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<tr>
<th>Time</th>
<th>Item</th>
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<tbody>
<tr>
<td>12:45</td>
<td>1. Strategic Plan 2013: Implementation Strategy</td>
<td>Oral</td>
<td>Information</td>
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<tr>
<td>1:40</td>
<td>BREAK</td>
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<td>1:50</td>
<td>2. Remarks from the Chair</td>
<td>Oral</td>
<td>Information</td>
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<td>1:55</td>
<td>3. Agenda/Additional Agenda Items</td>
<td>Oral</td>
<td>Decision</td>
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<td>2:00</td>
<td><strong>Consent Agenda</strong></td>
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<td><strong>Motion:</strong> To approve and/or receive for information by consent items 4-7 below.</td>
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<td>4.</td>
<td>Minutes of the 1 April 2014 Meeting [enclosed]</td>
<td>Decision</td>
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<td>5.</td>
<td>Report of the President</td>
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<td></td>
<td>a. Recognition and Commendation</td>
<td>1-2</td>
<td>Information</td>
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<td></td>
<td>b. Sabbatical/Administrative Leaves and Administrative Appointments/Reappointments</td>
<td>3-10</td>
<td>Decision/Information</td>
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<tr>
<td></td>
<td>a. Changes to Policy 59, Reduced Workload to Retirement</td>
<td>11-14</td>
<td>Information</td>
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<td>7.</td>
<td>Report of the Vice-President, Administration &amp; Finance</td>
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<td></td>
<td>a. Incidental Fees</td>
<td>15-16</td>
<td>Decision</td>
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<td>8.</td>
<td>Business Arising from the Minutes</td>
<td></td>
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<td>2:05</td>
<td>9. Online Learning Development</td>
<td>Oral</td>
<td>Information</td>
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<td>2:10</td>
<td>10. Report of the President</td>
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<td>Decision</td>
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<td>a. Hong Kong Technology Transfer Subsidiary</td>
<td>17</td>
<td>Decision</td>
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<tr>
<td>2:50</td>
<td>a. Change to the Memorandum of Agreement between the FAUW and the University of Waterloo</td>
<td>18</td>
<td>Decision</td>
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<td></td>
<td>b. Exceptions to Policy 40, The Chair</td>
<td>19-20</td>
<td>Decision</td>
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<td></td>
<td>c. New Academic Department, Faculty of Environment</td>
<td>21-23</td>
<td>Decision</td>
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3:05 12. Report of the Vice-President, Advancement  
   a. Office of Advancement FY14 Update  
   b. School of Urban and Regional Planning Alumni Association – Consent to Use University Name

3:15 13. Research Presentation: Bryan Smale, Professor of Recreation & Leisure Studies and Director of the Canadian Index of Wellbeing

3:35 BREAK

3:50 14. Reports from Committees  
   a. Audit

4:00  b. Building & Properties

4:10  c. Finance & Investment

4:20  d. Governance

4:30  e. Pension & Benefits

4:40 15. Institute for Quantum Computing Annual Report to Industry Canada, Executive Summary [full report*]

4:50 16. Other Business

CONFIDENTIAL SESSION

Consent Agenda

4:55 Motion: To approve by consent items 17-20 below.

17. Minutes of the 1 April 2014 Meeting [enclosed]  
   Decision

18. Report of the President  
   a. New Appointments with Tenure  
   b. Tenure Recommendation  

19. Report from the Governance Committee  
   CS4  
   Decision

20. Pension & Benefits Committee Appointments  
   CS5  
   Decision

Regular Agenda

5:00 21. Business Arising from the Minutes

5:05 22. Report of the Vice-President, Advancement  
   Oral  
   Information

5:15 23. Other Business

IN CAMERA SESSION

5:20 24. Report from the Governance Committee  
   Oral  
   Information

5:30 25. Next Meeting/Adjournment  
   Tuesday 28 October 2014 with the President’s Reception to follow

Action Item Enclosed: Conflict of Interest Declaration

Note: To allow the board to complete a number of matters quickly and to devote more of its attention to major items of business, the agenda has been divided between items that are to be approved and/or received for information by consent and those that are to be presented individually for discussion and decision and/or information.

A consent agenda is not intended to prevent discussion of any matter by the board, but items listed under the consent sections will not be discussed at the meeting unless a governor so requests. Governors are supplied with the appropriate documentation for each item and all items will be approved by means of one omnibus motion. The board will then move immediately to consideration of the items on the regular agenda.

JLA/tad
23 May 2014

Logan Atkinson
University Secretary & General Counsel

Parking available in Lot D (underneath Needles Hall)
Please convey regrets to Tracy Dietrich at 519-888-4567 x36125 or tdietrich@uwaterloo.ca


Secretariat & Office of General Counsel: Logan Atkinson, Tracy Dietrich, Cindy Baker

Regrets: Jordan Banks, Michelle DiEmanuele, Prem Watsa, Karen Wilkinson

BRIEFING SESSION

1. STRATEGIC PLAN 2013: IMPLEMENTATION STRATEGY

The chair and the president made remarks to introduce the implementation strategy to governors and to summarize some of the efforts that have been made to date. Theme leaders from each of the eight themes were in attendance, and four of those groups made presentations specific to their themes.

The provost summarized priorities for the 2014-15 year, and referred to the budget implications for those priorities.

Bruce Muirhead and John Thompson, both associate vice-presidents in the Office of Research and theme leads for “Transformational Research,” made the opening presentation. The two projected outcomes of this work relate to the anticipated increases, over the life of the strategic plan, in both the impact of university research and the reputation of that research.

The “Internationalization” theme was presented by Nello Angerilli, associate vice-president, international. He spoke to the importance of global mobility and global literacy to ensure that this university moves confidently forward toward globally relevant research outcomes, and world recognition and prominence for the institution as a whole.

The dean of applied health sciences, Susan Elliott, made a presentation on the “Experiential Education” theme. While this university is a world leader in co-operative education, it is not so clear that it is a leader in experiential education across the spectrum. This will be a focus of this theme going forward.

The “Entrepreneurship” theme was presented by Howard Armitage, special advisor to the president on entrepreneurship. He outlined the mission, goals and desired outcomes for the Entrepreneurship theme, positioning the theme discussion in terms of the value proposition offered by the University of Waterloo.

In response to a question, Muirhead summarized key elements to be focused on through the Transformational Research theme, both those forming the lead research areas, and those that will also achieve prominence through the implementation process. With respect to performance indicators,
Muirhead spoke to increased tri-council funding as an important measure. A further question was raised with respect to the distinction between “deep excellence” and overall research strength. It was acknowledged that research excellence in a few specified areas is a key to the university’s success, without detracting from the creativity among faculty that allows new areas of strength to emerge. The strategic plan must encourage that sort of organic development. This is especially the case, given that the vast amount of research funding comes from sources outside the university, meaning it is highly competitive and generated by the researchers themselves.

McBoyle spoke to the strategic advantage of international collaborations in research and publishing as a way to increase the university’s global prominence and rankings. In response to a question, McBoyle indicated the manner in which choices are made in the identification of research priorities and the allocation of resources.

Elliott spoke to the link between academic goals and career goals by using examples in service learning and the individual growth possible in such a program. One of the proposed outcomes is the “career readiness certificate,” and providing every undergraduate student with the opportunity for an experiential learning opportunity. For students not in the co-op program, data exists to assist the university in designing programs that will properly equip students for the workforce.

In response to a question, Armitage and Bud Walker, special advisor to the VP academic & provost, spoke to the Toronto/Waterloo corridor, the attempts to improve the region’s capabilities for the development of new enterprise, and the need to position activity close to the research power of the university’s main campus.

On Internationalization, Angerilli spoke to exchanges in engineering and other disciplines, and on the need to send a greater number of students of this university to study abroad. The accreditation question is very important to this process, and the Faculty of Engineering is paying close attention to this question. He spoke as well to the need to attract the very top international students in the world.

There was some discussion about international benchmarks against which to measure progress on the various strategic planning themes.

McBoyle introduced the theme leads for the other four themes.

Slides used in the presentations may be seen at: https://uwaterloo.ca/secretariat-general-counsel/sites/ca.secretariat-general-counsel/files/uploads/files/stratplan_010414.pdf

MEETING

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

OPEN SESSION

2. REMARKS FROM THE CHAIR
The chair welcomed those present to the spring meeting. He extended a special welcome to Registrar Ray Darling attending his first meeting of the board.

He thanked those governors whose terms on the board end 30 April 2014 for their service to the university: community-at-large representative – Karen Maidment; faculty representatives –
George Freemen, Barry Warner and Beth Weckman; staff representative – Mark Walker; undergraduate student representatives – David Collins, Sean Hunt and Nicolette Zaptses; graduate student representative – Michael Makahnouk.

3. AGENDA/ADDITIONAL AGENDA ITEMS
   The board heard a motion to approve the agenda as distributed.

   Schlegel and Witer. Carried.

Consent Agenda
   The board heard a motion to approve and/or receive for information by consent items 4-6 below.

4. MINUTES OF THE 4 FEBRUARY 2014 MEETING
   The board approved the minutes of the meeting as distributed.

5. REPORT OF THE PRESIDENT
   Recognition and Commendation. The board received the report for information.

   Sabbatical and Administrative Leaves/Leave Changes and Administrative Appointments/Reappointments. The board approved the recommended leaves/leave changes and received the administrative appointments/reappointments for information.

6. REPORT OF THE VICE-PRESIDENT, ADMINISTRATION & FINANCE
   Student Services Fee. The board approved the recommended fee changes.

   Remers and Lazaridis. Carried.

Regular Agenda

7. BUSINESS ARISING FROM THE MINUTES
   Strategic Plan 2013 Update. An update on the strategic plan was provided during the briefing session held prior to the meeting of the board.

   Strategic Mandate Agreement Update. An update on the Strategic Mandate Agreement was provided under item 8, “Report of the President.”

8. REPORT OF THE PRESIDENT
   Hamdullahpur presented a report on the Strategic Mandate Agreement as submitted to and negotiated with the provincial government. He reminded the board that much of the impetus for the creation of the strategic mandate agreements is the government’s interest in institutional differentiation. Waterloo’s submission was very well received by the province, and the final conversation with the province in this respect took place on 27 March. McBoyle summarized some of the specifics of Waterloo’s agreement, including some of the areas of institutional strength required to be outlined in the agreement. He indicated the program areas for growth, also required by the province. The agreement has not yet been signed, but it is anticipated that it will direct the relationship with government for the next three years.

   Some comments were offered by Hamdullahpur on the recent federal budget and the funding promised in that budget for the research enterprise. He mentioned the appointment of Ed Holder as the new federal minister responsible for science and technology, a visit by the premier of Ontario to the university’s VeloCity operation, and a visit by Brad Duguid, minister of trades, colleges and universities to announce the eligibility of co-op students for tuition support programs.
He mentioned his visit to Australia representing the Canadian post-secondary education sector, and his trip to Israel to take part in a joint research symposium with the Technion Israel Institute of Technology. An historic collaboration agreement was signed between the University of Waterloo and Technion for continuing research collaboration.

Information was provided to the board on the university’s rankings by discipline on both a global and national level, focusing on disciplines in which the University of Waterloo ranks in the top 100 in the world. Nationally, out of 30 disciplines ranked, the University of Waterloo ranks in the top five in 11 of those disciplines. Hamdullahpur summarized those areas in which the university improved, and those areas in which it declined.

Slides used in the presentation may be seen at: https://uwaterloo.ca/secretariat-general-counsel/sites/ca.secretariat-general-counsel/files/uploads/files/president_010414.pdf

9. REPORT OF THE VICE-PRESIDENT, ACADEMIC & PROVOST
2014-15 Operating Budget. McBoyle presented information on the proposed operating budget for 2014-15, focusing on both the expense side and the revenue side. He summarized major changes anticipated for both, and indicated how adjustments had been made to allow for these changes.

The board heard a motion to approve the operating budget for 2014-15 as presented.

Schlegel and Makahnouk.

A question was asked about the relationship between costing the strategic plan implementation and the potential for creating deficits to fund those initiatives. Hamdullahpur responded by saying that the university would manage this question through strategic asset reallocation as the strategic plan matures. He indicated that the greatest risk on the revenue side relates to undergraduate enrolments, and McBoyle confirmed that work is underway for the development of a strategic enrolment management plan for the university. McBoyle also pointed out risks attendant on the grant funding formula and the tuition framework. He expressed confidence that a sufficient number of students will be attracted to the university to cover the anticipated deficit, but he did not provide for this in the budget so as to give a proper picture to governors. McBoyle mentioned some controls in place on the expenses side, including the hiring freeze already in place and planned to continue until at least the end of June.

McBoyle agreed to revise budget reporting to the board to include “actuals” as against the budget.

The question was called, and the motion carried.

Undergraduate Applications and Admissions Update. Darling presented the report on undergraduate applications and admissions for 2014-15.

Slides used in the presentation may be seen at: https://uwaterloo.ca/secretariat-general-counsel/sites/ca.secretariat-general-counsel/files/uploads/files/admissions_010414.pdf

10. REPORT OF THE DEAN OF ARTS
Dean Peers delivered a presentation on the Faculty of Arts, explaining the faculty’s focus on transdisciplinary connections inside the faculty and across faculties, and the unique characteristics of the faculty. He focused on “arts by the numbers,” including numbers of students, faculty members, majors and co-op students. Peers connected work being done in the faculty with university strategic planning themes, focusing in particular on transformational research and major research collaborations underway. He also outlined the growth in graduate student education as a further
element of strategic significance in the faculty, and innovation in various programs, especially in experiential learning, international experience and career focused learning.

In answer to questions, Peers: spoke to the sustainability of growth in the number of graduate students, focusing especially on the need to fund these additional students and how that might be done; summarized the offerings currently available at the Stratford Campus; and provided a status report on the faculty strategic plan and its relationship to the university strategic plan, concentrating on research intensity, experiential education and innovations in program offerings.

Slides used in the presentation may be seen at: https://uwaterloo.ca/secretariat-general-counsel/sites/ca.secretariat-general-counsel/files/uploads/files/arts_010414.pdf

11. RESEARCH PRESENTATION
Peers introduced Chris Eliasmith, professor of philosophy and systems design engineering and Canada Research Chair in Theoretical Neuroscience. Eliasmith reported on his overarching research into the workings of the human brain, and the importance of this research across a wide range of issues. The focus is on the possibility of building a computer simulation of a brain as the clearest path toward understanding the workings of the human brain.

In response to a question, Eliasmith commented on the relationship between his research and work underway in the medical sciences, especially in relation to Parkinson’s disease.

12. REPORTS FROM COMMITTEES

Building & Properties
- **New Student Residence Building.** The board heard a motion to approve a project budget of $47.5 million for the construction of a 500-bed undergraduate student residence to be located on the west parking lot at the existing University of Waterloo Place complex.
  
  Gamble and Lazaridis.
  
  Gamble offered comment on the financing model for this project, and on the continuing need for additional beds on campus, even given the expansion of capacity in commercial development off campus. Huber commented on the relative advantage of developing existing university lands as opposed to buying existing buildings off campus.
  
  The question was called, and the motion carried.

- **Hydro Easement to Waterloo North Hydro.** The board heard a motion to approve granting a 0.12 acre easement to Waterloo North Hydro to service the new day care building.
  
  Gamble and Lounds. Carried.

- **Transfer of Regional Storm Water Management Pond to the University.** Governor Schlegel declared a conflict of interest on this item.
  
  The board heard a motion to accept the transfer from the Regional Municipality of Waterloo to the University of Waterloo of a 0.5436 acre parcel of land for nominal consideration of $2.00.
  
  Gamble and Stork. Carried.

The board received the remaining items in the report for information.

**Finance & Investment.** The board received the report for information.
Governance

- **New ad hoc Committees.** The board heard a motion to establish two *ad hoc* committees of the board, to be called the “*ad hoc* Committee on Technological Innovation” and the “*ad hoc* Committee on Alumni Relations, Outreach and Communications,” and that the terms of reference of both committees be approved as presented.

Lynch and Remers.

Observations were made on the quorum requirements, funding of the committees, and the participation of internal governors on the committees.

It was moved that the motion be amended to require four internal governors among membership for both committees.

Henderson and Makahnouk.

During debate, it was agreed that the amending motion be withdrawn.

It was moved that the main motion be amended by changing the terms of reference for the two proposed *ad hoc* committees, as follows:

For the *ad hoc* Committee on Technological Innovation, that the second sentence in paragraph two of its terms of reference be deleted and replaced by the following: “Ordinarily, the Committee will be composed of a maximum of four appointed governors, and as many as three non-Board members.”

For the *ad hoc* Committee on Alumni Relations, Outreach and Communications, that the second sentence in paragraph two of its terms of reference be deleted, and replaced by the following: “Ordinarily, the Committee will be composed of at least four members of the Board.”

This proposed amendment was accepted by the mover and seconder of the main motion as a friendly amendment.

The main motion, as amended, was then called, and the motion carried.

- **Changes to the Building & Properties Committee Resolution.** The board heard a motion to approve changes in the resolution establishing terms of reference for the Building & Properties Committee as submitted.

Lynch and Lazaridis.

A point of order was raised by Hunt. He suggested that the motion was out of order as the proposed terms of reference for the Building & Properties Committee contradict Board Bylaw 1, in which it is provided that at every meeting of a committee of the board, a majority shall constitute a quorum.

After some discussion, the point of order was overruled by the chair.

Hunt moved to appeal the chair’s decision. There being no seconder for this motion, debate resumed on the main motion.
During debate, several governors commented on the need to find mechanisms to ensure the continued contributions of all governors, both internal to the university and external.

Hunt moved that the terms of reference for the Building & Properties Committee be sent back to the Governance Committee for further consideration. There being no seconder for this motion, debate resumed on the main motion.

The question was called, and the motion carried.

• **Changes to the Governance Committee Resolution.** The board heard a motion to approve changes in the resolution establishing terms of reference for the Governance Committee as submitted.

  Lynch and Maidment.

  During debate, comment was offered on the role of internal governors as possible chairs of standing committees of the board, on the role of the board in overseeing, rather than initiating, administrative activity, and the difficulties inherent in seeing to the continued contributions of all governors, notwithstanding the constituencies represented.

  The question was called, and the motion carried.

The board received the remaining items in the report for information.

**Pension & Benefits.** The board received the report for information.

13. **OTHER BUSINESS**

  **Thank You Letter.** The chair observed that Professor Chad Gaffield has resigned as the leader of the Social Sciences and Humanities Research Council of Canada to return to his faculty position at the University of Ottawa.

  The board heard a motion to write to Gaffield to thank him for his service to SSHRC and his contributions to research and scholarship in Canada.

  Lynch and Hamdullahpur. Carried.

The board convened in confidential session.

Logan Atkinson
University Secretary & General Counsel
FOR INFORMATION

Recognition and Commendation
A professor of accounting at the University of Waterloo since 1981, Howard Armitage has been named Ontario’s top entrepreneurial educator by Startup Canada. Armitage, now the special advisor to the president on entrepreneurship, as long recognized the powerful role budding entrepreneurs play in building the Canadian economy. He was founding director of Waterloo’s Conrad Business, Entrepreneurship and Technology Centre (CBET) and its MBET program. At the graduate level, Armitage designed an experience-based program to correspond with the stages of entrepreneurial venture and commercialization process. The award recognizes Armitage’s leading role in shaping post-secondary entrepreneurship education in Canada. “We are so proud of Howard’s achievement,” says Mark Weber, current director of CBET. “Like the entrepreneurs he is so passionate about teaching, Howard has always dreamed big and worked tirelessly to make new things happen in the marketplace and the world. Fortunately, one of his biggest dreams was the transformation of how we train entrepreneurs to be significant contributors at the heart of Canada’s innovation economy.” National winners of the Startup Canada awards will be announced in late May. [2 May 2014 Daily Bulletin]

Professor Ken Davidson of the Department of Pure Mathematics is the recipient of the 2014 Canadian Mathematical Society (CMS) David Borwein Distinguished Career Award. The award recognizes individuals who “have made a sustained outstanding contribution to the advancement of mathematics.” Davidson has been a member of the Pure Mathematics department since 1978, and was designated a university professor in 2007. “Ken Davidson has made sustained contributions of exceptional quality to all aspects of a career as a mathematician in Canada,” said CMS President Keith Taylor. “His continuing scientific creativity and intellectual leadership bring honour to CMS and the country.” Davidson has published well over 100 refereed publications in the areas of operator theory, non-self-adjoint operator algebras and C*-algebras and his research in these areas has garnered attention worldwide. He is also the author of two research monographs and a real analysis textbook. “Ken Davidson is a highly respected, world-class researcher who has many deep, substantial, accomplishments to his credit and he hasn’t slowed down,” said Ronald Douglas of Texas A&M University in his nominating letter. “He has played a critical role in the field of operator theory and operator algebras in Canada, the United States and worldwide.” [12 May 2014 Daily Bulletin]

Theresa Libby, managerial accounting professor at the University of Waterloo since 2010, will be presented with the 2014 L.S. Rosen Outstanding Educator Award at this year’s President’s Luncheon at the annual Canadian Academic Accounting Association (CAAA)’s conference. The award was established in 1983 to honour Professor L.S. Rosen, the founding president of CAAA, and recognizes the recipient’s contribution to Canadian accounting education over a sustained period of time through excellence in teaching, educational innovation, publications, guidance for students, and involvement in professional and academic societies and activities. The citation for the award describes Libby as “an exceptional, dedicated, caring, friendly and effective teacher.” As the director of the PhD program and acting graduate officer for the School of Accounting and Finance, Libby is currently an associate editor at Management Accounting Research and a consulting editor at Contemporary Accounting Research. [6 May 2014 Daily Bulletin]

University historian Kenneth McLaughlin was recently honoured with the Lieutenant Governor’s Ontario Heritage Award for Lifetime Achievement. McLaughlin, who in 2009 received the title distinguished professor emeritus after a long career in the Waterloo history department and at
St. Jerome’s University, is the author of two books about the history of the University of Waterloo – *Waterloo: The Unconventional Founding of an Unconventional University* and *Out of the Shadow of Orthodoxy: Waterloo@50* – as well as a history of St. Jerome’s University, and several works about communities in Waterloo Region. [14 April 2014 Daily Bulletin]

In the 2013 Putnam Mathematical Competition, the University of Waterloo team, comprised of mathematics undergraduate students Kangning (Colin) Chen, Volodymyr Lyubinets, and Hao Sun (coached by Professor Stephen New of pure mathematics), finished 7th overall, and first among Canadian universities. The top five teams were MIT, Carnegie Mellon, Stanford, Harvard, and Cal Tech. The William Lowell Putnam Mathematical Competition is an annual contest for university students in the US and Canada. Waterloo has finished in the top five 18 times since 1968. [11 April 2014 Daily Bulletin]

Chemical engineering graduate student and Engineering Science Quest’s Girls Club coordinator, Alison Scott, is this year’s winner of the prestigious Canadian Engineering Memorial Foundation’s Vale Master’s in Engineering Scholarship. As the recipient of the scholarship, which comes with a $10,000 award and an internship with Vale, a global mining company, Scott is required to share her story in at least two high school classrooms – a role she is thrilled to take on. “It’s really important to me to act as a role model and mentor for younger girls and show them that anything is possible when you put your mind to it,” she says. “Through Women in Engineering and Engineering Science Quest’s Girls Club program I’ve been able to act as a sounding board for girls who may not otherwise see themselves in engineering programs later in life.” Mary Wells, engineering’s associate dean of outreach, describes Scott as a dynamic person whose passion is contagious. “Over the past few years, she has made a difference in outreach initiatives including our Girls Club program, Women in Engineering events such as GoEngGirl and our Girl Guides Badge Day,” says Wells. To apply for the scholarship, applicants needed to demonstrate an interest and desire to work in the mining/metallurgical fields of engineering. Scott’s graduate research in polymer reaction engineering, under the supervision of Alex Penlidis, professor of chemical engineering, includes a wide variety of topics such as controlled radical polymerization and water-soluble copolymer and terpolymer systems, some of which have applications in the mining industry. [22 April 2014 Daily Bulletin]

All of the University of Waterloo’s more than 120 co-op programs have received formal accreditation from co-op education’s national governing organization, the Canadian Association for Co-operative Education (CAFCE). “This is wonderful news,” says Peggy Jarvie, executive director of Co-operative Education & Career Services. “Waterloo founded co-operative education in Canada, so we regard accreditation highly as it reaffirms our leadership in work integrated learning. We are delighted to help set national quality standards for co-op education in Canada.” A peer review team, consisting of CAFCE members from Simon Fraser University, University of Victoria and University of Laval, evaluated the University of Waterloo’s co-op programs and processes, and then provided its recommendation to the CAFCE Accreditation Council for final approval. “Accreditation standards were developed by CAFCE to establish co-op as an educational strategy and to provide leadership in ensuring quality co-op programming. Accreditation Council members from across Canada articulate and review accreditation measures as the needs of students, employers and institutions change. In order to qualify for accreditation, Co-op programs must provide documentation demonstrating structural criteria, co-op in the institutional context, institutional commitment criteria, quality program delivery criteria, and monitoring and evaluation criteria.” Programs maintain their accreditation status for a period of six years. [18 March 2014 Daily Bulletin]

Feridun Hamdullahpur
President
1. Sabbatical/Administrative Leaves/Leave Changes

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

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

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

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

- Sabbatical Leaves
  
  **Annable, William**, Civil and Environmental Engineering, September 1, 2014 to August 31, 2015, at 100% salary
  
  *Parts of my sabbatical will be dedicated to developing long-term monitoring research sites in British Columbia and Switzerland to initiate data collection phases for graduate research over the next 10-15 years. The balance of the time will be allocated to writing a substantial backlog of scholarly contributions.*

  **Barrickman, Nancy**, Anthropology, July 1, 2014 to December 31, 2014, at 100% salary
  
  *I will build on my scholarly strengths in primatology as it informs both human’s evolutionary past as well as the present-day relationship between humans, nonhuman primates, and their shared ecosystems. I will publish two papers on the coevolution of life history and brain size in primates, and conduct fieldwork and publish one paper regarding my conservation project in Tanzania.*
Blit, Joel. Economics, January 1, 2015 to June 30, 2015, at 100% salary
I will pursue ongoing research on the economics of innovation and entrepreneurship. I recently received a large research grant from the Institute for New Economic Thinking and the Centre for International Governance Innovation. I will primarily be pursuing the research agenda related to this grant. I will spend part of my time in Waterloo and part of my time at the University of Toronto working with the co-applicant on the grant.

Brisley, Neil. Accounting and Finance, November 1, 2014 to April 30, 2015, at 100% salary
I plan to bring an existing paper to completion and begin two new ones. With co-authors our overall objective is to build an understanding of the incentives for managers to invest in Firm-Specific Human Capital; an understanding of how this interacts with the firm’s information and control environment (including the regulation thereof), organizational form, compensation, investment and financing policies.

Brown, Daniel. Computer Science, January 1, 2015 to December 31, 2015, at 85% salary
While primarily based in Waterloo, I will collaborate with colleagues in Europe and the US on research in music information retrieval and on molecular phylogenetics. I will also spend time catching up on current laboratory techniques in biology, to adapt my algorithmic work to newer technology.

Chen, Tao. Economics, September 1, 2014 to February 28, 2015, at 100% salary
I am primarily interested in theoretical econometrics, estimation and specification test of semi-parametric/nonparametric models in particular; and their application in labour economics. I will use this sabbatical to revise and resubmit articles to three journals and advance my research on other projects.

Collins, Michael. Mechanical and Mechatronics Engineering, May 1, 2015 to October 31, 2015, at 100% salary
The sabbatical leave will be spent at the University of Waterloo, and will be used to develop new facilities, and to initiate new research projects. I intend to explore new funding opportunities in the fields of green buildings and solar thermal technologies.

Danisch, Robert. Drama and Speech Communication, July 1, 2014 to December 31, 2014, at 100% salary
The primary project during this leave is the completion of a book tentatively titled “Completing The Linguistic Turn: The Promise of Rhetorical Pragmatism.” This book manuscript represents the culmination of a four year SSHRC-funded research project that works at the intersection of intellectual history and rhetorical criticism. The purpose of the book is to show how the relationship between pragmatism and rhetoric can improve democratic decision-making.

De Juan, Joseph. Economics, September 1, 2014 to August 31, 2015, at 85% salary
During this sabbatical leave, I plan to finish several research papers and start new projects with collaborators. My goal is to expand my research on household consumption behaviour. The research will examine the adjustment of consumption to changes in income using household and aggregate data.

Dixon, Mike. Psychology, July 1, 2014 to June 30, 2015, at 96.8% salary
I will be taking sabbatical in order to learn a new technique to supplement my research, scholarship and teaching. The techniques are acquiring electromyographic data to record emotional reactions while playing slot machines. Part of the sabbatical will be spent at the University of British Columbia working with Drs. Alan Kingstone, and Luke Clark.
**English, Elizabeth**, Architecture, September 1, 2014 to February 28, 2015, at 85% salary  
*Three projects in the area of Amphibious Housing: 1) a book coauthored with Chris Zevenbergen, UNESCO-IHE and TU Delft, for publication by Taylor and Francis; 2) the First International Conference on Amphibious Architecture, Design and Engineering, April 2015 in Bangkok, Thailand, with conference co-chairs Zevenbergen and Chutayaves Sinthuphan; and 3) IDRC-funded research to develop low-cost amphibious bamboo housing for Nicaragua.*

**Fischmeister, Sebastian**, Electrical and Computer Engineering, September 1, 2014 to August 31, 2015, at 85% salary  
*I will spend my sabbatical performing research with collaborating groups, studying emerging topics in embedded systems and also deepening the collaboration with industrial partners through extended visits.*

**Forand, Jean Guillaume**, Economics, January 1, 2015 to June 30, 2015, at 100% salary  
*I am visiting the Department of Economics at John Hopkins University. The department is home to renowned experts in models of dynamic elections and legislative bargaining which is my main field of research.*

**Glinka, Grzegorz**, Mechanical and Mechatronics Engineering, November 1, 2014 to April 30, 2015, at 100% salary  
*Preparing an electronic textbook and website on the fatigue of welded structures – for teaching and engineering applications, writing delayed scientific papers from the past research projects, supervision of graduate students, supervision of experiments.*

**Goldberg, Ian**, Computer Science, September 1, 2014 to August 31, 2015, at 85.7% salary  
*I will visit two European universities to collaborate in the area of privacy enhancing technologies, or PETs. First I will visit Dr. Steven Murdoch at the University of Cambridge, where we will work on censorship resistance and related technologies. Then I will visit KU Leuven in Belgium, where Dr. Claudia Diaz and I will work on privacy for online messaging.*

**Grossman, Igor**, Psychology, February 1, 2015 to July 31, 2015, at 100% salary  
*I will be developing a program of research on emotional complexity, culture and anthropomorphism, in collaboration with local researchers in Spain, and other researchers in the U.S. (Stanford, University of Michigan).*

**Hancock, Mark**, Management Sciences, October 1, 2014 to March 31, 2015, at 100% salary  
*I intend to be a visiting researcher at Microsoft Research in Redmond, WA. I will investigate the psychological effects of lag on pen and touch interaction, and collaboration on a variety of other research projects with Andy Wilson and Kori Inkpen Quinn.*

**Harris, Randy**, English Language and Literature, September 1, 2014 to August 31, 2015, at 85% salary  
*I will be preparing a second edition of “Linguistics Wars”; preparing a collection of “Landmark Essays in Rhetoric of Science”; and beginning work on a monograph on cognitive rhetoric.*

**Hayes, Geoffrey**, History, September 1, 2014 to August 31, 2015, at 100% salary  
*I have three goals for this sabbatical. First, I will complete a manuscript that explores the selection, training and performance of the Canadian army’s wartime junior leadership during the Second World War. Second, I hope to finish a short biography of Milton Gregg, VC. I also hope to acquire further skills in the field of digital humanities.*
**Hoey, Jesse**, Computer Science, July 1, 2014 to June 30, 2015, at 85% salary

I will be visiting the Spatio-Temporal Activity Recognition Systems (STARS) research group at the Institut National de Recherche en Informatique et en Automatique (INRIA) in Sophia-Antipolis, France. I will be working on context-and emotion-aware intelligent prompting systems for persons with cognitive disabilities. These systems will use cameras and computer vision algorithms to detect and monitor elderly persons with e.g. Alzheimer’s disease, and automatically provide assistance with activities of daily living when needed.

**Hunt, Andrew**, History, July 1, 2014 to December 31, 2014, at 100% salary

I intend to finish writing a monograph I began working on long ago about the United States during the 1980s. I also intend to write a SSHRC-funded book on Senator George McGovern and the rise and decline of American liberalism between the 1950s and the 1990s. Since I have already mostly completed research on the McGovern book and entirely completed it on the book on the 1880s I anticipate I will be spending most of my time writing here at the University of Waterloo.

**Jayaram, Sheshakamal**, Electrical and Computer Engineering, January 1, 2015 to June 30, 2015, at 100% salary

I would like to spend my sabbatical at a different research laboratory with experts in the field of high voltage engineering and materials science. It is very important to work outside the University of Waterloo in order to broaden my knowledge and to establish new collaborations. This opportunity will also help me with finding potential graduate students.

**Johnson, Laura**, Planning, January 1, 2015 to June 30, 2015, at 85% salary

I am engaged in SSHRC-funded qualitative longitudinal survey research investigating the social impacts on tenants of the phased redevelopment of their Regent Park housing community in Toronto. I plan to work on my book manuscript describing the experiences of the first phase of low income tenants as they resettle or not into their rebuilt, mixed income community.

**Kenyon, Tim**, Philosophy, July 1, 2014 to June 30, 2015, at 100% salary

I will complete a range of projects bearing on two ongoing areas of research, the epistemology of testimony and critical thinking about biases, while developing the foundations for new work on ethical aspects of language use.

**Li, Yuning**, Chemical Engineering, May 1, 2015 to October 31, 2015, at 100% salary

My research focuses on the development of electronic materials for printed electronics. The first area is to develop polymer semiconductors for organic thin film transistors and organic photovoltaics, which can be used for flexible displays, radio-frequency identification tags, sensors, and solar cells. The second area involves the development of conductive inks for the electrodes and other conductive elements in various electronics.

**Loucks, Wayne**, Electrical and Computer Engineering, January 1, 2015 to December 31, 2015, at 100% salary

During the leave I expect to work on the relationship between undergraduate retention in Engineering and various input factors as well as seeking to develop an enrollment prediction process. I also expect to examine the changes in the role of the Associate Dean Undergraduate during my time in the position.

**Mann, Robert**, Physics and Astronomy, September 1, 2014 to August 31, 2015, at 100% salary

I shall be at the University of Queensland to work on Relativistic Quantum Information, a new field devoted to investigating how relativistic effects influence quantum information tasks. I will
work on advancing the field toward confrontation with experiment, developing tests that probe how/if spacetime becomes hot under acceleration and if different gravitational states can be placed under genuine superposition.

**Macrae, Merrin**, Geography and Environmental Management, July 1, 2014 to June 30, 2015, at 100% salary
*I will be conducting research on the effects of hydroclimatic drivers on agricultural runoff and water quality across Canada (Ontario, Manitoba and Alberta) and in Ohio, USA. The emphasis of my work will be on hydrological and biogeochemical processes occurring in winter and the snowmelt period.*

**Oldford, Wayne**, Statistics and Actuarial Science, September 1, 2014 to August 30, 2015, at 100% salary
*I will be continuing my research on data visualization. This will include development of interactive methods for the investigation of high dimensional data, visual tests of hypothesis, and empirical study of visual perception of visualization methods. A considerable part of the sabbatical will be devoted to the writing of a book on data visualization, based on course notes I have developed over several years.*

**Orend, Brian**, Philosophy, July 1, 2014 to June 30, 2015, and July 1, 2015 to December 31, 2015, at 100% salary
*I shall complete three book-length research projects. The first will be a fresh translation of, and commentary on, Kant’s famous essay “Perpetual Peace.” The second, entitled “Just War/Cyber War,” will consider the possibility of a new international treaty regulating cyber-warfare. The last, entitled “Seize the Day: Happiness in Spite of Illness,” considers happiness for the chronically ill.*

**Pandey, Mahesh**, Civil and Environmental Engineering, September 1, 2014 to August 31, 2015, at 85% salary
*I am planning to write a research monograph about risk and reliability analysis of nuclear plants systems.*

**Phillips, Blake**, Accounting and Finance, November 1, 2014 to April 30, 2015, at 100% salary
*I my sabbatical leave will allow me to bring three current projects to the submission stage at finance journals.*

**Poirier, Guy**, French Studies, January 1, 2015 to June 30, 2015, at 100% salary
*I will be working on a publication and a project part of the “Textes missionnaires dans l’espace francophone” SSHRC funded Partnership Development Grant, and on research projects related to 16th and 17th Century Jesuit letters, the work of François-Xavier de Charlevoix, and the representations of Henri III of France.*

**Poupart, Pascal**, Computer Science, September 1, 2014 to February 28, 2015, at 85% salary
*I will develop new algorithms for “lifelong machine learning,” which refers to algorithms that estimate and adapt models based on streaming data over a long period of time. More specifically, I will develop robust and scalable estimation algorithms for non-parametric models.*

**Rayside, Derek**, Electrical and Computer Engineering, September 1, 2014 to February 28, 2015, at 100% salary
*Development of design automation tools for microfluidic circuits based on recent advances in software verification technology (SMT solvers).*
Siemerling, Winfried, English Language and Literature, July 1, 2014 to December 31, 2015, at 85% salary
*I will complete dissemination aspects of my SSHRC Standard Research Grant on “African Canadian Writing and the Presence of the Past” with a companion website and work on an edited collection. As a co-researcher of the SSHRC Partnership Grant “International Institute for Critical Studies in Improvisation” (2013-20), I will initiate work for an essay on jazz, intermediality, and Canadian literature.\n
Smale, Bryan, Recreation and Leisure Studies, July 1, 2014 to June 30, 2015, at 100% salary
*I will continue to be responsible for planning and managing the Canadian Index of Wellbeing’s administration, research, and expansion. Particular foci will be the CIW Community Wellbeing Survey into other Canadian communities, updating for the next CIW report, and release of the CIW-Ontario report. The CIW research and my research programme on community-based leisure and wellbeing are ongoing.\n
Smyth, Heather, English Language and Literature, July 1, 2014 to June 30, 2015, at 85% salary
*I will research and write two articles and develop these articles and previously published material into a monograph called “Outside Multiculturalism: Coalition and Canadian Literature.” This project explores ‘coalition’ as an alternative model for Canadian multiculturalism. Coalition is a relational concept that can be applied to literacy/rhetorical structures in multicultural literature, but is also a common practice amongst Canadian literary antiracist activists.\n
Strickland, Donna, Physics and Astronomy, July 1, 2014 to December 31, 2014, at 100% salary
*My sabbatical will be spent on my research program of nonlinear optics with two colour lasers, in particular mid-infrared generation and ultra-short pulse generation. I have a new collaboration with a group in Montreal and in discussions about a possible collaboration with a group at Nankai University.\n
Swatuk, Larry, Environment, Enterprise, and Development, September 1, 2014 to August 31, 2015, at 85% salary
*I will be based at the Institute of Water Studies, University of Western Cape in South Africa where I will a) complete two partially completed manuscripts under contract; b) conduct primary research on boundary issues in Lake Malawi; c) develop a research proposal with colleagues at the Institute for Water Studies.\n
Taylor, Scott, Chemistry, September 1, 2014 to August 31, 2015, at 93.3% salary
*My studies during my sabbatical will focus on antibiotic research. A class of compounds called lipodepsipeptides will be prepared by total synthesis and evaluated as antibiotics for their ability to treat infections caused by bacteria that are resistant to current antibodies. Biochemical and biophysical techniques will also be employed to ascertain their mechanism of action.\n
Tolmie, Sarah, English Language and Literature, January 1, 2015 to June 30, 2015, at 85% salary
*I will be preparing an article on Chaucer and information theory; draft a second novel; edits of in-press short fiction collection; edits of OAC funded poetry collection under contract negotiation; and marketing.
**Tripunitara, Mahesh**, Electrical and Computer Engineering, September 1, 2014 to February 28, 2015, at 85% salary
*I plan to establish and enhance research collaborations with industry partners and research labs. Pursue long-term research collaborations in mutual areas of interest. Areas of research: information security, algorithms.*

**Wainberg, James**, Accounting and Finance, January 1, 2015 to June 30, 2015, at 100% salary
*My primary area of research is the behavioural audit field and my intention is to utilize my sabbatical to move my current and future research projects forward in order to maximize my chances of being awarded tenure.*

**Warner, Barry**, Earth and Environmental Sciences, September 1, 2014 to August 31, 2015, at 100% salary
*About half of my time will be spent in Waterloo catching up on a backlog of manuscripts, preparing research grant applications and developing a new undergraduate course on Evolution and Paleobiology. The other half of my leave will be spent as a Visiting Professor at the University of Neuchatel working on a new monograph on the ecology and paleoecology of testate amoebae (Protozoa) and visiting and conducting field work on wetlands on the Gulf Coast of Mexico with colleagues at the Institute de Ecologia in Xalapa, Mexico and wetlands in central Andes with colleagues at the University of La Serena in Chile.*

**Woody, Erik**, Psychology, July 1, 2014 to December 31, 2014, at 100% salary
*I plan to spend a block of time in Australia working on hypnosis research with Dr. Amanda Barnier. I also plan to spend a substantial amount of time at McMaster University, setting up neuroimaging studies of OCD with Dr. Henry Szechtman. Another major enterprise will be to advance my data-analytic skills using cutting-edge software, for use in my statistics courses.*

- **Sabbatical Leave Changes**
  - **Michela, John**, Psychology, change from January 1, 2014 to December 31, 2014, to January 1, 2014 to June 30, 2014, at 100% salary.

  - **Polak, Maria Anna**, Civil and Environmental Engineering, change from July 1, 2014 to December 31, 2014 to July 1, 2014 to December 31, 2014 and July 1, 2015 to December 31, 2015, at 85% salary.

- **Administrative Leave**
  - **Poirier, Guy**, French Studies, September 1, 2014 to December 31, 2014, at 100% salary
  [See description above, sabbatical leave, January 1, 2015 to June 30, 2015.]

**FOR INFORMATION**

2. **Administrative Appointments/Reappointments**

  - **Ager, Sheila**, appointment as Chair, Classical Studies, Faculty of Arts, July 1, 2015 to June 30, 2017.

  - **Chen, Jeff**, appointment as Chair, Physics and Astronomy, Faculty of Science, May 1, 2014 to August 31, 2016.
Collington, Tara, appointment as Chair, French Studies, Faculty of Arts, September 1, 2014 to June 30, 2015.

Faulkner, Andrew, appointment as Acting Chair, Classical Studies, Faculty of Arts, July 1, 2014 to June 30, 2015.

Hare, Kathryn, appointment as Chair, Pure Mathematics, Faculty of Mathematics, July 1, 2014 to June 30, 2018.

Janes, Craig, appointment as Director, Public Health and Health Systems, Faculty of Applied Health Sciences, July 1, 2014 to June 30, 2018.

Liston, Maria, reappointment as Chair, Anthropology, Faculty of Arts, May 1, 2014 to April 30, 2018.

Poirier, Guy, appointment as Chair, French Studies, Faculty of Arts, July 1, 2015 to June 30, 2019.

Power, William, appointment as Chair, Chemistry, Faculty of Science, September 1, 2014 to August 31, 2018.

Administrative Appointment Changes
Ager, Sheila, appointment as Chair, Classical Studies, Faculty of Arts, change from May 1, 2013 to April 30, 2017 to May 1, 2013 to June 30, 2014.

MacLeod, Colin, appointment as Chair, Psychology, Faculty of Arts, change from January 1, 2012 to December 31, 2014 to January 1, 2012 to June 30, 2015.

Feridun Hamdullahpur
President
FOR INFORMATION

Changes to Policy 59, Reduced Workload to Retirement
At its 20 May 2014 meeting, Senate approved changes to Policy 59, Reduced Workload to Retirement, as detailed in Attachment 1. Note: strikethrough = deleted text, underline = new text.

Rationale: The proposed changes include:
- A clarification regarding the reduction of salary when benefiting from a reduced workload [p. 2, par. 1];
- A clarification regarding the duration of the reduced workload and establishing an arrangement [p. 2, par. 2 and 4].

Background: The proposed changes were approved by the Staff Relations Committee on 4 April 2014 and by the Faculty Relations Committee on 10 April 2014.

Geoff McBoyle
Vice-President, Academic & Provost
Policy 59 – Reduced Workload to Retirement

The policies found on the website of the Secretariat & Office of General Counsel (SOGC) are compulsory rules for the university community. The authoritative copies of the policies are held by the SOGC and bear the seal of the university. The online version accessible through the website of the SOGC is available for information purposes only. In case of discrepancy between the online version and the authoritative copy held by the SOGC, the authoritative copy shall prevail. Please contact the SOGC for assistance if necessary.

Established: 2 October 1979
Revised: [Insert every revision date.]
Type of revision: Housekeeping
Mandatory Review Date: [If a new policy, insert the second anniversary of the establishment date. If revised, insert the fifth anniversary after the date when last revised.]
Supersedes: N/A
Class: FS

Responsible/Originating Department: Human Resources
Executive Contact: Vice-President, Academic & Provost

Related Policies, Guidelines and Procedures:
Policy 3 – Sabbatical and Other Leaves for Faculty Members
Policy 5 – Salary Administration – University Support Staff
Policy 39 – Leaves of Absence for Staff Members
Policy 54 – Definition of Staff
Policy 76 – Faculty Appointments

1. General
Reduced workloads may be of interest to faculty and staff members who wish to reduce the time committed to their university careers in the years prior to retirement [see section 2]. Normally, such arrangements remain in place until retirement.

Reduced workloads in other circumstances are either temporary or are considered a change from full-time to part-time or fractional-load status [see section 3].

Faculty and staff members are strongly advised to consult Human Resources regarding pension and benefits implications in advance of requesting a reduced workload. All university policies continue to apply to those on reduced workload. Leaves of absence for faculty and staff are described in Policies 3 and 39, respectively.
2. **Reduced Workload to Retirement**

Faculty and staff members who are at least 45 years of age with completion of at least 10 years of uninterrupted regular full-time service immediately prior to the commencement of the arrangement, may request a reduction of their daily, weekly, monthly or annual period of work to as low as 50% of that required for a full-time position. Salary is adjusted proportionately to reflect reduction of work. Leaves of absence, temporary reduced workloads, maternity/parental leaves and sick leaves/LTD are not deemed as interruptions in service for purposes of this policy. However, with the exception of a paid leave of absence and time worked during a temporary reduced workload, they do not contribute toward the ten years’ service requirement.

Reduced workload to retirement arrangements can be for a maximum of 17 years, or to the person’s 71st birthday, whichever comes first. A retirement date that is mutually agreeable to the employee and his or her department head must be established as part of the arrangement.

Requests for such arrangements must be recommended in writing via the appropriate administrative chain to the vice-president, academic & provost (VPAP) for approval. Before the VPAP level, requests not granted at one level may be appealed to the next higher level. If not granted, an individual is entitled to receive a written explanation of the decision, if so requested.

Before a reduced workload to retirement is approved, Human Resources will confirm details of the arrangement in writing to the faculty or staff member and to the department; expectations under the arrangement will be specified in a revised appointment letter. Mutual agreement by the faculty or staff member and the university is required for any change to a reduced workload to retirement; once in place, changing such an arrangement may be difficult.

Note: special pension and benefits arrangements, as outlined below, are available for approved reduced workloads to retirement. Cost sharing arrangements will be adjusted to match those for full-time appointments.

- Pension participation based on nominal full-time salary subject to Canada Customs and Revenue Agency limitations on the accumulation of pension service credit for time not worked. This legislation allows an employee to earn up to five years of pension credit (plus up to three years additional credit for pregnancy leaves) for periods of reduced pay or temporary absences. This applies to any situation following 1 January 1992 in which an employee contributes to the Pension Plan at her/his nominal full-time salary and the actual salary received is a lesser amount. Sabbaticals, unpaid leaves, reduced workloads and layoffs are included in this calculation.
- Extended Health Care and Dental coverage as if full-time.
- Life Insurance premiums and benefits based on nominal full-time salary.
- Vacation, sick leave as well as Long Term Disability premiums and benefits will be based on actual salary and reduced workload time commitment.
- Paid holidays paid only on scheduled work days subject to Employment Standards regulations.
- Canada Pension Plan, Employment Insurance and Workers' Compensation available according to government regulations.
3. Other (Temporary) Reduced Workload Arrangements
Staff or faculty members who wish to devote increased time to family or other outside interests during a portion of their careers may apply to reduce their daily, weekly, monthly or annual period of work to as low as 50% of that for a full-time position. Normally, such arrangements will be considered for approval for a period of at most two years but may be extended by mutual agreement to a maximum of four years in total. Continuation beyond four years will normally be on a fractional-load [see Policy 76 – Faculty Appointments] or regular part-time appointment [see Policy 54 – Definition of Staff].

A request for a temporary reduced workload will be assessed on its benefits to the employee and the university. Written approval must be given (with a copy to Human Resources) by the faculty or staff member's supervisor and department head and, where the period exceeds four calendar months, by the appropriate senior administrative officer (e.g., dean or associate provost).

Similarly, approval as noted above is required if a faculty or staff member wants to increase her/his workload before the expiration of the reduced workload arrangement. Note however, that the university has the right to require an increase in workload and/or return to full-time employment with the provision of at least three month's written notice.

During a temporary reduced workload arrangement, benefits other than pension, sick leave and long term disability (LTD) are the same as for full-time appointments. Pensions may be based on nominal salary subject to limits established by the Canada Customs and Revenue Agency. The LTD premium is based on nominal salary; the LTD benefit is based on actual salary until the end of the approved temporary reduced workload arrangement, and then on nominal salary.
FOR APPROVAL

Incidental Fees

Federation of Students Fee
It is recommended that the compulsory Federation of Students Fee, assessed and collected from all full-time undergraduate students, be increased from $48.51 to $48.95 per term effective September 2014 (fall term). Part-time undergraduate students are assessed 30% of the full-time fee or $14.69 per term.

Comments:
- The previous full-time fee increase was $3.71 per term effective September 2013
- The 2014 fee increase of 0.9% was approved at the 24 March General Meeting of the Federation of Students
- Payment of the fee is a requirement of registration and is non-refundable

Federation of Students Administered Fee
It is recommended that the Federation of Students Administered Fee be increased to reflect an increase for the U-Pass component effective September 2014 (fall term).

<table>
<thead>
<tr>
<th></th>
<th>Dental</th>
<th>Health</th>
<th>U-Pass</th>
<th>SRP</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular</td>
<td>$46.51</td>
<td>$51.25</td>
<td>$77.29</td>
<td>$1.00</td>
<td>$176.05</td>
</tr>
<tr>
<td>Co-op</td>
<td>$83.63</td>
<td>$94.81</td>
<td>$77.29</td>
<td>$1.00</td>
<td>$256.73</td>
</tr>
</tbody>
</table>

Comments:
- SRP = Student Refugee Program
- The Federation of Students has contracted with Studentcare for the health and dental components and Grand River Transit for the bus pass component
- The university assesses the fee on behalf of the Federation of Students and transfers the funds to the Federation of Students for disbursement
- Payment of the fee is requirement of registration; the health and dental components are refundable through the Federation of Students and their service provider; the bus pass is non-refundable; the Student Refugee Program is refundable directly through the Federation of Students
- During the winter term, regular students pay twice the rate for health and dental to ensure continuous coverage from May to August
- The U-Pass component reflects an increase of $5.06 per term (7.0%)

Graduate Student Association (GSA) Fee
It is recommended that the compulsory GSA Fee, assessed and collected each term from all full-time and part-time graduate students, be increased from $16.60 to $18.50 per term effective September 2014 (fall term).

Comments:
- The previous fee increase was $1.60 per term effective September 2013
- The 10% plus CPI fee increase ($1.90) was approved by graduate students at their March Annual General Meeting.
- Payment of the fee is a requirement of registration and is non-refundable
Incidental Fees
Report to the Board
3 June 2014

GSA Administered Fees
It is recommended that the compulsory GSA Administered Fee, assessed collected from active full-time and part-time graduate students, be increased for the U-Pass component effective September 2014 (fall term).

<table>
<thead>
<tr>
<th></th>
<th>Dental</th>
<th>Health</th>
<th>U-Pass</th>
<th>Grad House</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time</td>
<td>$63.00</td>
<td>$51.25</td>
<td>$77.29</td>
<td>$15.00</td>
<td>$206.54</td>
</tr>
<tr>
<td>Part-time</td>
<td>$63.00</td>
<td>$51.25</td>
<td>$   0.00</td>
<td>$15.00</td>
<td>$129.25</td>
</tr>
</tbody>
</table>

Comments:
- Payment of the fee is a requirement of registration
- The Graduate House Fee is refundable directly through the GSA
- The health and dental components are refundable through the GSA and its service provider
- The U-Pass Fee pays for a universal bus pass with the Grand River Transit; the fee is assessed to all full-time graduate students on-campus within the Region of Waterloo; the fee is not refundable
- The U-Pass component reflects an increase of $5.06 per term (7.0%)

Sandford Fleming Foundation Fee
It is recommended that the $6.00 per term Sandford Fleming Foundation Fee be continued for a further five-year term effective September 1, 2014. The fee is a requirement of registration for undergraduate students but refundable from the Foundation.

Comments:
- the fee is assessed and collected from undergraduate engineering students
- the previous five-year renewal was approved in April 2009 at a rate of $6.00 per academic term
- the refund rate is approximately 1%
- the Sandford Fleming Foundation is a not-for-profit organization and a registered charity which is devoted to the advancement of engineering education in Canada and encourages the pursuit of excellence in engineering through the provision of awards, scholarships and grants. Since most of the Foundation’s funding is currently derived from University of Waterloo students, its activities are largely centered on campus.
- the undergraduate engineering students support the continuation of this fee

Dennis Huber
Vice President,
Administration & Finance
FOR APPROVAL

Hong Kong Technology Transfer Subsidiary

Motion: That the university incorporate a wholly-owned for-profit Hong Kong subsidiary for the purpose of the management of technology commercialization activities including licensing transactions and startup company investments, and that approval be given for use of the words “Waterloo” and/or “University of Waterloo,” the coat-of-arms of the University of Waterloo, and all related marks and designs, in connection with the name of the subsidiary corporation and its business, without power of further assignment of such rights of use.

Background: The subsidiary proposed to be incorporated pursuant to this motion (“UW-HKI”) will be established with the purpose of facilitating research and commercial transactions between parties in China and the University of Waterloo (“UW”). UW, through the Waterloo Commercialization Office (“WatCo”) housed in the Office of Research, will grant UW-HKI licensed rights to WatCo controlled intellectual property on a case-by-case basis depending on the nature of the transaction being contemplated. The license agreement with UW-HKI will include the right to sub-license to Chinese entities which will enable business-to-business (“B2B”) transactions with less restrictive flow of capital issues from mainland China. The license agreement with UW-HKI will specify that certain royalty payments be made to UW (established on a case-by-case basis) in respect of the intellectual property rights granted to UW-HKI. It is anticipated that many of UW-HKI’s sub-licensed Chinese partners will require initial technology development/prototyping assistance from UW researchers\inventors. UW-HKI will sub-contract any such technology research activity back to UW.

It is envisioned that UW-HKI will also assist UW to secure and deliver other initiatives such as the current Memorandum of Understanding collaborations with Soochow University (Technology Transfer Office) and Zhejiang University (Technology Transfer Office), as well as any other similar partnerships that may arise. The UW-HKI may also potentially be a vehicle that could provide assistance to other university functional groups such as Advancement, Waterloo International, Waterloo Institute for Nanotechnology, WatCar, and possibly others.
FOR APPROVAL

Change to the Memorandum of Agreement between the Faculty Association of the University of Waterloo (FAUW) and the University of Waterloo

Motion: That the Board of Governors approve the following amendment to Article 13.3.3.e of the Memorandum of Agreement between FAUW and the University of Waterloo. This change is conditional upon ratification by FAUW members [note: new text underlined; deletions strikethrough]:

Effective May 1, 2004, the University will provide annually an Outstanding Performance Fund for each Faculty equal in value to ten percent of that Faculty's Selective Increase Pool, to provide special permanent salary increases as described below.

Members in each Faculty unit (department or school) whose annual performance rating for the current year is within the top twenty percent of ratings within the unit may be considered for a special permanent salary increase. Members who have received a special increase in either of the previous two years are not eligible to receive a special increase, and are excluded for purposes of determining the top twenty percent and those within it.

All Members identified by the process above will form a single Faculty-wide pool. The Dean of the Faculty, in consultation with the Vice-President, Academic & Provost, will review the performance of all Members in this pool, and make special salary increase awards equal in value to one Selective Increase Unit (SIU) to a subset of them. The primary criteria will be outstanding performance in teaching and in scholarship. For at least eighty percent of the awards, the sole criterion will be outstanding performance in teaching and scholarship. Remaining awards may be given on the basis of outstanding service to the University. Consideration also should be given to dispersing the awards across Faculty units, ranks, and to both women and men. Awards given on the basis of outstanding service will not be limited to Members holding administrative positions. The number of awards made will be such that, in the aggregate, they will differ from ten percent of each Faculty's Selective Increase Pool by less than one SIU, and any unspent amount in the Fund of a given Faculty will be carried forward to the next salary year. The Vice-President, Academic & Provost will publicly announce the award recipients.

Rationale: This change was brought forward by FAUW to address concerns that some outstanding performance awards are perceived to be awarded primarily on the basis of service as opposed to teaching and research activity. Recognizing that it is desirable to reward outstanding service, it is proposed that a maximum of twenty percent of the awards be permitted for this purpose, noting that “service” will be considered as a whole and not limited to the holding of administrative positions.

Background: The proposed change was supported by Dean’s Council on 18 December 2013 and unanimously supported by the Faculty Relations Committee at its meeting of 19 December 2013. All FAUW members are entitled to participate in a ratification vote for major changes to the Memorandum of Agreement and FAUW intends to hold a vote relating to this change during May/June 2014. If approved, it will take effect in 2014 for outstanding performance awards delivered in 2015.
FOR APPROVAL

**Exceptions to Policy 40, The Chair**

**Motion:** To approve exceptions to Policy 40, The Chair, as described in Attachment 1.

**Rationale:** The proposed exceptions are necessary in order to provide for the eligibility of the affiliated and federated institutions of Waterloo (AFIW) faculty members to serve as chair of the Department of Religious Studies and/or to serve on a nominating committee for the chair of that department, which is a collaborative undertaking between the University of Waterloo and the AFIW.

**Background:** The proposed exceptions were approved by the Faculty Relations Committee on 21 November 2013, by the relevant academic group at each of the AFIW, and by Senate on 20 May 2014.

Geoff McBoyle
Vice-President, Academic & Provost
Exceptions to Policy 40 – The Chair related to Religious Studies

Each of the University of Waterloo (“UW”), St. Jerome’s University, Conrad Grebel University College, Renison University College, and St. Paul’s University College is a legal entity, with its own constitution and governance system. The latter four are referred to in this document as “AFIW” (affiliated and federated institutions of Waterloo). The Department of Religious Studies is a collaborative undertaking of the five institutions, which functions as a UW department within the Faculty of Arts.

This document sets out exceptions to Policy 40 – The Chair, which are necessary in order to provide for the eligibility of AFIW faculty members (as defined below) to serve as chair of the Department of Religious Studies, and/or serve on a nominating committee for the chair of that department.

In this document, “AFIW faculty member” means a faculty member in the Department of Religious Studies, who is employed by an AFIW institution with a tenure-track appointment at the rank of assistant professor, associate professor or professor.

1. Qualification
Policy 40 provides that the chair of a department will be a tenured associate professor or professor at UW (as defined in Policy 76 – Faculty Appointments). In the case of religious studies, an AFIW tenured faculty member will be eligible to be appointed chair, despite not being a tenured faculty member at UW. AFIW members serving in administrative positions at the level of associate dean or higher at an AFIW institution are not eligible to serve as chair of a UW department.

Before an AFIW faculty member applies for consideration as chair of the department, the faculty member will inform the head of his/her AFIW institution that he/she is running for office.

2. Appointment of a Nominating Committee
The nominating committee for the chair of religious studies shall consist of:
   - The dean of the faculty, who shall chair the nominating committee.
   - Three faculty members elected by and from the regular and AFIW faculty members of the department. At least one of these three faculty members will be tenured at UW.
   - One regular staff member, elected by and from the regular staff members of the department.
   - A regular faculty member from another department within or outside the faculty, selected by the vice-president, academic & provost in consultation with the dean of the faculty.
   - The vice-president, academic & provost or delegate, ex officio, non-voting.
   - One undergraduate student and one graduate student, chosen by the dean. Normally, the dean shall consult with department or faculty student organizations where these exist. Student appointees are voting members of the nominating committee.
   - One additional non-voting member (e.g., non-regular faculty or staff) may be appointed by the dean following appropriate consultation with department members and associated members.

3. Agreement Required
Prior to an AFIW faculty member being appointed chair, the arrangement must be documented in an agreement between UW and the AFIW institution that employs the faculty member.

4. Application of UW Policies, Procedures, Guidelines and the MOA
Insofar as they are relevant to the activities of a chair at UW, UW policies, procedures, guidelines and the Memorandum of Agreement between the Faculty Association of the University of Waterloo and UW (the “MofA”), as they all are amended from time to time, will apply to and be binding upon an AFIW faculty member in the performance of his or her duties as chair at UW, as if such AFIW faculty member were a regular UW faculty member as defined by the MofA, and such AFIW faculty member will have all of the rights and obligations that these documents and practices confer on the chair of a UW department.
FOR APPROVAL

New Academic Department, Faculty of Environment

Motion: To approve the transformation of the Centre for Knowledge Integration into the Department of Knowledge Integration within the Faculty of Environment, as described in Attachment 1 and effective 1 September 2014.

Background: Since its establishment in 2007, the centre has sustained and grown a significant undergraduate program (Bachelor of Knowledge Integration) while also growing its faculty complement and maintaining a substantial level of activity overall. Since undergraduate programs typically fall under the responsibility of a department or school, it would be suitable for the centre to be transformed into a department at this time. This change was endorsed by Deans’ Council on 9 April 2014, and was approved by Senate on 20 May 2014.

Geoff McBoyle
Vice-President, Academic and Provost
Department of Knowledge Integration

Proposal
The Faculty of Environment is currently composed of four primary academic units — the Department of Environment and Resource Studies (ERS), the Department of Geography and Environmental Management (GEM), the School of Planning (SOP), and the School of Environment, Enterprise and Development (SEED). The Faculty proposes to create a fifth academic unit — the **Department of Knowledge Integration (DKI)** from the existing Centre for Knowledge Integration. This new academic unit will build upon and provide a “home” for an existing undergraduate program, currently delivered at the Faculty level through the Centre. It will also house Waterloo Unlimited and the Shad Valley programs, which are heavily involved in outreach activities for high school students across Canada.

**Context and Rationale:**
The Centre for Knowledge Integration (CKI) was established in 2007 in the Faculty of Environment with the primary mission of developing and sustaining the new undergraduate degree program in Knowledge Integration. That program grew out of a university wide high school outreach and enrichment program, Waterloo Unlimited, created in 2004 at the request of then Provost Amit Chakma. CKI has now operated Waterloo Unlimited for seven years, and has graduated two cohorts of Knowledge Integration students. Since its inception, CKI has also run the national award winning Shad Valley summer program on behalf of the university.

The Knowledge Integration program is unique in its balance of core courses, breadth requirements and elective flexibility, as reflected in its unique degree designation. The Bachelor of Knowledge Integration program was approved and endorsed by the Ontario Ministry for Training, Colleges and Universities in August 2007. KI students take full advantage of the diversity of course offerings across campus and in 2013, the roughly 100 KI students across four years took 320 different courses from 58 different departments across campus. The first two graduating classes have gone on, in roughly equal numbers, to enroll in graduate programs in everything from Philosophy to Biology to Public Policy to Speech Language Pathology and Anthropology, or into gainful employment across the public and private sectors.

In 2013, the Faculty of Environment hired two new faculty members for the Centre (bringing the total to five) to enhance the capacity of CKI in both teaching and research and to deliberately strengthen its connections within the Faculty. In its strategic plan, CKI has articulated three main goals:

- to continue to grow the undergraduate program in KI, offering additional electives designed to attract students from across campus;
• to continue to operate and grow Waterloo Unlimited, which attracts over 120 outstanding high school students from across Canada to campus each year (about two-thirds of whom apply to Waterloo, with half of them actually enrolling in programs across all six faculties); and
• to develop a significant research activity supporting interdisciplinary and trans-disciplinary study, and to explore the potential of a graduate program (MKI).

The integration of CKI within the Faculty of Environment has been very successful. Not only has CKI deepened our interdisciplinary approach, which is a hallmark of our Faculty, it has contributed significantly to develop the problem solving skills of our students. The recent faculty hires fit exceptionally well with the vision of the Faculty of Environment and are already well integrated within the activities of CKI and the Faculty at large.

Furthermore, having achieved a significant level of activity and an initial steady state, CKI has become a fully-fledged academic unit in its own right. The term “Centre” is typically linked to research centres or other (administrative) centres such as CTE or CEL on campus. Since academic units responsible for undergraduate degree programs at Waterloo are either departments or schools, it would seem appropriate at this time to grant CKI academic unit status as the Department of Knowledge Integration.

André Roy  
Dean  
Faculty of Environment

Ed Jernigan  
Director, Centre for Knowledge Integration  
Faculty of Environment

March 21, 2014

*The change in status for Knowledge Integration (from Centre to Department) was endorsed by Environment’s Faculty Council at its meeting on March 17, 2014.*
The Office of Advancement had another successful year and focused on three key operational priorities in addition to our revenue targets: post-campaign stewardship, talent management and strengthening our prospect management program and increasing call activity levels. Progress was made in all three areas and will be sustained into the coming year.

In addition, the Office of Advancement developed the Advancement Strategic Framework over the past year to unify and guide Waterloo’s advancement activity and investments across campus for 2014-17. The Advancement Strategic Framework embraces a philosophy where the Office of Advancement and university leadership are united in their conviction that philanthropy is ‘core’ to achieving the university’s vision.

A key element of the Framework is our mission, capturing what the Office of Advancement is responsible for and the overarching goal that drives our strategies and programs:

**Inspire and engage people in philanthropy to advance the University of Waterloo in becoming one of the world’s top innovation universities**

The Advancement Strategic Framework outlines six Strategic Goals of which four have been prioritized for investment in 2014-15. Preliminary work has begun with dedicated teams established to focus on emerging practice and innovation, goal setting and new performance indicators, and bringing forward recommendations that respond to our environment and goals and are designed to build our fundraising capacity.

**Financial Results Highlights**

*University of Waterloo reports on Dollars Raised (new cash & pledges, including gift-in-kind/other)*

Preliminary results for the fiscal year ended April 30, 2014 totaled $58,784,947. Our financial results remained steady compared to FY13 results of $57.2 million.

**Program Highlights**

Waterloo’s Alumni Relations team achieved a number of milestones over the past year:

- Social media/Digital media – significant growth in all social media platforms, conversations, blog and other on-line tools (e.g. Facebook - 94% increase, Twitter - 55% increase, LinkedIn - 13% increase & addition of Google+), all with increased campus coordination across platforms.

- International Chapters – Waterloo recently launched our 9th and 10th alumni chapters in Seoul, Korea and Vancouver, Canada. These join existing chapters in the following locations: Hong Kong, United Kingdom, Singapore, Shanghai, Beijing, California (Bay area), New York and Calgary. The Hong Kong government has approved Waterloo’s charitable status and we will be setting up the Hong Kong Waterloo Foundation Office with its primary focus on fundraising and alumni relations.

- Waterloo’s Annual Giving Program finished the year with strong results, continuing to focus on strengthening the foundation of Waterloo’s donor base. In particular, our Call Centre once again surpassed its goal of $696,000, with over $750,000 raised this year from more than 5,700 people. This program’s impact goes far beyond the dollars, as it is also used to update contact and business information and delivering university key messages to our alumni and parents.
Waterloo’s Planned Giving Program surpassed its goal of 30 new bequests with 32 new bequests confirmed valued at $3.2 million. In response to these results, a series of special appeals has been scheduled for FY15. A target analytics project is underway to do further analysis on our prospect pipeline and available resources to service leads moving forward.

**Human Resource Update**

Talent management is an ongoing priority for the Office of Advancement as we strive to stand out in an extremely competitive environment. In 2013-14, 24 full-time advancement positions were filled (not including staff reassignments), four with internal candidates from the Advancement team. Please refer to the senior staff announcements below.

**Awards and Honours**

The University of Waterloo Advancement team accepted a number of awards in 2013-14. From the Council for Advancement in Support of Education (CASE) District II – Alumni Relations proudly accepted the Silver Medal for Best Alumni Blog for their engaging blog *Bringing Alumni Together Through Conversation*. In addition, Waterloo was awarded the Silver Medal in the Proposal Writing category for our *RBC Initiative for Building Water Expertise* proposal.

From the Canadian Council for Advancement in Education (CCAE) – Cynthia Breen, alumni officer, digital initiatives, was honoured with the Rising Star Award 2014 for her achievements in the advancement field as a young professional. The Alumni Relations team also took home the CCAE Gold Medal for Best Use of Social Media for their innovative *Join the Conversation* alumni twitter wall at the 2013 convocation ceremonies.

**Senior Staff Announcements (excerpts)**

**Michael den Haan, MA, Associate Vice-President, Principal Gifts (August 2013)**

Michael came to Waterloo from University of Toronto where he served as Executive Director of Advancement in the Faculty of Medicine from 2007-13. During this time, Michael led the Faculty of Medicine to phenomenal success where he and his team of 30 advancement staff raised more than $300 million for the Boundless Campaign. Prior to U of T, Michael held several progressive positions at the MS Society of Canada, including National Campaign director and Assistant Vice President, Major Gifts & Planned Giving.

**Sheilaah Guthrie, Associate Director, School of Accounting & Finance (April 2014)**

Sheilaah has had an extensive and successful fundraising career, working with a variety of organizations in leadership roles over the past 13 years, including KCI Ketchum Canada Inc., Toronto Children’s Aid Foundation, Oakville Hospital, Art Gallery of Hamilton and most recently Sheridan Institute of Technology and Advanced Learning.

**Frances Houston, Director, Major Gifts (December 2013)**

Frances has been a member of the Waterloo Advancement Team for more than 6 years working in the School of Accounting & Finance (SAF). During her time in SAF, Frances and her team exceeded their $8 million campaign goal early and doubled the size of the endowment holdings of the School. Frances successfully built a strong advancement operation and culture in SAF. A graduate of McMaster University, Frances also had a successful career in sales and marketing both overseas and in Canada where she built and led sales teams, oversaw marketing strategy and implementation and directed business development and capacity building initiatives.

**Stephen Shapiro, Senior Executive Director, Global & Regional Development (September 2013)**

An experienced fund raiser and administrator, Stephen Shapiro has held senior advancement positions with the University of British Columbia, the University of Alberta, St. Paul’s Hospital Foundation (Vancouver) and the Government of Alberta prior to joining the University of Waterloo.
FOR APPROVAL

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School of Urban and Regional Planning Alumni Association –
Consent to Use University Name

Motion: To give consent to the “School of Urban and Regional Planning Alumni Association” to change its legal name to “University of Waterloo Planning Alumni of Toronto.”

Rationale: The School of Urban and Regional Planning Alumni Association (SURPA) is seeking to change its name to incorporate specific reference to the University of Waterloo in order to distinguish itself from alumni groups of other institutions active in the GTA. Board of Governors Bylaw 1 (K.1) requires that “No persons shall assume or use the name or the coat-of-arms of the University of Waterloo, or any design in imitation of the same without the authority of the Board.”

Background: SURPA was incorporated as a not-for-profit in 1991 and consists of University of Waterloo alumni who support the School of Planning by organizing an annual fundraising dinner. This dinner has approximately 1,000 guests consisting of planning, architecture, law, land development and related professionals from the GTA and Ontario. SURPA has raised hundreds of thousands of dollars that directly benefit School of Planning students. Every year, proceeds from the event support a “Planner-in-Residence” program, entrance scholarships, endowment scholarship funds, and special student initiatives. Each alumnus from the planning program recognizes the valuable contributions this group has made to their educational experience.
This report is submitted following the committee’s meeting of 13 May 2014.

FOR APPROVAL

1. **UW Financial Statements, 2013-2014**
   **Motion:** That the Board of Governors delegate its authority to approve the university’s audited financial statements for the fiscal year ended 30 April 2014 (the “Financial Statements”) to the Board Executive Committee.

   **Background:** The Financial Statements will be reviewed by the Audit Committee at its July/August meeting. In the past, the Financial Statements were presented to the Board of Governors for approval at its October meeting. Due to changes in auditing standards, if the Financial Statements are not approved until the October meeting of board, the auditors will be required to perform a subsequent events review and bring any changes to an extraordinary meeting of the Audit Committee before the Financial Statements can go before the board. Approval of the Financial Statements before the October meeting of board will also allow the university to make certain filings and release information based on the Financial Statements earlier than in previous years.

2. **Amendment to Governing Resolution**
   **Motion:** That the Board of Governors approve amendments to the governing resolution of the Audit Committee, as presented in Attachment 1.

   **Background:** The proposed amendments are intended to align the resolution guiding the committee’s activities with the increasing prevalence of risk management in the ongoing work of the committee. This includes renaming to the Audit & Risk Committee, as well as enhancing the terms of reference to reflect the committee’s role in the overall management of risk for the university. Other minor amendments reorganize the terms of reference to delineate the specific responsibilities of the committee, and to generally add clarity where appropriate.

FOR INFORMATION

3. **New Accounting Standards for Valuation of Employee Future Benefits**
   The Audit Committee was briefed on new accounting standards for the valuation of employee future benefits, including the effect that these new standards will have on the university’s financial reporting, and expressed no concerns with respect to these changes.

4. **Risk Management and Mitigation**
   In the past year, the committee has received several audit reviews and audit follow-up reports. As well, the committee has received briefings on a variety of risk management activities of the university. On the basis of reviews of the university’s management initiatives and approaches, the committee is satisfied that risk mitigation is being addressed.

/sg
Cindy Forbes
Chair
Audit & Risk Committee - Resolution

1. MEMBERSHIP

The membership of this Committee shall consist of the following:

Five members of the Board of Governors from among the 17 Board members appointed by the Lieutenant Governor-in-Council or elected by the Board from the community-at-large. At least one member of the Committee, as well as the Chair, is The Chair and at least one other member of the Committee are expected to have accounting or major financial expertise and experience and at least one member is expected to have risk management experience and expertise. All Committee members are to be financially literate*.

It is desirable that one One member of the Committee shall also serve on the Finance and Investment Committee.

No Governor may serve on the Audit Committee while that Governor or a company with whom the Governor has a business or employee relationship is receiving consulting, advisory or other fees from UW.

(*'Financially literate' includes, at a minimum, the ability to read and understand a set of financial statements that present a breadth and level of complexity of the issues that can reasonably be expected to be raised by UW's financial statements.)

2. MEETINGS

The Committee will meet at least three times per year, more often as required.

3. TERMS OF REFERENCE

To review the external auditor's report with the external auditors prior to the issuance of the annual audited financial statements, and to:

- review contentious issues, including actual or anticipated litigation with material financial impact
- recommend the financial statements to the Board of Governors for approval
- review reports to management from the auditors and ensure that management has taken the appropriate action
- retain or appoint, at UW's expense, such experts and advisors as it deems necessary to carry out its duties; the Committee shall advise the Governance Committee of such actions

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

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

To monitor the effectiveness of UW’s internal controls and management information systems, including:

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

To monitor the effectiveness of UW’s risk management activities, including:

- that appropriate procedures are in place to mitigate risk
- monitoring the effectiveness of the University’s risk management environment
- receiving and considering reports on significant risks or exposures to the University and the management of these
- ensuring that a risk management system with appropriate procedures is in place to mitigate risk
- discussing with administration, the internal auditors and the external auditors the University’s major risk exposures (whether financial, operational, or otherwise), the adequacy and effectiveness of accounting and financial systems, and the steps administration has taken to monitor and control such exposures
- reviewing, at every meeting, the status of risk management initiatives and emerging issues that have the potential to impact the University’s risk profile
- to reporting to the Board annually on risk management
- to meeting with the risk officer in the absence of management, at least once annually
- ensuring that committee members receive appropriate orientation regarding the work of the committee, and that training to enhance financial literacy and best practices in risk management is made available to committee members as required

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

Approved by the Board of Governors, April 5, 1988.
Amended by the Board of Governors, June 6, 2006.
Amended by the Board of Governors, October 27, 2009.
Amended by the Board of Governors, June 1, 2010.
Amended by the Board of Governors, June 3, 2014.
Audit & Risk Committee - Resolution

1. MEMBERSHIP

The membership of this Committee shall consist of the following:

Five members of the Board of Governors from among the 17 Board members appointed by the Lieutenant Governor-in-Council or elected by the Board from the community-at-large. The Chair and at least one other member of the Committee are expected to have accounting or major financial expertise and experience and at least one member is expected to have risk management experience and expertise. All Committee members are to be financially literate*.

One member of the Committee shall also serve on the Finance and Investment Committee.

No Governor may serve on the Audit Committee while that Governor or a company with whom the Governor has a business or employee relationship is receiving consulting, advisory or other fees from UW.

(*'Financially literate' includes, at a minimum, the ability to read and understand a set of financial statements that present a breadth and level of complexity of the issues that can reasonably be expected to be raised by UW's financial statements.)

2. MEETINGS

The Committee will meet at least three times per year, more often as required.

3. TERMS OF REFERENCE

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

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

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

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

- monitoring the effectiveness of the University’s risk management environment
- receiving and considering reports on significant risks or exposures to the University and the management of these
- ensuring that a risk management system with appropriate procedures is in place to mitigate risk
- discussing with administration, the internal auditors and the external auditors the University’s major risk exposures (whether financial, operational, or otherwise), the adequacy and effectiveness of accounting and financial systems, and the steps administration has taken to monitor and control such exposures
- reviewing, at every meeting, the status of risk management initiatives and emerging issues that have the potential to impact the University’s risk profile
- reporting to the Board annually on risk management
- meeting with the risk officer in the absence of management, at least once annually
- ensuring that committee members receive appropriate orientation regarding the work of the committee, and that training to enhance financial literacy and best practices in risk management is made available to committee members as required

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

Approved by the Board of Governors, April 5, 1988.
Amended by the Board of Governors, June 6, 2006.
Amended by the Board of Governors, October 27, 2009.
Amended by the Board of Governors, June 1, 2010.
Amended by the Board of Governors, June 3, 2014.
FOR APPROVAL

1. **Applied Health Sciences Expansion**
   **Motion:** That the Board of Governors approve a revised project budget of $18,639 million for the construction of an expansion building for Applied Health Sciences – Kinesiology on a portion of parking lot M.

   **Background:** During the schematic design process, this project was refined to include a 350-seat lecture theatre, five offices, five research laboratories, a graduate student seminar room, and four student workspaces, totalling approximately 48,300 gross square feet. Further, during design development, it was determined that the potential connection points to the existing Burt Matthews Hall building provided a one-time opportunity to create a two-storey, 7700 gross square foot multi-purpose student space which is generally in short supply with the Faculty of Applied Health Sciences and across campus. The tender documents were issued to include the additional multi-purpose student space in the base price. The additional funds will not add to the debt of the university, and the university remains well within its targeted debt ratio.

2. **Applied Health Sciences Expansion**
   **Motion:** That the Board of Governors approve the award of a design/build contract to Melloul-Blamey Construction Inc. for $16,041,518, plus HST.

   **Background:** The President’s Advisory Committee on Design met on 2 May to receive presentations from each of the four design/build teams and evaluated the submissions based on design, strength of team, quality of submission, and quality of presentation. After the committee finalized the relative ranking of each proposal, tender prices were shared and added to the ranking to determine the recommended project. Melloul-Blamey Construction Inc. was the second low bid and the successful bidder according to the rankings procedure.

3. **Light Rail Transit Project**
   **Motion:** That the Board of Governors delegate authority to the Building & Properties Committee to approve minor land transactions between the university and the Region of Waterloo to facilitate the implementation of the light rail transit project intended to operate along the east boundary of the university’s main campus.

   **Background:** Discussions have been held between the university and the Region of Waterloo with respect to the development of lands on the east side of the main campus and the east side of the Health Sciences campus in Kitchener for the purpose of the light rail project. To properly proceed with the project, the Region of Waterloo may require two small pieces of land at or near the university’s main campus. The first measures 927 square feet near East Campus Hall and the Region of Waterloo has offered compensation to the university of $17,000. Transfer of this piece of land would not unduly interfere with the university’s use and development of its neighbouring lands. The second measures approximately .23 acres and is intended for a new power substation and switchgear. Discussions are underway among the university, the Region of Waterloo and Waterloo North Hydro to locate this work north of Columbia Street on the existing Waterloo North Hydro easement. If this
cannot be done for technical reasons, then the university will enter discussions with the Region of Waterloo about an alternative site, while minimizing the future impact on the university’s developable lands.

FOR INFORMATION

4. Maintenance Program and Energy Conservation Efforts
   The committee received a report from Rick Zalagenas, director of utilities & maintenance, on the university’s efforts to minimize the use and cost of energy. The report focused on the university’s Building Automation System, which allows continuous monitoring of mechanical systems and environmental conditions in each building. Through this system, occupancy scheduling, temperature setback and ramping routines, air quality measurements and load shedding strategies allow the university to minimize energy consumption. For the year just ended, the university’s energy consumption was 1.79 GJ/m². Average Ontario university energy use is 2.59 GJ/m².

5. General Oversight
   The committee reviewed and accepted for information:
   • the capital financing commitments associated with capital projects and advises that these commitments fall within Waterloo’s board-approved debt policy
   • the status of capital projects
   • its terms of reference and work plan
   • a summary of the planned capital submission to the province of Ontario in response to a request for expressions of interest
   • a summary of the South Common Functional Plan
   • a review of proposed expansion plans for Renison University College and St. Jerome’s University

Murray Gamble
Chair

9 May 2014
This report is submitted following the committee’s meeting of 3 March 2014.

FOR APPROVAL

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Endowment Fund Investments

Motion: To appoint Dalton Investments as an approved global equity manager for the University of Waterloo endowment fund.

Background: Members reviewed Dalton’s strong track record in its long only equity portfolio focused on Asia and its expertise investing in areas such as India, mainland China and Indonesia, which provides an opportunity to invest in a specific geographic region relative to the university’s existing global equity managers. In recommending the selection of Dalton Investments, the committee notes that it is taking a long term view to manager selection with a focus on managers who rigorously apply value investing principles.

Risk Factors: (a) the Asia Pacific sector is more volatile than the broader global equity markets, although it has performed well over the long term; (b) long term value oriented managers are known to have periods of underperformance compared to the markets; (c) Dalton Investments has not been rated by Aon Hewitt, the university’s investment consultants; however, based on publically available information, it has a strong track record within its sector and is familiar to several members of the committee.

/ew

Prem Watsa
Chair
This report is submitted following the committee’s meeting of 8 May 2014.

FOR INFORMATION

1. **Board and Board Committee Self-Assessments**
   Board and board committee self-assessments for the 2013-2014 board and board committees have been completed online. Results are being tabulated and will be provided to the board and committees when available. There were some challenges with communication and technology that will be addressed for next year.

2. **Core Competencies of the Board and its Members**
   Members of the 2014-2015 board have been asked to complete a new skills matrix online on their own behalf. Results are being tabulated and will be shared with the Governance Committee when available.

3. **Committee Work Plan**
   Minor changes have been made to the committee work plan, reflecting an annual review of the board and board committee self-assessment surveys at the January meeting.

4. **The University of Waterloo Act, 1972**
   The committee received a report from its secretary on challenges in interpretation of the statute. It was decided that there is no urgency to pursue changes to the statute at this time.

5. **Board Retreat**
   It was decided to explore the possibility of holding a third annual board retreat, sometime in late November, with a focus on trends in higher education that might be anticipated for periods beyond the current strategic plan.
This report is submitted following the committee’s meetings of 4 April 2014 and 9 May 2014.

FOR APPROVAL

1. Actuarial Valuation of the UW Pension Plan as at 1 January 2014

   **Motion:** To approve filing of the “Actuarial Report: University of Waterloo Pension Plan” as of 1 January 2014 (the “Valuation”) with the Financial Services Commission of Ontario (FSCO) and the Canada Revenue Agency (CRA).

   **Background:** The University of Waterloo Pension Plan (the “Plan”) is an inflation-linked defined-benefit plan. The Plan is funded by contributions from the employees and the university and by investment returns. The total annual contribution is determined by applying actuarial methods with assumptions about investment returns, mortality, inflation and salaries.

   Due to the impact of lower than expected investment returns and increasing pensioner longevity, the pension plan is in a deficit position. The deficit position has increased since the 1 January 2013 report due to the adoption of more conservative actuarial assumptions. The university continues to make additional contributions to meet the unfunded liability. The university has received approval from the Ministry of Finance for temporary solvency funding relief in connection with the 1 January 2014 actuarial valuation.

   A copy of the Valuation can be requested through the committee’s secretary, ext. 37549.

   **Financial Position of the Plan**

   **Going Concern Basis.** A valuation conducted on a going-concern basis is to determine the relationship between the respective values of assets and accumulated liabilities, assuming the Plan will be maintained indefinitely.

<table>
<thead>
<tr>
<th></th>
<th>01.01.2013</th>
<th>01.01.2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actuarial value of assets</td>
<td>$1,021,371,472</td>
<td>$1,156,065,428</td>
</tr>
<tr>
<td>Actuarial liability</td>
<td>$1,146,705,029</td>
<td>$1,305,570,459</td>
</tr>
<tr>
<td>Funding excess (unfunded liability)</td>
<td>$(125,333,557)</td>
<td>$(149,505,031)</td>
</tr>
<tr>
<td>Deferred asset gain (loss) (non-real return bonds)</td>
<td>$(7,010,202)</td>
<td>0</td>
</tr>
<tr>
<td>Market value of assets</td>
<td>$1,089,990,306</td>
<td>$1,194,775,607*</td>
</tr>
</tbody>
</table>

   * Audited statement value has been increased by accrued benefit payments that are included in plan liabilities

   The 2014 actuarial liabilities shown above have been discounted based on a 3.75% real rate of return (down from 3.85% in 2013). The actuarial value of assets as at 1 January 2014 does not reflect smoothing (which historically deferred investment gains/losses over a three-year period). The $48 million deferred asset gain was fully recognized to partially offset the impact of changes to actuarial assumptions adopted to strengthen the valuation including:
Demographic assumptions: the 2014 Canadian Pensioner Mortality Combined Table, with Improvement Scale CPM-B, recently released by the Canadian Institute of Actuaries was adopted; this table reflects significant longevity improvements resulting in an increase of approximately $80 million to the Plan’s unfunded liability; and

Economic assumptions: the interest rate used to discount liabilities was reduced to 6.00% (CPI + 3.75%) and the interest rate used to discount cash flow from real return bonds was reduced to 3.75% per year to be consistent with the rate used to discount the liabilities, resulting in an increase of approximately $18 million to the Plan’s unfunded liability.

**Solvency Basis.** A valuation conducted on a solvency basis is used to determine the relationship between the respective values of the Plan’s assets and its liabilities assuming the Plan was wound up and settled on the valuation date. In accordance with the *Pension Benefits Act*, solvency liabilities exclude certain contractual benefits (e.g., indexing) in order to limit the magnitude of additional funding requirements for solvency purposes. Ignoring these obligations for solvency funding purposes does not, however, alter the contractual obligation with respect to indexing in place under the terms of the pension plan (the liability for indexation benefits is reflected in the going concern valuation position and funding requirements). The solvency calculation reported below excludes indexation. The additional wind-up liability for indexation benefits is approximately $771 million at 1 January 2014, resulting in a hypothetical wind-up deficit of approximately $847 million at 1 January 2014 (including indexation).

<table>
<thead>
<tr>
<th></th>
<th>01.01.2013</th>
<th>01.01.2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market value of assets (net of wind-up expenses)</td>
<td>$1,089,990,306</td>
<td>1,194,275,607</td>
</tr>
<tr>
<td>Solvency liability</td>
<td>$1,337,806,909</td>
<td>1,270,650,784</td>
</tr>
<tr>
<td>Solvency excess/(deficiency)</td>
<td>$(248,316,603)</td>
<td>(76,375,177)</td>
</tr>
</tbody>
</table>

**Funding Requirements.** Member contributions for 2014 are approximately $26 million, or 7.31% of pensionable earnings. The university’s current service cost is approximately $27.2 million or 7.66% of pensionable earnings. In anticipation of additional contribution requirements arising from the actuarial valuation, the university contributions to the Registered Pension Plan and Payroll Pension Plan [see below] were increased to 163% of required member contributions (from 155% in as at 1 January 2013). The full university contribution is being directed to the Registered Pension Plan to meet the current service cost requirements and to amortize the unfunded liability. In addition to the foregoing, the university will make a one-time contribution to the Payroll Pension Plan to address the deficit.

**Asset Mix**

<table>
<thead>
<tr>
<th>Asset Mix (% of Total Market Value)*</th>
<th>As of 1 Jan 2013</th>
<th>As of 1 Jan 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real Return Bonds</td>
<td>21%</td>
<td>17%</td>
</tr>
<tr>
<td>Fixed Income, Cash</td>
<td>40%</td>
<td>34%</td>
</tr>
<tr>
<td>Equities</td>
<td>34%</td>
<td>41%</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>Real Estate</td>
<td>1%</td>
<td>3%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Asset mix is based on the underlying assets excluding in-transit contributions and payments.
**Membership Data**

<table>
<thead>
<tr>
<th>Membership Data</th>
<th>01.01.2010</th>
<th>01.01.2011</th>
<th>01.01.2012</th>
<th>01.01.2013</th>
<th>01.01.2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Members</td>
<td>3499</td>
<td>3518</td>
<td>3617</td>
<td>3760</td>
<td>3891</td>
</tr>
<tr>
<td>LTD Members</td>
<td>87</td>
<td>93</td>
<td>96</td>
<td>94</td>
<td>97</td>
</tr>
<tr>
<td>Suspended Members</td>
<td>7</td>
<td>12</td>
<td>10</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>Current Pensioners</td>
<td>1400</td>
<td>1432</td>
<td>1480</td>
<td>1555</td>
<td>1603</td>
</tr>
<tr>
<td>Deferred Pensioners</td>
<td>394</td>
<td>422</td>
<td>447</td>
<td>448</td>
<td>485</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5387</strong></td>
<td><strong>5477</strong></td>
<td><strong>5650</strong></td>
<td><strong>5872</strong></td>
<td><strong>6087</strong></td>
</tr>
</tbody>
</table>

**History of Asset Returns.** The following table shows the history of asset returns for the last seven years:

<table>
<thead>
<tr>
<th>Year Ending</th>
<th>Return on Market Value* (After Expenses)</th>
</tr>
</thead>
<tbody>
<tr>
<td>31 December 2007</td>
<td>1.62%</td>
</tr>
<tr>
<td>31 December 2008</td>
<td>-21.51%</td>
</tr>
<tr>
<td>31 December 2009</td>
<td>14.70%</td>
</tr>
<tr>
<td>31 December 2010</td>
<td>8.49%</td>
</tr>
<tr>
<td>31 December 2011</td>
<td>2.89%</td>
</tr>
<tr>
<td>31 December 2012</td>
<td>9.10%</td>
</tr>
<tr>
<td>31 December 2013</td>
<td>13.1%</td>
</tr>
</tbody>
</table>

* Excluding real return bonds

The returns (after all expenses) on market value have been calculated assuming contributions and benefit payments take place in the middle of the year.

**FOR INFORMATION**

2. **Payroll Pension Plan**

The University of Waterloo Payroll Pension Plan provides pension benefits (subject to plan caps) that cannot be paid from the Plan because of the application of the *Income Tax Act* maximum pension. The Plan and Payroll Pension Plan are integrated from a financial management perspective. Assets are set aside within the university funds in respect of the obligations under the Payroll Pension Plan. A going concern valuation of the Payroll Pension Plan is performed in conjunction with the annual valuation of the Plan, using the same actuarial assumptions. The values in this section are reported before taking into account the university’s additional contribution.

As of 1 January 2014, the actuarial liabilities of the Payroll Pension Plan were $29.8 million. The market value of the funds set aside was $27.5 million. The current service cost for 2014 is $1,492,678 or 0.42% of pensionable earnings, bringing the combined university current service cost for the Plan and Payroll Pension Plan to 8.08% of pensionable earnings. When special payments to amortize the unfunded liability are taken into account, the university’s total contribution as a percentage of pensionable earnings is 11.92%.

Based on claims experience and following a negotiation process with the carrier, the committee approved the following changes to benefits premium rates effective 1 May 2014:

- University Life Insurance Plan: contract rates will decrease by 20%; university and employee paid rates will remain unchanged through use of the unrestricted deposit account;

- Extended Health Plan: no change to single and family rates, ASO fees increase of 0.21%, large amount pooling increase of 0.09%;

- Dental Plan: no change to single and family rates, ASO fees increase of 0.04%;

- Long-Term Disability: Employee premium rate will be reduced by 18% to 0.99% plus RST; the new rate is believed to be sustainable and justified based on work undertaken by Human Resources to improve disability claims management.

4. Benefits Review Working Group

The committee accepted the recommendation of the working group to end its mandate and submit its research and findings to the strategic plan theme group dealing with a robust employer-employee relationship on the grounds that a review of the university’s total compensation program is required to effectively address the feedback received from employees.

5. General Oversight

The committee receives regular reports from the consulting actuary on legislative and policy changes anticipated and in force that impact public sector pensions, as well as changes implemented by other public sector pension plans. The committee discusses implications for the university’s pension plan and takes the information into account when making decisions on matters including plan design, funding and administration. During the reporting period, this included: voluntary consolidation options for public sector pension assets and a pension symposium held at Wilfrid Laurier University on 6 May 2014, which several members attended, that fostered productive discussion re: issues facing Ontario university pension plans, including potential for a university sector plan.

/ew

Bill Watson
Chair
Report to Industry Canada
Executive Summary


Institute for Quantum Computing
University of Waterloo
June 2014

Draft pending University of Waterloo Board of Governors approval
Executive Summary
The road to Quantum Valley

The Institute for Quantum Computing (IQC) began as a vision in 2001. Today, IQC is regarded as one of the leading quantum information research institutes in the world. This rapid success is due in no small part to the collaborative partnership behind IQC – the University of Waterloo, Mike and Ophelia Lazaridis, the Province of Ontario and the Government of Canada.

Over the past five years, the Government of Canada’s investment in IQC has helped to accelerate the institute’s growth, enhance its research infrastructure, draw international research talent to IQC, and share the results of our research with the world. Highlights from 2008-2014 include:

1. Research at the highest international level
   Quantum information research at IQC continues to advance and accelerate the field of quantum information. IQC research spans quantum computation, quantum communication, quantum sensors and quantum materials. Since 2008, research at IQC has advanced to compete at the highest international levels. Our 22 faculty have been recruited from around the globe, our postdoctoral fellowship program attracts the best and brightest talent to IQC and our rapidly growing graduate program is preparing the next generation of quantum information specialists.

2. Construction of the Mike & Ophelia Lazaridis Quantum-Nano Centre
   IQC’s headquarters, the Mike & Ophelia Lazaridis Quantum-Nano Centre, officially opened on September 21, 2012 and is home to IQC and the Waterloo Institute for Nanotechnology (WIN). This state-of-the-art building features 285,000 square feet of lab, office and collaboration space along with a fabrication facility (cleanroom). Designed to meet the highest scientific standards for temperature, vibration, humidity and electromagnetic radiation control, the Lazaridis Centre provides the ideal environment for interaction and collaboration of the top researchers and students from around the world. Today, the Lazaridis Centre is fully operational with all current faculty and staff moved into the building and eight labs occupied.

3. Faculty and student growth
   Over the past five years, IQC’s research faculty complement has grown to 22 faculty with both senior and young researchers being recruited. Additionally, IQC’s graduate programs have seen a 170% increase – from 42 students in 2009 to 114 in 2014. In turn, IQC’s overall research footprint has expanded by 350% to include the new Lazaridis Centre and the Research Advancement Centres (I and II) to a total of 53,943 sq. ft. on the University of Waterloo campus. IQC will continue to grow to meet our full complement of 33 faculty, 55 postdoctoral fellow and 165 graduate students.
4. **Host scientific conferences and lectures**

   From 2008/09-2013/14, IQC has hosted **26 scientific conferences** with researchers from around the globe on topics ranging from the fundamentals of quantum theory to experimentation of quantum devices. Attendees to these conferences and lectures have included Nobel Prize recipients, the forefathers of quantum information science and industry leaders.

5. **Disseminate and exchange research results**

   IQC’s visitor program promotes the dissemination and exchange of research with institutions across the globe. Over the past five years, IQC hosted **923 scientific visitors** from leading institutions, **185 industry visitors** and **163 government representatives**. Visitors to IQC have included Stephen Hawking; Nobel Prize winners Sir Anthony Leggett (2003), Serge Haroche and David Wineland (2012); and many of the world’s leading quantum information researchers.

6. **Promote science awareness to the public**

   IQC’s outreach activities have reached over **10,000 people** through a variety of activities including graduate fairs and public open houses, from the quantum symphony to Nobel Laureate lectures. Outreach activities are aimed to bring IQC’s research out of the labs and into the hands and minds of various audiences including potential graduate and undergraduate students, high school students and the general public.

7. **Support domestic and international students, post-doctoral fellows and visiting professors**

   Graduate students at IQC have **grown by 170%** since 2008, now at 114 students participating in our collaborative graduate program in partnership with Waterloo’s Faculties of Science, Mathematics and Engineering. Additionally, IQC’s postdoctoral fellowships have seen a 500% increase with 48 current postdoctoral fellows. As mentioned above, over 900 visiting researchers have spent time at IQC creating a vibrant research environment.

8. **General administration and operation of the facility**

   IQC has adapted its administrative and technical support structure to the complex nature of its growing research activities. Quantum information research varies from theoretical to experimental requiring a diverse level of both administrative and technical support.

These activities have positioned IQC as one of the preeminent research institutions in the world and have branded Canada as a global leader in quantum information research. As IQC continues its rapid growth and advances the understanding of the quantum world, Waterloo Region’s reputation as Canada’s Quantum Valley will continue to be solidified.