returning officer. Each nomination shall be signed by the required number of members of the constituency from which the member is to be elected, and shall include a signed statement from the nominee agreeing to serve if elected. For faculty and graduate students, the required number of members is five; for undergraduate students elected from a single faculty, the required number is twenty-five; for undergraduate students elected at large, the required number is one hundred.

d. When a seat is vacant because of the failure of a constituency to nominate any candidate to contest an election or by-election, that seat shall remain vacant until the next annual election, unless a petition [available from the Secretariat & Office of General Counsel] requesting a by-election signed by the required number of members of the constituency concerned is received by the chief returning officer.

e. When a seat becomes vacant within three months of the end of the term for that seat, no by-election shall be called to fill the vacancy for the balance of the term.

f. No by-election shall be called or held in any constituency between 1 July and 15 September. In addition, no by-election shall be held in any undergraduate constituency between 1 April and 1 July.

3. ALUMNI REPRESENTATION

3.01 Each year the Alumni Council shall recommend the names of individual(s) for appointment to Senate. The USGC shall be informed of such recommendations as they are made and shall so inform Senate.

4. BOARD OF GOVERNORS REPRESENTATION

4.01 Each year the USGC shall request the Board of Governors to elect from among its community-at-large members as many as four individuals to serve as members of Senate pursuant to paragraph 18(b)(1) of The University of Waterloo Act, 1972. The USGC shall be informed of the results of such election promptly following its completion, and shall so inform Senate.
Approved by Senate 15 June 1972.
Amended by Senate April 1973.
Amended by Senate June 1975.
Amended by Senate in two readings, September and October 1975.
Amended by Senate in two readings, November and December 1982.
Amended by Senate in two readings, January and February 1983.
Amended by Senate in two readings, December 1984 and January 1985.
Amended by Senate in two readings, December 1989 and January 1990.
Amended by Senate in two readings, October and November 1990.
Amended by Senate in two readings, November and December 1991.
Amended by Senate September 1995.
Amended by Senate September 1999.
Amended by Senate in two readings, October and November 2013.
Amended from Bylaw 5 by Senate in two readings, September and October 2014.
Amended by Senate in two readings, **** and **** 2016.

1See *The University of Waterloo Act*, section 25, for instances when graduating students may be exempt.
White Paper

Measuring Research Output through Bibliometrics

Draft presented to Senate
February, 2016
White Paper
Measuring Research Outputs through Bibliometrics

Prepared by the Working Group on Bibliometrics, University of Waterloo
Winter, 2016

Suggested Citation

University of Waterloo Working Group on Bibliometrics, Winter 2016
White Paper on Bibliometrics, Measuring Research Outputs through Bibliometrics, Waterloo, Ontario: University of Waterloo

Prepared by

Lauren Byl, Jana Carson, Annamaria Feltracco, Susie Gooch, Shannon Gordon, Tim Kenyon, Bruce Muirhead, Daniela Seskar-Hencic, Kathy MacDonald, Peter Stirling, of the University of Waterloo Working Group on Bibliometrics

For further information regarding this report, please contact:

Working Group on Bibliometrics,
University of Waterloo
200 University Avenue West
Waterloo, ON Canada
N2L 3G1
Email: iap-bibl@uwaterloo.ca
Appendix A Working Group on Bibliometrics

Members

Advisory Group Members:

Director, Institutional Analysis & Planning: Allan Starr
Head Librarian: Mark Haslett
Vice President, University Research: George Dixon

Working Group Members:

Chair: Bruce Muirhead (to August, 2015), Tamer Ozsu (beginning September 2015)
Office of Research: John Thompson, Brenda MacDonald
Institutional Analysis & Planning: Daniela Seskar-Hencic, Jana Carson, Kerry Tolson
Library: Kathy McDonald, Shannon Gordon, Pascal Calarco, Peter Stirling, MLIS co-op student
AHS: Brian Laird
Arts: Angela Roorda, Jennifer Simpson
Science: Alain Francq, Bernie Duncker
Math: Tamer Oszu, Kim Tremblay
Engineering: Anwar Hasan, Martha Foulds
Environment: Maren Oelberman

Past Working Group Members:

AHS: John Mielke
Library: Lauren Byl (Student), Susie Gooch (Student)
Science: Marc Gibson
Executive Summary and Recommended Practices

Research output may be measured by assessing a wide variety of research outputs. These include:

- research published and cited in refereed journals,
- conference proceedings,
- books,
- policy reports,
- works of fine art,
- software and hardware, artifacts,
- scholarly blogs,
- the type and amount of intellectual property produced (e.g., patents, licenses, spin-offs),
- the type and amount of research awards,
- the nature and number of highly qualified personnel developed by the researcher or group, and
- publication acceptance rates (the proportion of papers or conference presentations accepted compared to the number submitted).

Bibliometrics is one family of measures that uses a variety of approaches for counting publications, citations, and authorship.

Purpose

This White Paper provides a high-level review of issues relevant to understanding bibliometrics, and practical recommendations for how to appropriately use these measures. This is not a policy paper; instead, it defines and summarizes evidence that addresses appropriate use of bibliometric analysis at the University of Waterloo. Issues identified and recommendations will generally apply to other academic institutions. Understanding the types of bibliometric measures and their limitations makes it possible to identify both appropriate uses and crucial limitations of bibliometric analysis. Recommendations offered at the end of this paper provide a range of opportunities for how researchers and administrators at Waterloo and beyond can integrate bibliometric analysis into their practice. Additionally, Table 3 provides a summary of levels and types of inquiry that were considered by the working group as appropriate, and not, in a variety of situations. Further efforts will build on this White Paper, including sharing practice-based suggestions with members of the University community and preparing a subject guide to facilitate access to background research literature in bibliometrics.
This process will support efforts to recognize appropriate and inappropriate uses of bibliometrics in the Waterloo context.

**Background**

Important stakeholders, including funders and ranking organizations, increasingly use bibliometrics as a measure of research output to encourage university accountability for funding, and to determine how to distribute funding or with whom to partner. In 2011, the University of Waterloo, along with other Canadian universities, began to build institutional understanding and awareness of bibliometrics.¹

In 2012 key University stakeholders including the Library, Office of Research, Institutional Analysis and Planning (IAP), and representatives from all Faculties formed a Working Group on Bibliometrics (WGB). A full listing of members is provided in Appendix A. The purpose of the WGB is to assist the University in meeting new realities of how bibliometrics are used, and provide resources to support researchers and administrators to use them more effectively. One of the Working Group’s initial steps was to identify the need for resources, including a white paper, to foster a common institutional understanding of bibliometrics and its role in capturing research performance. A sub-committee, with a faculty member and representatives from the Library, IAP, and the Office of Research, was tasked with creating the White Paper. This sub-committee conducted a comprehensive literature review of peer-reviewed literature published within the past four years and an extensive grey literature search to identify relevant position papers. The group identified, reviewed, and summarized key articles and drafted the White Paper with support of a principal writer. The evidence gathering process is outlined in Appendix B. The resulting document is a resource for institutional and Faculty leadership and researchers, students, and other members of the campus community who are interested in better understanding bibliometrics.

**Key Findings**

This review of peer-reviewed literature and selected grey literature indicates that bibliometrics offers a useful approach for measuring some aspects of research output and impact, yet is subject to significant limitations on its responsible use. Bibliometrics are most useful when employed in combination with peer and other expert review to assess the categorical or non-comparative impact and volume of scholarly work. Differences in disciplinary cultures are too strong an effect for most cross-discipline comparisons to be reliable. For these reasons, assigning a major role to bibliometric measures for hiring, merit review, tenure, and promotion decision-making is strongly discouraged and using bibliometric measures alone as a measure

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¹ The U15 Group of Canadian Research Universities (U15) completed some work on comparative bibliometrics with the Observatoire des Sciences et des Technologies (OST) between 2005 and 2009, using Thomson Reuters’ citation tracking databases.
for inter-departmental research activity comparisons, is not appropriate. The scientific and scholarly content and quality of research outputs, understood by the norms characteristic of the fields in which the research is performed, is more important than simple publication metrics for these purposes.

Limitations on the effective use of bibliometrics include the following:

- Citation-tracking databases use different methodologies for collecting and reporting bibliometric measures and their indexing of research publications from various fields of study can produce significant limitations to some disciplines.

- Proprietary citation-tracking databases (Web of Science and Scopus) index different collections defined by the publications their commercial enterprises hold. Google Scholar, while not defined by proprietary collections, is limited by search conventions that can include non-scholarly works. No citation-tracking database indexes every type of publication, and comprehensive coverage of research publications is not possible. This limited coverage is reflected in the research analytic tools (such as InCites and SciVal) that draw on data from citation-tracking databases.

- Academic disciplines produce a range of research outputs, and not all of these are indexed equally well by citation-tracking databases. These outputs include number of patents, papers in conference proceedings, produced systems developed and widely used, data sets, or hardware and software artifacts, policy papers, white papers, and reports produced for government and other public organizations, books, or works produced and exhibitions.

- Citation-tracking databases do not have good coverage of research that is not published in English, interdisciplinary research or research of regional importance, and cannot provide field-specific context for research outputs like the extent and type of some research collaborations.

- The practice of attributing citations, and collecting citation data, differs across disciplines and fields. In some fields citations accrue only many years after a work is published, in other fields citations accrue primarily within only a few years after publication. Differences in citation practices carry over into every bibliometric measure that uses citations as part of calculating the metric, including the h-index.

- There is evidence of gender bias in citation practices. This bias underestimates contributions made by women researchers. This factor must be taken into consideration when conducting citation analysis.

- Bibliometric measures taken at different times cannot always be meaningfully compared. First, citations, a key research bibliometric measure, accrue with time after publication. Second, the time required for understanding the impact of a paper using
citations differs by discipline. Finally, citation databases themselves change their methodology and journal coverage over time.

The use of bibliometric measures may lead to changes not only in how researchers choose to publish, to increase opportunities for enhanced coverage in citation-tracking databases, but also in what they choose to research. It may provide opportunities and incentives to manipulate metrics. Cross-disciplinary differences in the ease of use for bibliometric tools, moreover, may be misinterpreted as cross-disciplinary differences in research activity or impact itself.

Summary

In aggregate, these factors strongly suggest that bibliometric comparisons across disciplines or sub-disciplines, or longitudinal comparisons within a group, may generate unclear or misleading results. The recommendations offered in this paper provide important practices and considerations for optimizing the use of bibliometrics. Table X also provides a useful tool that applies the limitations and recommended practices for bibliometrics at levels and types of inquiry in a variety of typical situations for measuring research outputs.

Recommended Practices for Bibliometric Analysis

The use of bibliometrics, and bibliometric analysis, is a common approach for measuring research outputs. These recommendations speak only to the methodological reliability of bibliometric measures, as indicated in the relevant literature. University policies (such as Waterloo's Policy 77 on Tenure and Promotion) may direct the use of these measures. If used carefully, bibliometric measures can provide a data point, in conjunction with others, for evaluating research outputs. The following recommendations are geared toward researchers, administrators, and others interested in using bibliometrics or assessing the relevance of bibliometric results.

For Researchers:
Define a researcher's identity convention as an author early, and use that convention systematically throughout their career. Appropriate affiliation to the University of Waterloo is also important. As an example, researchers can increase the likelihood that their works will be accurately attributed to them within citation-tracking databases by proactively determining how their name will appear in published form throughout their career by creating an author profile such as Open Researcher and Contributor ID (ORCID).

For All Users:
Approach the process of analysing research outputs in the same way that one would conduct good research:

- develop a strong research question with the scope and clarity appropriate to the discipline and issue under consideration,
assess whether bibliometric measures can appropriately provide the information required to answer the research question; if not, it may be necessary to revise the research question or use other measures,

if bibliometric measures are indicated, select appropriate tools and measures to investigate the research question,

be explicit about other non-bibliometric data sources that should also be considered, and

understand the research and comparison context, including discipline-specific effects and the implications of sample size.

Consider bibliometrics as one measure among a set of others for understanding research output and impact. Best practice is to work from a basket of measures. It is impossible for any bibliometric analysis to present a complete picture. Bibliometrics is optimally used to complement, not replace, other research assessment measures, such as peer review, keeping in mind that “both need to be used with wisdom, discretion and the rigorous application of human judgement” (Phillips & Maes, 2012, p. 3).

Understand and account for variations in how disciplines produce and use research publication. Avoid comparisons that the measurement tools and key concepts cannot support. The nature of research (and more generally, scholarly) output (e.g., journal articles, books and book chapters, conference proceedings, performances, social outputs, research artifacts) differs across disciplines, and thus the relevance and applicability of bibliometrics also differs across disciplines. It is important to use bibliometric measures relevant for each discipline and to recognize that meaningful comparisons across those measures may not be possible.

Involve those being evaluated in the process and provide them with interpretive information. Given the significant role and impact of context in the use of bibliometrics, researchers in the field or discipline in question may be best equipped to understand and explain the variability of how bibliometric measures capture and reflect research outputs in their field. This will help to ensure that using bibliometric measures incorporates a full understanding of their limitations, particularly at the discipline level.

Understand the distinctions among bibliometric measures. Be aware of the methodology, purpose, and limitations of bibliometric databases (such as Web of Science, Scopus, and Google Scholar) and of individual bibliometric measures (such as the Journal Impact Factor and h-index). As an example, it is important to recognize the value of normalized measures compared to whole/raw count while also recognizing that normalized measures can be vulnerable to outliers (e.g., a single highly cited paper can increase the average somewhat artificially). Regular review and updating of research methods and definitions will ensure a strong and current understanding of methodologies used.
Exercise caution when using journal impact rankings. Journal impact rankings such as JIF or SCImago Journal Rank (SJR) should not be broadly used as a surrogate measure of the quality of individual research articles or an individual’s overall performance when opportunities exist for an in-depth evaluation of individual publications.
ORF – RE
- Waterloo led – 9
- $32.6M ORF-RE ask
- $102.4M total project budget

Projects where Waterloo is the partner – 14
- $2.5M ORF-RE ask
- $7.0M total project budget

CFI

Internal NOI
March 21, 2016 - Internal NOI deadline (8 weeks for researchers to prepare)
May 2, 2016 – Decisions released (6 weeks later) ADRs will review Internal NOIs, rank and make recommendations to Deans Council for final decision. Results released to community.

Only of a subset of Internal NOIs will be invited to proceed to a full proposal.
- UW envelope is $36.5M. We must stay within our Envelope at the Internal NOI stage
- Minimum total budget is $750,000 ($300,000 CFI contribution)
- Standard CFI criteria apply (leadership, excellence, capacity, impact, training etc.)
- Internal NOIs will be reviewed by each Faculty; we encourage institution-wide perspectives during this review
- ADRs will then meet to rank and assign envelope to a subset of Internal NOIs, which will then be forwarded as a recommendation to Deans Council
- Deans Council will review and approve a final ranking of Internal NOIs to be invited to submit full proposals

Research Partnerships Highlights
- GM with K. Inal (M&ME) - $750,000 GM contribution
- Ford with A. Gerlich (M&ME) - $60,000 amendment to increase funding
- Ciena with A. Khandani (E&CE) - $1.8M (Ciena contribution $900,000 plus NSERC IRC)
- Huawei – 4 projects with P. Poupart, K. Daudjee, B. Wong, K. Salem all School of Computer Science - $914,300
- HockeyTech with P. Poupart - $319,200 ($169,200 company contribution plus OCE)
- Lockheed Martin with C. Wilson (IQC) - $497,950 ($281,450 company contribution plus OCE)
- Lockheed Martin with S. Peterson (M&ME) - $584,200 ($330,200 company contribution plus NSERC)
- Lockheed Martin with J. Baugh (IQC) - $310,000 ($170,000 company contribution plus OCE)
- Ontario Drive & Gear with K. Erkorkmaz (M&ME) - $73,846
- Johnson & Johnson Vision Care – CCLR with L. Jones (Opt) - $2.07M

Waterloo International
Summary of the IRPG evaluation:
The International Research and Partnership Grant (IRPG) program was established in 2011 to provide seed funding to develop new international research partnerships and leverage additional funding opportunities. A recent internal review of the program has generated substantial results. To date, the program invested $860,000 in 56 projects that has leveraged $4.3M in new grants awarded to Waterloo researchers and facilitated 134 new international research partnerships.

D. George Dixon