

University of Waterloo
BOARD OF GOVERNORS
Notice of Meeting

Date: Tuesday, February 7, 2006

Time: 2:30 p.m.

Place: **Manulife Wellness Centre** [campus map enclosed; parking available in Lot M]

	<i>OPEN SESSION</i>	<i>Page</i>	<i>Action</i>
2:30	1. Remarks from the Chair		
	a. Campaign Waterloo Update	Oral	Information
2:35	<u>Consent Agenda</u>		
	Motion: That items 2-5 [below] be approved and/or received for information, as indicated, by consent.		
	2. Approval of the October 25, 2005 Minutes*		Decision
	3. Report of the President		
	a. Recognition and Commendation	A1-A3	Information
	b. Sabbatical/Administrative Leaves and Administrative Appointments	A4-A7	Decision/Information
	4. Report of the Executive Committee	A8	Information
	5. Other Business		
	a. Accountability Status Reports		
	• Graduate Program Appraisals	A9	Information
	• Research Policies/Practices	A10-A11	Information
	• Undergraduate Program Reviews	A12	Information
	• Undergraduate Recruitment and Admissions	A13-A14	Information
	b. Waterloo Environmental Studies Endowment Foundation Constitution	A15-A22	Decision
	<u>Regular Agenda</u>		
	6. Presentations		
2:40	a. Sixth Decade Plan ["one pager" to be distributed]	A23-A31	Discussion/Information
3:05	b. Review of CECS: Progress on Implementation	A32	Discussion/Information
3:30	c. Living-Learning Project Report	A33	Discussion/Information
	[Re: item 6.b. & c. (above): reports previously distributed; enclosed again for external Governors; available at http://www.adm.uwaterloo.ca/infosec/reports.html]		
3:50	d. Sustainability Initiatives	A34-A35	Information
4:00	Break		
4:15	7. Report of the President		
	a. Environmental Scan	Oral	Information
4:30	8. Report of the Vice-President, Academic & Provost		
	a. 2005-06 Operating Budget Update	A36-A40	Information
	b. 2006-07 Operating Budget Outline	Oral	Information
4:45	9. Report of the Vice-President, Administration & Finance		
	a. 2006-07 Residence Fees	A41-A42	Decision
4:50	10. Reports from Committees		
	a. Audit	A43	Information

		Page	Action
4:55	b. Building & Properties	A44-A45	Decision/Information
5:05	c. Finance & Investment	A46	Information
5:10	11. Other Business		
	CONFIDENTIAL SESSION		
5:15	<u>Consent Agenda</u>		
	Motion: That items 12-14 [below] be approved by consent.		
	12. Approval of the October 25, 2005 Minutes*		Decision
	13. Report of the President		
	a. New Appointments with Tenure	CS1	Decision
	14. Other Business		
	a. Delegation of Authority	CS2	Decision
	b. Naming Proposal	CS3	Decision
	<u>Regular Agenda</u>		
5:20	15. Business Arising from the Minutes		
5:25	16. Report of the Building & Properties Committee	CS4	Information
	17. Other Business		
5:30	a. Annual Review of the President	CS5	Information
5:35	b. Appointment/Reappointment to the Board of Governors/Finance & Investment Committee	CS6	Decision
	18. Next Meeting		
	Tuesday, April 4, 2006, starting at 2:30 p.m.		
	19. Adjournment		
	Reception/dinner immediately following the meeting.		

*previously distributed

Information items enclosed: COU Briefing Notes, 2005-2006; February *University Affairs*; Governor Mark Walker's (staff representative) bio [because of timing, it was omitted from the Board Handbook].

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.

LC:tad
 January 24, 2006

Lois Claxton
 Secretary of the University

Please convey regrets to Tracy Dietrich at (519) 888-4567, x6125 or tdietric@uwaterloo.ca

University of Waterloo
BOARD OF GOVERNORS

February 7, 2006

Report of the President

For Information

1. RECOGNITION AND COMMENDATION

Chancellor **Mike Lazaridis** (President & Co-CEO of Research In Motion Inc.), Governor **Serge Godin** (Chairman & CEO of CGI Group Inc.) and Professor **Ric Holt** (Professor of Software Engineering and Director of the Software Telecommunication Group) are among Canada's "Top 30 IT Movers and Shakers" of the past 30 years. *Computing Canada* magazine published the list, saying "Canada has had more than its share of inventors and entrepreneurs. They have helped shape not only the nature of this country's business technology landscape, they have changed the very nature of computing itself. From mobile e-mail devices to open source operating systems to platform-agnostic programming languages – Canada's IT innovators have left an indelible mark."

Distinguished Professor Emeritus **Ralph Haas** and two Engineering alumni are being honoured by Professional Engineers Ontario for their achievements. Haas (Civil Engineering), who has achieved national and international recognition for important contributions to pavement engineering and infrastructure management, will receive the Association's Engineering Medal in the Research and Development category. **Tom Chau** (received his PhD in Systems Design Engineering and holds the Canada Research Chair in Pediatric Rehabilitation Engineering at the University of Toronto), who has enhanced the quality of life of children with disabilities through innovative research at the Bloorview Research Institute, won the Engineering Medal in the Young Engineer category. **Tony Franceschini** (received his Bachelor of Applied Science degree in Civil Engineering), who is President & CEO of Stantec Inc. Canada, based in Edmonton, and transformed the company into a leading North American professional services firm, won the Engineering Medal for Entrepreneurship.

The Scientific Director of the Institute for Quantitative Finance and Insurance, Professor **Phelim Boyle** (Accountancy), has been named the 2005 International Association of Financial Engineers (IAFE)/SunGard (a global leader in software and processing solutions for financial services) Financial Engineer of the Year. The Chairman of IAFE said "Dr. Boyle has produced a remarkable number of contributions to the field of financial engineering, over a long career. By focusing on bridging theory and the real world, his work has brought clarity to the difficult process of actually implementing theoretical models in option pricing. His seminal papers applying Monte Carlo techniques and high-dimensional lattice methods to practical problems provide foundation for much of the work financial engineers perform. It is fitting that the IAFE and SunGard recognize his contributions and insight to our field by naming him the Financial Engineer of the Year."

The latest volume – *Sustaining Our Futures: Reflections on Environment, Economy and Society* – in the Department of Geography's publication series celebrates 35 years at UW for **Bruce Mitchell** (Professor of Geography and Associate Provost, Academic & Student Affairs). The book has essays from 14 of Mitchell's protégés, on topics that range from the management of water, floodplains and entire river basin systems through to resource conservation, local knowledge systems, protected area legislation, cumulative impact assessment and feminist environmental geographies. "That he is an outstanding teacher and educator is beyond refute," say the editors of the book – Dan Shrubsole (now of the University of Western Ontario) and Nigel Watson (University of Lancaster, England), both

former PhD students with Mitchell. “Yet Bruce’s contribution is much greater than these collective activities suggest. He has also played a pivotal role in mentoring his students, particularly his graduate students, and is considered an ally and friend to many.”

Professor **Bill Poole** (Director of the Centre for Cultural Management) has received the 2005 Association of Cultural Executives Award for his outstanding contributions to cultural management in Canada.

Two Pattern Analysis and Machine Intelligence (PAMI) PhD students won prizes at the second annual LORNET e-Learning Scientific Conference held in Vancouver late last year.

Khaled Hammouda took first place for best demo, “Automatic Metadata Extraction,” showing text mining techniques to extract key information from documents for the purpose of automatically annotating them with metadata (a key component in e-learning environments). **Masoud Makrehchi** took second place for best poster, “Unsupervised Keyword Extraction based on Corpora,” which also employs text mining algorithms to extract keywords from a document collection. The students are both supervised by Mohamed Kamel, Director of PAMI.

Professor **Ellsworth LeDrew** (Geography) has been elected, through the Geoscience and Remote Sensing Society of the Institute of Electrical and Electronics Engineers (IEEE), a Fellow of IEEE with the citation “for contributions to environmental remote sensing sciences.”

A team of four fourth-year students – **Chris Deruyter, Carol Wong, Brent Sellors and Faisal Hadibhai** – took first place in the second annual University of Ottawa Accounting Competition held in November. The competition is designed to challenge upper-year students as they get closer to their Chartered Accountant designation. A total of 11 teams from five universities took part, including the UW group, selected by lecturer Alastair Lawrence based on their academic achievements and success in UW’s WatCase competition.

After dominating a recent qualifying event, the Waterloo Black team – **Tor Myklebust** (Combinatorics & Optimization), **David Pritchard** (Combinatorics & Optimization) and **Kartikaya (Kats) Gupta** (Software Engineering) and coached by Professor Gordon Cormack – is preparing for the 30th Association for Computing Machinery (ACM) International Collegiate Programming Contest World Finals. The competition, hosted by Baylor University and sponsored by IBM, will be held this spring at the Hilton Palacio del Rio in San Antonio. Waterloo has been world champion in the ACM programming competition twice and North American champion five times.

A graduate student in Electrical & Computer Engineering, **Mohammad Maymandi-Nejad**, is the winner of an award from the Strategic Microelectronics Council. The award recognizes “industrial collaboration,” and Maymandi-Nejad was cited for his project entitled “A Wireless Bio-Implantable Device for Monitoring Blood Pressure of Transgenic Mice.”

Engineering student **Kirsten Robinson** took second place in the Design for the Cold Competition with a plan to cover sections of northern downtowns with innovative transparent materials. The entry, called the “Sudbury Street Skins Project,” imagines ecologically friendly solutions for downtown spaces in northern cities. It proposes covering streets with a transparent roof made of an ecologically friendly material called Texlon. Graduates of Architecture won third place in the competition: **Chris Hardwicke** proposed a covered bicycle highway that would run above the roads; and **Alexander Tedesco** proposed using geothermal heat to create warm public spaces.

UW's new **School of Architecture** building in Cambridge was awarded a 2005 Wood Works Award at a recent ceremony held at the Blue Mountain Resort in Collingwood. The award, in the Heritage category, reflects not only the preservation of the wood structure, columns and floor slabs, and maple flooring, but also the integration of wood throughout in doors, sills, shelving and casework, especially in the Musagetes Architecture Library. The Wood Works Awards program is sponsored by the federal and provincial governments, Canadian Wood Council and private sector companies in forest and wood products industries.

BOARD OF GOVERNORS

February 7, 2006

REPORT OF THE PRESIDENT

A. SABBATICAL LEAVES – for approval

University of Waterloo Policy 3 “Sabbatical and Other Leaves for Faculty Members” [excerpts below, full text available at: <http://www.adm.uwaterloo.ca/infosec/Policies/policy3htm>] sets out the purpose of sabbatical leaves 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.

Thomas S. Abler, Anthropology, six months, July 1, 2006 to December 31, 2006, at 85% salary. *A major portion of time during the leave will be spent working on a funded research project: Significant Others: Anthropological Love Affairs with Particular Cultures (Pamela Stern, co-investigator). Its purpose is to explore why a relatively small number of societies have become icons or classic cultures within the anthropological canon.*

Jim Barker, Earth Sciences, twelve months, September 1, 2006 to August 31, 2007, at full salary. *I will develop water research projects with the oil sands industry and complete journal papers on recent research. In addition, I will expand the network of academic researchers involved with subsurface hydrocarbon contamination and remediation through visits, lectures, and course instruction involving research institutes and universities in Mexico, Brazil, Australia, Czech Republic, Spain, Italy, USA, and Germany.*

Michael Boehringer, Germanic and Slavic Studies, six months, July 1, 2006 to December 31, 2006, at full salary. *I will complete a monograph entitled “Gender/d Identities in the Works of Ferdinand von Saar”.*

Charles Clarke, Computer Science, twelve months, January 1, 2006 to December 31, 2006, at 85% salary.

From January to June, I plan to visit Microsoft in Redmond, Washington, to work on projects in the areas of web search, question answering and information retrieval with colleagues at Microsoft Research and MSN Search. From July to December, I plan to visit the University of Melbourne, Australia hosted by Professor Alistair Moffat in the Department of Computer Science and Software Engineering.

Javier Cuenca, Economics, twelve months, September 1, 2006 to August 31, 2007, at 85% salary. *New data to be collected in London and in Lisbon should help to establish that Spanish America and Brazil were major sources of exogenous demand for British manufacturers in 1765-1820. At stake is a central contribution to the long-standing debate on whether British industrialization was home-driven or export-led.*

D. Z. Djokovic, Pure Mathematics, six months, March 1, 2006 to August 31, 2006, at full salary. *I intend to work full time on the problem of describing the SL_n -invariants in the ring of polynomial functions on two generic matrices and related problems.*

Antonio Fama, Spanish and Latin American Studies, twelve months, July 1, 2006 to June 30, 2007, at full salary.

The Argentinean Jorge Luis Borges and the Italian Leonardo Sciascia use detective story techniques as a mechanism to search for God, thus transforming a human investigation into a metaphysical search. This study will analyze the many themes and motifs common to both authors as well as their attack on language as an insufficient vehicle for communication, and on reason as an insufficient tool to give us an understanding of reality.

Chris Godsil, Combinatorics and Optimization, six months, January 1, 2006 to June 30, 2006, at 85% salary.

I plan to spend most of this leave in Waterloo. I hope to finish a book on applied algebra and to continue my work on problems in algebraic graph theory that arise from quantum computing. I plan to make some short trips, including one to Perth, Australia, to continue my collaboration with Gordon Royle.

Guang Gong, Electrical and Computer Engineering, twelve months, September 1, 2006 to August 31, 2007, at 85% salary.

My research interests are in the areas of sequence design, cryptography and network security. For my sabbatical leave, I plan to visit the University of Electronic Science and Technology of China (UESTC), and Shanghai Jiao Tong University (September 2006 – December 2006), both in China, for research on cryptography and network. After that I plan to visit the University of Southern California (January 2007 – August 2007) for research on sequence design.

Ian Goulden, Combinatorics and Optimization, twelve months, July 1, 2006 to June 30, 2007, at full salary.

The leave will be spent in Waterloo, with a few short trips to conferences and to visit colleagues. One third of the time will be spent on a draft of an advanced graduate student and research level book. The remaining two thirds will be spent on research – both finishing current projects and starting new ones.

Vinko Grubisic, Germanic and Slavic Studies, six months, January 1, 2006 to June 30, 2006, at full salary.

I will be writing a book entitled Polylingualism in Croatian Culture: An Anthology of the Croatian Renaissance Literature (approximately 450 pages). This book will be the first selection of parallel texts in original version and in standard Croatian. It is intended mainly for university students.

Paul Guild, Management Sciences, twelve months, January 1, 2006 to December 31, 2006, at full salary.

I will use this sabbatical to ramp up research following 5 year tenure as Vice-President, University Research.

Peter V. Hall, Geography, six months, July 1, 2006 to December 31, 2006, at full salary.
I will be engaged in a range of scholarly activities: in July, I will attend a major international conference in South Africa, early in the fall I will be engaged in ongoing fieldwork in northern Ontario, and in October I will submit a grant application. The remainder of the sabbatical will be devoted to submitting academic journal articles.

Daniel Heller, Psychology, six months, September 1, 2006 to February 28, 2007, at full salary.
As a probationary faculty member I would like to use the six month early sabbatical to write up three or four promising research projects, work on revising and re-submitting two or three other manuscripts that are currently under review, as well as design and develop new research projects to be pursued together with graduate students upon my return.

Ellsworth LeDrew, Geography, twelve months, July 1, 2006 to June 30, 2007, at full salary.
With funding from the Global Environment Facility of the World Bank, I will participate in collaborative research on remote sensing of submerged coral reefs for coastal management. I will also study non-stationary climate change processes related to Sea Ice variability in the Polar Basin.

Heather MacDougall, History, twelve months, January 1, 2006 to December 31, 2006, at full salary.
During my twelve month sabbatical, I will complete the research for my history of the Canadian medicare program, write a monograph on it, and present several conference papers. I will also prepare a new graduate course in the history of Canadian public policy for the Winter 2007 term.

Michael McCool, Computer Science, six months, January 1, 2006 to June 30, 2006, at 85% salary.
I will be engaging in technology transfer activities. I will be on campus 40% of the time for research during this period.

John L. Michela, Psychology, twelve months, July 1, 2006 to June 30, 2007, at 85% salary.
Concentrated attention will be given to two lines of research on innovation. Firstly, Dr. Michela will act as quantitative data analysis director of the international, SSHRC-supported MINE Project (Managing Innovation in the New Economy), based at École Polytechnique. Secondly, seven recent studies concerning leadership vision, from Dr. Michela's graduate research group, will be written up in book form.

Michael Power, Biology, twelve months, September 1, 2006 to August 31, 2007, at 93.33% salary.
I will use this sabbatical to catch up on the backlog of publication obligations accrued during a 13 year period with no sabbatical leave of absence.

Bruce Richmond, Combinatorics and Optimization, twelve months, September 1, 2006 to August 31, 2007, at full salary.
During this sabbatical I will concentrate on research. I plan to visit Ed Bender at UCSD and D. Merlini at the University of Firenze, Italy. We will do research on random combinatorial objects. I plan to work with Daniel Panario at Carleton University on random combinatorial objects and on the analysis of computer algebra algorithms.

Hildy Ross, Psychology, twelve months, January 1, 2007 to December 31, 2007, at 85% salary.
I plan to work on empirical papers related to my SSHRC-funded research on parent mediation of conflicts between their children, to write a scholarly review on sibling conflict, and to write a book aimed largely at parents concerning family processes related to children's conflict and aggression.

Michael Ross, Psychology, six months, January 1, 2007 to June 30, 2007, at full salary.
I will be writing for publication using research that I have conducted over the last several years on remembering and resolving group conflict.

Daniel Scott, Geography, six months, July 1, 2006 to December 31, 2006, at full salary.

The six month sabbatical will be used to complete field work and to publish the results of several funded projects on climate change and tourism, fulfill obligations as Canada's representative to the new World Meteorological Organization – World Tourism Organization Expert Team on Climate and Tourism, and work with collaborators in Sweden and New Zealand on a book on 'Global Change and Tourism.'

Wan, Justin Wing-Lok, Computer Science, six months, September 1, 2006 to February 28, 2007, at full salary.

I plan to visit the research institutes of several key collaborators in the United States (Prof. Jameson and Prof. Golub, Stanford University; Prof. Chan and his image processing group at UCLA), and overseas, (Prof. Chan, CUHK, Hong Kong) to strengthen and extend my research on scientific visualization, medical imaging and simulation, and computational finance.

Jeffrey S. West, Civil Engineering, six months, January 1, 2006 to June 30, 2006, at full salary.

The proposed sabbatical leave will be used to continue ongoing research efforts on new materials to extend the serviceable lifespan of existing and new concrete infrastructure. In addition, new research relationships with industry, including consultants, material producers, contractors and government agencies, will be explored.

Joanne Wood, Psychology, six months, January 1, 2007 to June 30, 2007, at full salary.

During my leave I plan to concentrate on two research programs that I have underway: (1) emotion regulation in close relationships, and (2) paradoxical reactions to positive events. I will analyze the large amount of data I have collected on these topics and will write several articles to submit for publication.

Mark P. Zanna, Psychology, six months, January 1, 2007 to June 30, 2007, at full salary.

I plan to spend my sabbatical at the University of Minnesota with Professor Borgida conducting research designed to investigate the influence of smoking in the media on implicit (i.e., unconscious, automatic) norms. Given the potential theoretical and, especially practical significance of such influence, I plan to focus on the formation of injunctive norms (i.e., beliefs about 'what ought to be') of adolescents.

B. ADMINISTRATIVE LEAVE – for approval

Patrick Harrigan, History, four months, September 1, 2006 to December 31, 2006, at full salary.

I will be writing a book manuscript entitled "The Canadian Intercollegiate Athletic Union, 1961-2001." This will be the completion of my 2002 SSHRC grant.

C. ADMINISTRATIVE APPOINTMENTS – for information

Sandra Burt, appointed as Associate Dean, Graduate Studies, Faculty of Arts, January 1, 2006 to December 31, 2008.

Riemer Faber, appointed as Chair, Department of Classical Studies, Faculty of Arts, July 1, 2006 to June 30, 2009.

Tim Kenyon, appointed as Chair, Department of Philosophy, Faculty of Arts, July 1, 2006 to June 30, 2009.

Trefford Simpson, appointed as Interim Director, School of Optometry, Faculty of Science, January 1, 2006 to June 30, 2006.

Bruce Taylor, reappointed as Acting Chair, Department of Fine Arts, Faculty of Arts, July 1, 2006 to June 30, 2007.

University of Waterloo
BOARD OF GOVERNORS

February 7, 2006

For Information

1. REPORT OF THE EXECUTIVE COMMITTEE

The Board Executive Committee, acting on the delegated authority of the Board, approved the appointment of Professor Deep Saini as Dean of Environmental Studies for a first term ending June 30, 2011, and Professor, with tenure, in the Department of Environment & Resource Studies, both appointments commencing January 1, 2006.

Paul Koenderman
Chair

**REPORT ON THE STATUS OF GRADUATE PROGRAMS
APPRAISED BY THE ONTARIO COUNCIL ON GRADUATE STUDIES**

Board of Governors – February 7, 2006

The Dean of Graduate Studies reports annually to the Board of Governors on the results of UW graduate program appraisals carried out by the Ontario Council on Graduate Studies (OCGS).

The OCGS carries out two types of appraisals: standard and periodic. Standard appraisals are conducted on new, proposed graduate programs, while periodic appraisals are conducted on existing programs. Each existing program is reviewed every seven years.

The outcome of the review of proposals for standard appraisals (new programs) is either: *Approved to Commence* or *Not Approved to Commence*.

Reviews of periodic appraisals (existing programs) result in one of four decision categories:

Good Quality: These programs have achieved a level of good quality and are expected to retain that level of quality over the next seven-year period. Such programs are approved to continue.

Good Quality with Report: These programs have achieved a level of good quality at the time of the appraisal; however, factors that could have impact on the future quality of the program require monitoring in the succeeding seven-year cycle. Retirements of senior faculty or newly introduced developments in curriculum are examples of such factors. Programs in this category are approved to continue with a report called for by a specific date (usually after two or three years).

Conditionally Approved: These programs require improvements to meet the quality standard. They receive conditional approval at the time of the appraisal and full approval when the Appraisal Committee is satisfied that the improvements have been made. Normally, a report is required after two or three years. In some cases, the Committee may recommend that the university cease admitting new students to the program until certain specified conditions are met.

Not Approved: These programs fail to meet the quality standard and admissions must be suspended. They require major improvements, such as the addition of a number of new faculty or significant new library or laboratory resources, to achieve the quality standard. A successful standard appraisal is mandatory for the reinstatement of the program. Programs in the category are not eligible for resubmission prior to two years from the date of the OCGS decision.

The following reflects decisions by OCGS for the 2004-05 (September 2004 - August 2005) reporting year.

Standard Appraisals

Collaborative PhD in Aging, Health and Well-being	Approved to Commence
Diploma in Electric Power Engineering	Approved to Commence
Diploma in Taxation	Approved to Commence
MASc in Psychology - Sub-specialization in Developmental Communication Science	Approved to Commence
MEng in Electrical & Computer Engineering - Electric Power Engineering	Approved to Commence
MPH (Public Health)	Decision Pending
Part-time MBET (Business, Entrepreneurship & Technology)	Approved to Commence

Periodic Appraisals

MA in French	Decision Pending
MA/PhD in German	Decision Pending
MA/PhD in Recreation & Leisure Studies	Good Quality
MASc/MEng/PhD in Management Sciences	Decision Pending
MBET (Business, Entrepreneurship & Technology)	Good Quality with Report
MMSc in Management of Technology	Decision Pending
MSc/PhD in Earth Sciences	Good Quality
MSc/PhD in Kinesiology	Good Quality
MTax (Taxation)	Good Quality

Ranjana Bird, Dean of Graduate Studies

REPORT ON THE STATUS OF RESEARCH POLICIES/PRACTICES

Board of Governors – February 7, 2006

Policies and procedures have been established to ensure that the management of research activities is consistent with the University's mission and meets or exceeds the standards required by sponsoring agencies, both public and private, and applicable provincial and federal laws. University research is, to a very large degree, a self-motivated, individual activity. The ideas are developed by the individual or groups of researchers who then produce a project proposal to seek external funding for the research. All such proposals must have approval of their respective Chairs or Deans and be submitted through the Office of Research, which provides University-level approval to the submission. Management of the funding application procedures, negotiation of grant and contract agreements with the sponsor, and financial monitoring of the funds when they are awarded are conducted through the Office of Research.

The **Institutional Programs Group** within the Office of Research has responsibility for overseeing applications from the University for institutional research awards from the provincial and federal governments. They act as the point of contact for each agency on behalf of faculty members, promote the programs across campus and, where appropriate, between institutions. This includes coordination of review committees, extensive editorial review and negotiation of award agreements.

The **International Programs Office** is the central international liaison office for UW and coordinates all international agreements with foreign institutions. The office provides information and assistance to the UW community on a wide variety of international research, education and training related activities including: international research and education funding opportunities; advice in the preparation of proposals; non-industrial international research project management; facilitates visitor protocols; maintains active liaison with international agencies and provides pre-departure briefings for UW students embarking on mobility programs abroad. Formal international connections now include 250 linkage agreements in 56 countries.

Contracts Research and Industrial Grants provides assistance to researchers and to industry, governments and others in negotiating research contracts and industrial grants; provides liaison with the industrial and public sectors and communicates contract and grant research opportunities to University researchers; and monitors the progress of contracts and industrial grants including the university/industry programs of the Federal Granting Councils.

The **Research Grants Group** provides information and assistance to the University research community on a wide variety of research-related activities including identification and publication of new and existing funding opportunities; advice and assistance in the preparation and submission of proposals; substantive review of, and recommendations for editing and revision to, research proposals; assistance in budget development and review; negotiation and monitoring research contribution agreements; and maintains active liaison with external sponsoring agencies, as well as research education organizations and research offices at other universities.

The **Office of Research Ethics (ORE)** provides centralized administration of the human and animal research ethics operation at UW and works closely with the Human Research Ethics Committee and the Animal Care Committee. The ORE conducts ethics review of human research that poses no greater than minimal risk to human participants. In addition, it provides oversight for the ethics review of all research and teaching projects involving human participants and live, non-human vertebrate animals, and ensures compliance with the University's own guidelines as well as the requirements of related provincial, federal and international agencies. The ORE develops guidelines and procedures for humans and animal research and research integrity, and delivers these through educational programs and workshops to UW students, staff and faculty.

Research Finance provides financial administration, monitoring and reporting to researchers, University administration and external sponsors; provides the necessary oversight function to ensure adherence to University policies and to financial conditions imposed by governments, agencies and clients; and maintains liaison with sponsors on procedural matters and communicates requirements to researchers.

The **Technology Transfer and Licensing Office (TTLO)** undertakes a wide range of activities associated with the identification, protection, evaluation and commercialization of intellectual property assigned to UW by its researchers. These activities include patent and trademark prosecutions, negotiation of options, licenses, non-disclosure agreements or other agreements associated with intellectual property. TTLO provides information and guidance to UW researchers and students on intellectual property policies and other matters related to intellectual property protection and commercialization.

Centres and Institutes may form when groups of researchers wish to formalize their collaboration in order to gain visibility, to attract research funding and/or external interest. Procedures are in place for establishment of these organizations by the Senate Graduate & Research Council for subsequent approval by Senate. All centres and institutes are subject to review at five-year intervals and either continuation or closure.

Policies, procedures and guidelines that have the most bearing on the administration of research funded from grants and contracts, include:

Policy 26 – Provision for University Overhead in Research Grants/Contracts

Policy 33 – Ethical Behaviour

Policy 41 – Contract Research at University of Waterloo

Policy 68 – Vice-President, University Research

Policy 69 – Conflict of Interest

Policy 73 – Intellectual Property Rights

Procedure 1A – Contracts and Agreements – Research

Procedure 10 – Applications and Proposals – Research

Awards for Excellence in Research

Conflict of Interest

Contracts and Agreements: Signing Authorities

Guidelines on Integrity in Research

Guidelines for the Establishment and Review of Centres/Institutes

Guidelines for Establishing Institutional Collaboration with Foreign Universities

Interim Research Accounts

International Programs Guidelines and Policies

New Travel Requirements

Research Term Absences

Research with Animals

Research with Human Participants

Research Grants Policies and Guidelines

Research Finance Policies and Procedures

Safety Guidelines for Fieldwork/Field Trips in International Locations

Safety in Student Abroad Programs

Technology Transfer and Licensing Policies and Procedures

Alan George
Vice-President, University Research

**Progress Report on Undergraduate Program Reviews
University of Waterloo – Board of Governors, February 7, 2006**

This report outlines the progress achieved with regard to undergraduate program reviews since the last report to the Board of Governors on February 1, 2005.

I. STATUS OF ACADEMIC REVIEWS

- i. Completed reports received by Senate:** Anthropology, Earth Sciences, Faculty of Science non-departmental programs, International Studies, Management Sciences, Recreation and Leisure Studies, Studies in Sexuality, Marriage and the Family
- ii. Site visits completed and strategic plans prepared:** Faculty of Arts non-departmental programs, French Studies, Kinesiology, Religious Studies (including Spirituality and Personal Development)
- iii. Site visits completed:** Cognitive Science, Peace and Conflict Studies
- iv. Self-studies completed:** Faculty of Engineering including Software Engineering, Health Studies and Gerontology, Physics
- v. Two-year progress reports received by Senate:** Economics, Management Studies

II. GENERAL OBSERVATIONS

UW has now completed the first cycle of undergraduate academic program reviews that began in 1998/1999. While the review process entails a significant amount of additional work for academic units, it has been invaluable in assisting the University in monitoring the quality of our undergraduate programs, in reflecting on how they might be improved to meet the changing needs of our students and our society, and in setting specific, realistic goals for continued excellence.

The reviews completed in the last year have pointed to a number of shared positive features of our undergraduate programs, as well as some common areas that require ongoing attention. In the first category, the innovative nature of our programs, the high quality of our students, the strong records of achievement of our alumni, and the national and international reputations achieved by our faculty members through their scholarly activities have been frequently cited by the review teams. Areas they have singled out for further discussion and action include maintaining UW's position as a leading Distance Education provider, faculty renewal, strengthening co-op programs, and allocating resources to sustain excellence in both teaching and research

In keeping with the changes introduced to UW's undergraduate program guidelines in June 2004, the completed reports are presented to both Senate Undergraduate Council and to Senate for comment and discussion. Increased emphasis has also been given to the role of Faculty Deans in the formulation and implementation of their academic units' seven-year strategies, and the Deans are now invited to comment on the reviews of their units at Senate.

Gail Cuthbert Brandt
Associate Vice-President, Academic

REPORT ON THE STATUS OF UNDERGRADUATE RECRUITMENT AND ADMISSIONS

Board of Governors – February 7, 2006

Admission and Registration Objectives

The fall 2005 year one full-time registration target for the University was 5,461 comprised of 5,109 newly admitted students and a predicted 352 returning students. By the November 1 official MTCU count date, a total of 5,065 students had registered representing 92.7% of the University's objective. With the exception of Arts, Engineering and Software Engineering, all Faculties experienced a shortfall in year one registrations. The shortfall was most evident in the Ontario Secondary School (OSS) domestic category at 90% and particularly in the Visa category at 79.2%.

Marketing and Recruiting Prospective Applicants

Marketing to prospective students, and their parents, is becoming increasingly more competitive as many Ontario universities have gone through strategic reviews to strengthen their institutional identity/brand. A survey of UW's 2005 applicants who declined our offers of admissions confirmed that our competitors' branding efforts are showing positive results. UW applicants cited the following reasons for declining our offers of admission – difficulty distinguishing UW's strength over the university chosen and UW's reputation is not as strong as the university chosen. UW continues to look for cost-effective ways to target high-quality students and a number of new initiatives were implemented:

- Co-op presentations at the Ontario Universities' Fair
- High school visits involving a first-year UW student who attended that school
- Winter liaison visits to connect with applicants and grade 10 students
- MSN instant messenger to stay connected with students after a visit
- Visitors Centre received a refresh and new computers for visitor use
- Expanded residence brochure highlights campus life opportunities
- Weekly UW success stories on the prospective student website
- President's scholar receptions for admitted students with over 90%
- Research study to strengthen UW's brand message in 2006 recruitment materials
- Targeted visits to top international high schools in Mexico and Norway and a parents' night in India

Applications

The University received a total of 34,882 applications for fall 2005 year one full-time studies – an increase from the 29,869 applications received in 2004. This increase was experienced in all admission categories including domestic, Permanent Resident and Visa students. Compared to the fall 2001, the percentage increase in domestic, Permanent Resident and Visa applications has been 26.3%, 55.5% and 123.6% respectively. The total University increase has been 36% since 2001 while the year one target has increased by 26.4%.

Admission Decisions

For many programs, a significant number of early conditional offers of admission were made on a rolling basis beginning in late January 2005. These offers of admission were based on the results of final grade 11 overall averages and final grades in selected subjects. As grade 12 final fall grades and other information became available throughout the admission cycle, further larger rounds of offers were made in early April and mid-May. There was a concerted and relatively successful effort to admit as many qualified applicants as early as possible in the admissions cycle, particularly in the Visa category. As a result, 1,592 offers of admission were made to Visa students compared to 1,431 in 2004. In total, 19,487 offers of admission were made for the fall 2005, down slightly from 20,060 in 2004.

Admission Standards

There is a strong commitment by the Faculty admissions committees to maintain, if not improve, the quality of our year one students while meeting our enrolment objectives. Although the University experienced an overall increase in applications from 2004 to 2005, there was a 3.6% decrease in the number of applications received from OSS students – by far our largest applicant pool. As a result, the University met its goal with respect to standards but fell short of meeting the overall enrolment target. As a measure of “quality,” the percentage of Ontario Scholars (min. best six average of 80%) this year was 75.2% compared to 72.7% last year. Provincially, the percentage has been in the low 60s. In addition, the median average for OSS registered students was 84.8% a slight increase over last year. Provincial data for 2005 are not yet available.

Demographic Data

Similar to last year, the percentage of the total number of applications and new registrations by students who are in Canada on Study Permits (Visa students) is 12.6% and 6.3% respectively. In 2001, 3.6% of our new year one registrations were Visa students. Although a relatively large number of applications from Visa students were accepted this year (1592 vs. 1431 last year), increasing the number of students who confirm and register is our new challenge.

Summary

Each admissions cycle presents different and often difficult challenges to those involved in marketing, recruitment and admissions. The main challenges for 2005 continued to be one of attaining registration targets despite the decrease in secondary school applications while maintaining, if not improving, the quality of the incoming class. Despite a great deal of planning and effort on the part of the many faculty and staff involved in all aspects of the recruitment and admissions processes, these goals were not fully realized in many Faculties and programs.

Further information is available from Peter Burroughs (pburroug@uwaterloo.ca) or Tina Roberts (roberts@admmail.uwaterloo.ca).

Peter Burroughs
Director of Admissions

Tina Roberts
Director, Marketing and
Undergraduate Recruitment

January 2005

Report to the Board of Governors

February 7, 2006

Recommendation:

That the revised Constitution of the Waterloo Environmental Studies Endowment Foundation (WESEF) be approved.

Background:

- in November 2005, a student referendum was conducted to determine student support for these constitutional changes. The referendum results were:

Yes – 182

No – 17

Declined – 2

Overall turnout was 11.8% of eligible voters

- the main amendments involve changes to (a) student representation including the elimination of Architecture as a result of its move to the Faculty of Engineering, and (b) the method to appoint the Chair

Dennis Huber
Vice President,
Administration & Finance

WESEF

THE WATERLOO ENVIRONMENTAL STUDIES ENDOWMENT FOUNDATION

CONSTITUTION OF THE WATERLOO ENVIRONMENTAL STUDIES ENDOWMENT FOUNDATION (WESEF)

1. Name and Function

The name of the organization is the Waterloo Environmental Studies Endowment Foundation (WESEF), hereinafter referred to as the "Foundation". It is to function, subject to the provisions of *The University of Waterloo Act, 1972* and amendments thereto, as a semi-autonomous, non-profit organization within the University of Waterloo, hereinafter referred to as the "University".

2. Purpose

The objects of the Foundation are to raise funds to be used for an on-going commitment to improving undergraduate and graduate education at the University in the Environmental Studies Faculty and to participate in the investment and administration of such funds and the application of such funds in furtherance of such improvement.

The Voluntary Student Contribution (VSC) to the Foundation will be decided by student referendum. Subject to the provisions hereinafter contained with respect to the Foundation's early years of operations, only funds generated through the investment of contributions, hereinafter referred to as "Income", shall be available for yearly expenditures. The term "Funds" when used in this Constitution shall refer to the Funds raised by the Foundation and/or collected by the University from students and held by the University in accordance with this Constitution, together with all Income accrued thereon. In the first and subsequent years of the Foundation's operations sixty per cent (60%) of contributions will be available for Foundation expenditures and forty per cent (40%) shall be allocated to Capital. This allocation of Funds shall continue until the Income earned from Capital is equal to or exceeds the monetary value of the sixty per cent (60%) holdback portion to be used for expenditures. From that point yearly expenditures will be

made only from the Foundation's Investment Income and not directly from contributions. The Foundation Board will decide at that time at what level they will withdraw from Investment Income on a yearly basis. The Foundation recognizes that it is desirable to provide annual purchasing power protection on the Capital portion of the Fund.

The Foundation shall always act in the best interests of undergraduate and graduate Environmental Studies education and will make recommendations to the University with respect to the expenditure of Income in a fair and equitable manner, keeping in mind the needs of undergraduate and graduate Environmental Studies education at the University.

Only expenditures approved by the Foundation can be committed against the Foundation Funds. Any monies not needed specifically as approved will remain with the Foundation.

3. Powers

To achieve the purposes and objects aforesaid, the Foundation shall have the following powers, subject to the provisions of *The University of Waterloo Act, 1972*, and the control and authority of the University's Board of Governors, the University Senate, and the Office of the President and Vice-Chancellor:

- (a) to solicit Funds in ways approved by the University;
- (b) to make recommendations to the University with respect to the use of the Funds held by the University on behalf of the Foundation;
- (c) to receive regular monthly reports from the University with respect to the Income and the Capital of the Funds and to require the University to hire an independent "money manager" to administer the Funds; the salary of the said money manager shall be paid out of the Funds.

4. No Power to Sign on Behalf of the University

The Foundation shall have no power to make any financial commitments or undertakings of any kind that might be contractually binding on the University, and all formal documents making any commitments or contracts shall be signed in the name of the University in a manner and by such persons as shall be directed by the Board of Governors of the University.

5. Faculty of Environmental Studies not to be Affected

The Foundation, in the exercise of its powers, shall in no way interfere or otherwise adversely affect the autonomy of the Faculty of Environmental Studies in the exercise of its powers, authorities, duties, or regular conduct of its affairs.

The Funds raised for the Foundation and the interest earned thereon shall not have an adverse effect on the funding provided by the University to the Faculty of Environmental Studies and shall be held by the University in an account separate from all general funds of the University.

6. University to be Reimbursed for Expenses

All direct and indirect expenses of the Foundation shall be paid by the Foundation from its earnings, (or as provided for herein from yearly contributions). Unless otherwise stipulated in a written agreement with the University, the general accounts of the University shall be fully reimbursed from the particular accounts of the Foundation, for all services provided to the Foundation or expenditures made by the University in connection with the management or operation of the Foundation, including the cost of hiring an independent money manager to administer the Funds.

7. Periodic Review

The Foundation and its Constitution shall be subject to periodic review by the Board of Governors of the University and by the Board of the Foundation, such review to be carried out in the light of any new or revised policies established by the Board of Governors, the Senate of the University, or by the Board of the Foundation. The said review shall be for the purpose of defining or controlling the affairs or earnings of institutes or foundations or similar groups which may be established under the authority of the Board of Governors or the Senate of the University. If the Board of Governors proposes to take any action which may adversely affect the Foundation or its operations, the Board of Governors shall give the Board of the Foundation sixty (60) days' notice in writing before such action is taken.

8. Power of the Board of Governors to Reject Recommendations

The Board of Governors has the power to refuse recommendations from the Foundation Board for the expenditure of funds subject to the following:

- (a) The Board of Governors will give the Foundation a written explanation of the rationale behind its refusal to accept funding recommendations within thirty (30) days of the Board's decision.

Section - 9. The Board of the Foundation

- (a) Members of the Foundation:

There shall be eleven (11) Foundation Board member seats available. ~~The process of selection is oriented towards seeking the most appropriate candidate for the position considering the ever-changing needs of the~~

~~Foundation. For each of the following positions the existing Foundation Board will devise a set of criteria which will reflect the projected needs of the Foundation Board (eg. marketing skills, fund raising experience, financial skills, management skills, negotiating skills, etc.). These criteria will be used to choose the best candidate from the various pools of candidates submitted by each of the stakeholder groups. A resume of skills and experiences must be provided in order to stand as candidates.~~ The Foundation Board members shall consist of the following voting members, who must be a minimum of eighteen (18) years of age:

i) ~~The Dean of Environmental Studies (ex-officio), and one (1) faculty and one (1) staff member chosen by the preceding Board Dean of Environmental Studies from a pool of candidates suggested by each of the Environmental Studies units. Each School or Department within the faculty of Environmental Studies will select one (1) faculty and one (1) staff member who has agreed to let his/her name stand as a potential candidate;~~

ii) ~~Five (5) undergraduate students chosen by the preceding Foundation Board from a pool of candidates suggested by each governing undergraduate Faculty of Environmental Studies student executive. Each elected group of student representatives including the Waterloo Architecture Student Association, the Waterloo Association of Geography Students, the Environment and Resource Studies Student Association, the Planning Student Association, Waterloo Environment and Business Students (WEBS) and the Environmental Students who has agreed to let his/her name stand as a potential candidate;~~

iii) ~~Two (2) graduate students chosen by the preceding Foundation Board from a pool of candidates suggested by each governing graduate Faculty of Environmental Studies student executive. Each elected group of student representatives including the Association of Graduate Planners and the Association of Graduate Geographers (including ERS and Led graduate students) member who has agreed to let his/her name stand as a potential candidate;~~ and

~~iv) One (1) alumni selected by the existing Foundation Board from a pool of candidates provided by the University of Waterloo's Development & Alumni Affairs Office and the various Schools and Departments in the Faculty of Environmental Studies.~~

iv) The WESEF Chair will be elected during the Environmental Studies Society (ESS) elections during Winter Term and will sit on the ESS executive. The WESEF chair has primary responsibility for the well being of WESEF and may only be removed by the WESEF board (section b.v). The WESEF chair will not be pressured by any body in coming to his/her decision to accept or reject proposals.

v) if at a **general** meeting of the Foundation Board, duly called for that purpose, a resolution is passed by **three-quarters(3/4) five-sixths (5/6)** of the members present that a Foundation Board member be removed from office;

vi) Provided that if a vacancy shall occur for any reason as provided for above, the remaining Foundation Board members, by a majority vote, may fill the vacancy with a member of the Foundation while maintaining the ratio of representatives from each of the four groups outlined in Section 9.(a) (i) to (iv). **The exception being WESEF chair, who will be elected through ESS, should the WESEF chair position become vacant.**

10. Membership of the Foundation

Membership shall include all University of Waterloo undergraduate and graduate Environmental Studies students, present and past Foundation Board members, and such other individuals as may be determined by the Foundation's By-laws. There shall be no membership fees or dues. Provided, however, that any member who has requested and has received the return of his/her VSC in a particular term shall have no vote on Foundation business, **or** serve as a Board member for the remainder of that school term **or make a proposal to the Foundation.**

11. Annual General Meeting

The Foundation Board shall call an annual meeting of the Foundation members at the University of Waterloo on a day and at a time as shall be determined by the By-laws of the Foundation. Notice of the general meeting shall be given in the manner provided for in the said By-laws.

12. Auditors

The accounts of the Foundation shall be audited by the Auditors of the University who are appointed by the Board of Governors. In the event the Foundation Board requests an additional audit, any expenses for fees or services for such audits shall be charged to the particular accounts of the Foundation.

13. Amendment to the Constitution

Any constitutional amendment will require a simple majority of the votes cast by Foundation members in a referendum conducted for that express purpose **and two-thirds support of the WESEF board.**

14. Approval of the Constitution

Before becoming effective, the Constitution of the Foundation and its By-laws and any amendments thereto shall be approved by the Board of Governors of the University.

15. Establishment of a Separate Foundation

In the event that a referendum is conducted for the specific purpose of establishing a new Foundation with similar objects to the WESEF, but separate from the University, and a majority of Foundation members vote in favour of establishing such a Foundation, a separate Foundation may be established (hereinafter referred to as the "New Foundation") and this Constitution shall continue to apply to the Funds held by the University of Waterloo.

Provided, however, that if the Board of Governors of the University, after consideration of the objects and powers of the New Foundation, determine that it is in the best interests of the University to transfer the Funds, and the Canada Revenue Agency and the Public Guardian and Trustee for the Province of Ontario approve such transfer, the University shall transfer the Funds to the New Foundation. In the event that such transfer is not approved by the Canada Revenue Agency and the Public Guardian and Trustee for the Province of Ontario, and at the time of the establishment of the New Foundation, Foundation Funds are being held by the University, the said Funds so held by the University may only be used by the University to further the objects as set out in this Constitution. If such transfer as hereinbefore referred to is approved, following the transfer of such Funds, this Foundation (WESEF) shall be dissolved.

16. Drafting By-laws

The Foundation Board, at its earliest convenience and subsequently as may be required, shall draft by-laws in concert with the general aims and objectives of the Foundation relevant to the management of the affairs of the Foundation and the procedures of the meetings of members and the meetings of the Foundation Board. Without limiting the generality of the foregoing, these shall include at least the following:

- (a) definition of quorum, frequency of regular meetings, notice of meetings, minutes, records, etc.;
- (b) formality of making and passing resolutions, and decision-making procedures;
- (c) establishment of officers of the Foundation, and their duties and responsibilities;
- (d) establishment of any standing committees, such as an executive committee, and funding committee and their powers, duties and responsibilities;

(e) establishment of a fiscal year, which shall coincide with the University's fiscal year, and accounting procedures which shall be satisfactory to, and approved by the University's auditor, and the Vice President, Administration & Finance;

(f) establishment of an annual date on which to publish a status report, to include the cumulative principal and interest amounts of the Fund, and to include a detailed listing of all expenditures by the Fund.

17. Authentication of Acts of Foundation Board

All acts of the Foundation Board shall be taken or confirmed by way of resolution of the Foundation Board passed at a duly constituted meeting and duly recorded by written minutes. Within a period of not more than ten (10) days following the date of any duly constituted meeting of the Foundation Board, a copy of the minutes shall be forwarded or delivered, as indicated above, to the University offices of the President, the Vice-President, Academic and Provost, the Vice President, Administration & Finance, the Dean of Environmental Studies, ~~the Director of the School of Architecture~~, the Chair of Geography, the Chair of Environment and Resource Studies, and the Director of the School of ~~Urban and Regional~~ Planning, **Planning Students Association, Waterloo Association of Geography Students, Environment and Resource Studies Students Association, Waterloo Environment and Business Students and the Environmental Studies Society.**

18. Dissolution

If for any reason the Foundation is dissolved and Funds are not transferred to a New Foundation, then the following restrictions to dissolution apply:

(a) upon dissolution the Funds, after payment of all debts and liabilities, shall remain the property of the University of Waterloo, a registered charity, to be used as recommended by the Dean of Environmental Studies, for the purposes of benefiting undergraduate and graduate programs in the Faculty of Environmental Studies at the University;

(b) if the Faculty of Environmental Studies at the University of Waterloo no longer exists, the Funds shall be used for such other educational purposes as the Board of Governors of the University of Waterloo may direct;

(c) voluntary dissolution shall take place only after a majority vote to that effect in a membership referendum. The majority vote shall be based on the number of votes cast.

***PURSuing GLOBAL EXCELLENCE: SEIZING OPPORTUNITIES FOR CANADA
UNIVERSITY OF WATERLOO (UW)
SIXTH DECADE PLAN (2007-2017)***

[Note: At its January 16/06 meeting, the Senate Long Range Planning Committee (SLRP) reviewed the first three pages; suggestions made at that meeting are underlined]

‘Bold and daring’ is embedded in UW’s DNA. Conceived by founders who dreamed an improbable dream, from its beginning UW has steered a course that has set it apart. With a directed focus that nurtured specializations, in its short history of less than 50 years UW has already achieved enviable national and international recognition.

The circumstance precipitating UW’s establishment in 1957 was the space race and critical unmet need for engineers. Half a century later a very different circumstance, global competition, is informing how UW needs to direct its energies. To compete successfully in the global arena, excellence is a *sine qua non*. And our sixth decade will be the decade where a new kind of boldness and daring will ensure UW achieves the excellence to make it a premier global competitor.

The Sixth Decade Plan Framework [Appendix A], approved by UW’s Senate and Board of Governors, sets the framework to cultivate, nurture and promote excellence in all reaches of the enterprise by achieving an even greater degree of academic distinction, becoming more academically and socially relevant, and having its initiatives supported by the necessary resources. In approving the Plan Framework, UW’s two governing bodies have given direction clearly and unequivocally: pursue global excellence.

Amit Chakma
Vice-President, Academic & Provost

Informing the Plan

The detailed plan which follows will be executed in the context of the following four overarching conditions.

Guiding Principles

- Experiential learning and co-op will continue to distinguish UW. {moved up, to first bullet}
- UW will focus on global engagement and excellence measured globally.
- Excellence will be pursued and supported in all activities.
- UW will preserve a willingness to make choices, and to act where it can have greatest impact.
- UW will continue to be the leader in support of creativity, innovation and risk taking, which support its global excellence goals.
- To create a dynamic, integrated living and learning environment that develops and enhances students’ personal and professional competencies.

Objectives

Following from the Framework document, by 2017 UW will continue to be internationally recognized for its academic programs, scholarship and societal contributions through the realization of the following overall objectives:

- Recognized global leadership in additional, selected areas of UW's scholarly (teaching and research) endeavours, while aspiring to maintain national leadership in chosen aspects of academic activities.
- Improve quality of student experience and learning by deeper integration of experiential learning and research engagement.
- Prepare UW students to be global citizens by inculcating broad diversified awareness and creating learning opportunities for them in international settings.
- Recognizing the importance of effective support services to the quality of student life and the formation of strong alumni/ae links with UW.
- Increase UW's research and scholarly contribution to society through research intensity and breadth.
- Commitment to academic support staff so that UW can continue to provide high-quality programs, research and services.

Benchmarking

There will be ongoing assessment and benchmarking of UW's progress in teaching and research against the performance of peer institutions, globally.

By 2017:

- at least 12 UW academic programs will be the best in North America.
- at least 12 of the 44 academic departments/schools will rank in the top 12 in North America.
- at least 20 departments/schools will rank in the top three in Canada.
- each department/school will participate in a doctoral program.
- all departments/schools will rank in the top 25% in Canada.

Benchmarking methodologies will be broad based, vary from discipline to discipline, and include a wide range of qualitative and quantitative measures developed by academic units and Faculties.

Size

UW will continue to grow selectively in its undergraduate enrollment and grow more aggressively in its graduate enrollment. Growth will be strategic, selective and focused so that achieving academic excellence can be realized. By 2017, UW's W-K-C campuses will have the following student body:

	<u>2017</u>	<u>2005</u>
• Total Full-Time Students:	30,000	24,000
• Undergraduate Students:	22,000	22,000
• Graduate Students:	8,000*	2,600

* (5,000 research and 3,000 course based)

To accommodate this growth while maintaining quality, UW will have to increase the size of its faculty and staff and build additional physical and social infrastructure, particularly research and graduate student space.

The Plans

Realization of what is set out in these plans is expected by 2017 unless stated otherwise.

Focus will be on what UW does well while retaining flexibility to respond to new initiatives and challenges, and to opportunities presented by evolutionary changes in academic disciplines.

Academic

To achieve UW's academic excellence goals, each academic plan is expected to satisfy the following criteria:

- is in demand by excellent students
- has faculty with strong scholarly programs
- has faculty committed to and demonstrating excellence in teaching
- is consistent with attributes that make UW distinctive, including experiential learning, technologically current (in application or through critical perspective), creative and innovative in its curriculum content and delivery, with entrepreneurial and interdisciplinary perspectives
- for existing academic plans, is assessed by peers to be *at least* in the top third of similar plans offered in Canada, or is unique and essential to the province; for new academic plans, is viewed as having the potential to be one of the best in Canada and *at least* among the top quarter of similar plans in North America.

Teaching and Research

As a teaching and research intensive university, UW believes in the integration of “knowing” and “learning”. The “knowing” component requires scholarship and research while UW’s “learning” component involves a combination of “classroom teaching”, and “experiential learning”.

UW aspires to be a leader in enhancing the quality of student learning by greater integration of experiential learning and research engagement and will continue to embrace “innovation” in its academic programs and program delivery.

UW will achieve the following goals for the integration of teaching and research:

- All undergraduate students will participate in a “research” or equivalent “inquiry based learning” project.
- All undergraduate programs will offer options for an accelerated Master’s program.

As one of the most innovative universities in the world, UW academic programs will ensure that all UW graduates will possess the following distinguishing characteristics:

- Creativity
- Commitment to continuous improvement and assessment
- Risk taking
- Ability to build relationships and to work effectively in teams
- Problem solving ability.

UW will achieve the following benchmarks in achieving its excellence in teaching goals:

- Enhance teaching skills improvement programs through TRACE, LT3 and the Teaching Excellence Council.
- Recognize excellence in teaching at every level.
- Support the development of innovative curricula.
- Create 20 Teaching Innovation Chairs / Fellowships. {Note: title TBD; intent of the award is to provide opportunity for people to excel in teaching, develop methodology, to innovate}

UW will achieve the following benchmarks in achieving its research intensity goals:

- Increase research revenue to 50% of the operating budget from the current level of 30%
- Stand in the top five in Canada in per capita research intensity. (current ranking is 13th)
- Be in the top two in the country re: NSERC grants/FTE faculty. (current NSERC/CIHR combined ranking is 16th)
- Be in the top 10 in the country re: SSHRC grants/FTE faculty. (current ranking is 18th)
- Quadruple CIHR grants to \$10 million.

By 2012, UW will achieve the following mid-plan milestones in advancing its research intensity goals:

- Increase research revenue to 40% of the operating budget .
- Be in the top eight in Canada, in per capita research intensity.
- Be in the top four in the country re: NSERC grants/FTE faculty. (current NSERC/CIHR combined ranking is 16th)
- Be in the top 14 in the country re: SSHRC grants/FTE faculty. (current ranking is 18th)
- Double CIHR grants from current \$2.5 million to \$5.0 million.

To create a critical mass of scholars and research support infrastructure, UW will promote the creation of research centres and institutes. By 2017, UW will have the following research support infrastructures in place:

- At least six research centres/institutes supported by institutional funding of \$ 1 million per centre/institute, recognized by peer evaluation to be among the several best in the world.
- A UW Research Fund worth 1% of UW's research revenue to support new large research initiatives with external support.
- An internal research fund to support research and scholarly work in the humanities and social sciences.
- 20% of FTE faculty positions will be research chairs (including endowed, industrial and Canada Research Chairs).
- 20 year-long visiting professorships to bring eminent national and international scholars to UW.
- 100 Post Doctoral Fellowship positions.

Undergraduate Students

UW will achieve the following goals in attracting top undergraduate students from Canada and abroad:

- Be in the top three in Canada in attracting first-year students with 90% plus grades.
- Grant entrance awards to at least 75% of the first-year students.
- Have 100 National Entrance Scholarships valued at \$ 10,000.
- Establish 25 International Entrance Scholarships valued at \$ 10,000.
- Guarantee to meet the financial needs of ALL qualified Canadian students through a combination of scholarships, research internships, student loans and co-op jobs.

UW will provide its students with an enriched and supportive learning environment by achieving the following goals:

- Student/faculty ratio reduced to 20:1
- Providing research opportunities to undergraduate students by expanding the Undergraduate Research Initiative
- Expansion of on-campus research co-op terms or internships for gifted students, as entrance scholarships.

UW will produce well rounded graduates with a strong scholarly foundation by integrating teaching and research. This will be manifested by the following outcomes:

- Percentage of UW graduates who are awarded national scholarships (eg., CGS, OGS, NSERC, SSHRC, CIHR scholarships) will be the highest in Canada.

Graduate Students

UW will significantly enhance its graduate programs in both quality and in quantity and will achieve the following targets:

- Graduate student enrollment will be 20% of the total student population.
- International students will comprise 30% of the graduate student population.
- Graduates of other Canadian universities will comprise at least 30% of the graduate student population.
- All research-based full time doctoral students will receive a guaranteed level of support, starting in 2007.
- At least six on-line Master's level professional degree programs in specialized areas will be offered.

Experiential Education

UW will re-affirm its position as the leading co-operative education university in the world, and subsequently introduce / enhance experiential learning opportunities for regular students:

- By 2006, UW will have mechanisms and processes in place to ensure more student engagement in the management of CECS, and decisions about allocation of resources by CECS will be transparent to students.
- By 2008, UW will consistently find sufficient high quality work opportunities of various kinds for its co-operative education students.
- By 2008, UW will be using a mix of measures to facilitate and evaluate students' critical reflection relating work term experience to academic learning.
- By 2017, UW will offer a mix of experiential learning opportunities to all regular students.

Student Engagement

UW will be a leader among its peer public institutions in North America in engaging its student body intellectually, culturally and socially. To this end, UW will:

- Launch an integrated living-learning initiative to provide the richest possible educational experience both inside the classrooms and beyond:
 - Scholarly / Intellectual
 - Career / Professional
 - Social / Cultural / Civic
 - Health / Wellness
- Create learning opportunities beyond the classroom, including special seminars on current topics.
- Actively promote participation in volunteer activities and service learning, both locally and internationally.
- Provide on-campus or near campus housing for 50% of the undergraduate student body.
- Consider service to students as essential (e.g., provide "one-stop service" to students where possible).

Faculty

To achieve its academic excellence goals, UW will recruit and retain the very best faculty members available, competing with top North American universities by:

- Creating a stimulating intellectual environment through the establishment of clusters of academic excellence
- Making available state-of-the art research facilities and resources
- Offering competitive compensation packages
- Creating opportunities for faculty to pursue professional and leadership development.

Staff

A world leading university needs highly competent staff. UW will create an environment that will promote the recruitment of staff of the highest quality, encourage and facilitate professional development of staff, and allow staff to fully use their expertise to ensure efficient and effective operation of support services. These objectives will be achieved by adopting the following practices:

- Recruiting the best available staff through open competitions
- Investing in professional development programs for all staff members
- Offering competitive compensation packages.

Community Engagement

UW's community extends well beyond its geographic location and includes local communities, educational partners – schools, co-op employers, research collaborators and sponsors in the public and private sectors – and alumni and friends across the world.

UW will engage ALL community members and friends by achieving the following goals:

- All members of the UW's broader community will be electronically connected to UW through appropriate means.
- A worldwide program to involve alumni in the recruitment of students and other UW activities will be initiated.
- All community members will have electronic access to major lectures delivered by distinguished visitors to the University community.]
- The City of Waterloo will become known for its student-friendly policies and initiatives.

National and International Presence

To facilitate the establishment of UW's global leadership, UW will expand its presence nationally and internationally and have:

- Two international campuses with focused activities abroad
- Physical presence in select key locations in Canada and abroad
- Established partnerships, collaborative academic programs and joint research centres, with prominent national and international institutions.

Internationalization

UW will become Canada's most internationalized and, therefore, internationally best known university, by achieving the following goals:

- The international undergraduate student population will be increased to 20% of the total [currently ~6.7 %]
- At least 25% of UW undergraduate students will spend an academic or co-op work term abroad. [5125 terms abroad]
- All UW students will have oral and written command of a second language.
- International graduate students will comprise 30% of the total graduate student population.
- An "International Village" will be created in student housing with a mix of Canadian and international students.
- Twelve international visiting fellowship positions for international scholars will be created.
- Sixty international merit- and needs-based undergraduate scholarships will be created.

Facilities

- All UW classrooms will be equipped with appropriate high quality "learning technologies".
- State-of-the-art research and graduate student space will be built.
- Sufficient offices for faculty and staff will be provided.

- A “facilities renewal fund” at 1% of the operating budget will be created.
- A “scholar’s village” will be established to house senior undergraduate students, graduate students, post doctoral fellows, research associates, visiting scholars etc., with academic, social and recreational facilities on the North Campus.

Administrative Matters

In parallel with its academic excellence goals, UW will also develop a culture of administrative excellence by adopting the following measures:

- Institute a “culture” of periodic reviews for all academic support activities.
- Conduct bi-annual surveys of client satisfaction for all academic support units.
- Undertake ongoing initiatives to make administrative functions efficient.
- Encourage all staff members to identify areas where efficiency and effectiveness gains could be made.
- Encourage and formalize leadership training programs for Academic Department Chairs / School Directors, Associate Deans and Academic Support Department Heads.

Resources

UW will have the following incremental resources to support its pursuit of academic excellence:

- Cumulative funds raised by Campaign Waterloo, by the end of the sixth decade, to exceed a billion dollars.
- Annual funds raised to reach 20% of the operating budget
- 100 endowed chairs -- \$ 300 million
- 120 professorships -- \$120 million
- Scholarship endowment -- \$120 million
- Research Facilities -- \$140 million
- Annual private sector contributions (gifts etc.) to exceed \$100 million.

Strategic Resource Allocation

Starting in 2007, UW will implement the following strategic resource allocation measures to support its academic excellence goals:

- 2% of the budget will be reallocated on an ongoing basis.
- A pool of FTE faculty positions will be allocated selectively to programs/areas achieving their academic excellence goals:
 - 2007 -- 10
 - 2012 -- 15
 - By 2017, this will rise to 2% of the FTE positions (est. 20)

Time Frame

Although decade-long planning allows a focus on long term goals, circumstances may require the plan to be adjusted. While the Plan will be monitored and progress reported on annually, a mid-term review in 2012 would be useful as would the establishment, where possible, of mid-term goals.

APPENDIX A

University of Waterloo SIXTH DECADE PLAN FRAMEWORK

Overall Priority: Academic Excellence

Academic excellence is the cornerstone of Waterloo's mission. It is achieved by the commitment of the University community to the highest quality teaching, research, scholarship and services which support the academic enterprise. That commitment underlies admission and examination standards, hiring and promotion decisions, criteria for performance evaluation, and academic goals.

Teaching and research are mutually supportive activities, fulfilling equally important and complementary roles in the University. This complementarity is fostered and augmented through a diversity of scholarship and teaching styles. To continue to provide a high quality environment, UW aspires to achieve excellence in both teaching and research, and to make mutually beneficial connections between them.

The University of Waterloo will continue to strive to achieve academic excellence in all its activities through:

- Pursuit of new knowledge and scholarship through the vigorous promotion and encouragement of frontier and reflective research
- Recruitment of the best faculty through national and international searches; application of the highest standards in faculty recruitment, annual performance reviews, and tenure and promotion decisions; retention of top-performing faculty through tangible recognition of excellence in teaching, research / scholarship, and service
- Recruitment and retention of the highest quality academic support staff; acknowledgement of their contributions *via* a merit-based reward system; encouragement of staff, where appropriate, to become active participants in teaching and research initiatives
- Recruitment of students of the highest calibre, from Canada and abroad; provision of a stimulating, varied and challenging environment conducive to the successful completion of their programs
- External peer review of all academic programs
- Global leadership in co-operative education
- Planning measures (academic and administrative) in support of UW's goals and objectives; academic and budgetary decisions to support academic excellence
- Reserving resources to facilitate improvements and respond to opportunities, even in times of financial stringency

Relevance

The University of Waterloo will continue to strive to maximize its academic and societal relevance by:

- Recognizing that experiential learning through its co-op programs contributes to providing students with the best overall academic experience
- Working with partners in the public and private sectors to promote co-op education and knowledge transfer
- Enhancing institutional capacity to work collaboratively with all UW constituencies, including public and private sectors, and alumni
- Introducing new academic programs in response to long-term societal needs
- Providing service to society through cultural enrichment and knowledge transfer
- Encouraging and supporting innovation and accepting the collateral risk(s)

Resources

The University of Waterloo will continue to strive to improve its resources through vigorous fund-raising efforts, and to improve its financial stability through diversification of its sources of income and the continued building of its endowments.

Note: the Framework was accepted by SLRP (November 18/03); and approved by UW Senate (January 19/04) and the Board of Governors (February 3/04).

University of Waterloo
BOARD OF GOVERNORS
February 7, 2006

**REVIEW OF CO-OP EDUCATION & CAREER SERVICES:
PROGRESS ON IMPLEMENTATION**

The presentation on progress, made jointly by Peggy Jarvie, Executive Director, Co-operative Education & Career Services, and myself, will:

- provide an update on action taken on recommendations in the review report.
- highlight specific actions being taken by CECS with regard to the report.
- identify proposed metrics related to
 - (i) student employment,
 - (ii) jobs posted, filled and cancelled,
 - (iii) employer numbers: ongoing, current, lost,
 - (iv) finance, such as cost per co-op student enrolled, and
 - (v) quality of student experience.

Details will be provided at the meeting, with Governors invited to indicate whether metrics should be added, deleted or modified.

Bruce Mitchell
Associate Provost, Academic &
Student Services

[The CECS review report (available at <http://www.adm.uwaterloo.ca/infosec/reports.html>) was distributed with the October 25, 2005 Board agenda.]

**Beyond the Classroom:
UW Living-Learning Project Report
Executive Summary**

The University of Waterloo seeks to graduate highly educated, civically minded, and well-rounded individuals. With our reputation for producing the “leaders of tomorrow,” we strive to provide the richest possible undergraduate experience for our students.

Underlying this goal is the University’s desire to help students achieve competencies in four key areas: scholarly / intellectual, career / professional, social / cultural / civic, and health / wellness.

The richest undergraduate experiences result from learning that takes place not only inside the classroom and laboratory but outside as well. Thus, a “living-learning” model for residence life emerges — where a residence unit actively seeks to integrate students’ academic experience with the living environment — and contributes to students’ achievement of competencies.

The UW Living-Learning Project examined student housing, academic learning and co-operative work-study environments to assess approaches that best align or integrate the in-class and out-of-class learning experiences. Key recommendations from the Project’s work include:

- adopting a set of key competencies for UW students;
- creating a Living-Learning Council to identify learning opportunities throughout the undergraduate experience, and provide advice to the Department of Housing and Residences on an integrated living-learning strategy;
- allocating resources to support an integrated living-learning strategy; and
- launching an integrated living-learning strategy on campus, which includes major initiatives like a residential thinktank, and a global arts community.

A living-learning environment integrates learning where it happens — in the classroom, in the residences, in the workplace, online, with friends, with peers, with faculty and with staff. By fostering key competencies in UW students, a living-learning strategy will enhance the student experience and develop well-rounded graduates.

[The Living-Learning Project Report (see <http://www.adm.uwaterloo.ca/infosec/reports.html>) was distributed with the October 25, 2005 Board agenda.]

University of Waterloo

Board of Governors

February 7, 2006

Sustainability Initiatives – Plant Operations

From 1981 until today UW has consistently performed better than the Ontario University system average in terms of energy efficiency per square meter. The combination of these efforts has resulted in UW's having the lowest energy consumption per unit area for the last two years: our current energy consumption is 1.27 GJ / M² (04/05). Our current energy intensity is roughly 30% lower than the Ontario system average and approximately 40% lower than the average commercial/institutional energy use as reported by Natural Resources Canada.

Projects under way or completed this year include a reverse flow ventilation heat recovery unit for the Engineering 2 Graphics Lab, water source heat pump system for the Optometry building, a refrigerant sub cooling system at the Columbia Icefields, solar thermal heating for Physical Activities Complex and flue gas condenser installations in the Central Plant. These projects were undertaken with the assistance of \$250,000.00 in NRCan funding and will result in projected savings of over \$700,000.00 per year. All new construction projects target 25% energy savings as a minimum when compared to base model standards to qualify for Commercial Building Incentive Program funding from NRCan.

Plant Operations have undertaken numerous other initiatives to reduce the environmental impact, energy consumption and operational costs of all campus facilities some of which are outlined briefly below.

Waste Management: UW has an extensive recycling program throughout all buildings. Faculty, staff and students participate by depositing various materials in specified containers and Plant Operations staff move materials to areas for outside contractor pick up. Since 1987 when records were first kept we have reduced our solid waste by 50% in spite of increased enrolment, buildings, activity, etc.

Turf Management: UW has reduced the amount of maintained turf by 15% replacing it with naturalized landscapes and low maintenance perennial gardens. Pesticides have been eliminated except for spot applications on sport fields in order to maintain safe playing conditions. Cultural practices have been shifted to emphasize fertilization, aeration and irrigation.

Land Use: Storm Water facilities on the North Campus have been designed with the latest quality and quantity standards. These are owned and maintained by UW. South campus facilities are not designed at the new standards and currently there is no requirement to retrofit them. If this becomes necessary there could be significant land and cost implications.

The Environmental Reserve on the North Campus has undergone a significant upgrade this past year. Phase 1A of 2 phases has been completed. Columbia Lake has been reshaped after considerable sediment was removed. The bypass channel design previously approved by the Board has been roughed in and awaits further funding for completion in Phase 1B. This project is a significant land stewardship initiative by UW.

Transportation: The UW campus is a pedestrian/bicycle friendly environment. These modes of transportation are encouraged by the extensive multi-modal walks and pathways throughout both the south and north campus. The campus design to keep vehicular traffic primarily on the Ring Road and primarily non vehicular traffic inside the Ring Road is an essential element in this objective.

UW cooperates fully with Grand River Transit to allow buses to operate on UW lands. Additionally UW provides most transit shelters on campus and designs and constructs bus lay-bys to help facilitate bus traffic.

Electrical and Lighting Efficiency Improvements: Lighting retrofits include utilization of electronic ballasts, T-8 lamps and occupancy sensors, replacement of incandescent pot lights with compact fluorescent units wherever dimming is not required, and converting exterior lighting to high pressure sodium units. High efficiency lighting devices are mandated during renovations and on new construction projects.

Automation of Systems: UW Energy management initiatives through building automation include energy storage, temperature ramping, fan scheduling and CO² measurement to control ventilation rates. Electronic boiler controls with oxygen trim systems optimize combustion efficiency of major boiler systems, and electronic positioning controls have been installed on smaller boilers. Conductivity controllers on cooling towers and evaporative condensers reduce water consumption and ensure control over biological activity.

HVAC Optimization: Free cooling installations in Chemistry 2, Physics and CEIT minimize the need to operate mechanical refrigeration systems during cool weather. Heat recovery systems have been installed in eight buildings, and condensing hot water boilers were used in three projects.

Constant volume ventilation systems in many areas have been retrofitted to variable volume, using variable frequency drives to reduce operating horsepower requirements. High efficiency chiller installations in Biology 2, Physics and Central Services Building have reduced compressor power requirements by approximately 30 %, and have been accompanied by higher efficiency cooling towers. The balance of the Central Plant chillers are being replaced this year with high efficiency units, resulting in 90% of the air conditioning systems on campus being the most efficient units available.

Water conservation: Low flow showers and water saving plumbing fixtures have been installed throughout the campus. Equipment which was originally installed using once through cooling water has been converted to utilize closed loop recirculating systems. High efficiency pre-treatment systems for boiler makeup minimize regenerant chemical consumption and water use.

Tom Galloway
Director of Custodial &
Grounds Services

Rick Zalagenas
Director of Maintenance &
Utilities

**UNIVERSITY OF WATERLOO
2005/06 Operating Income Budget**

	Estimated 2005/06 05-04-05	Increase (Decrease)	Estimated 2005/06 06-02-07	Notes
	\$000	\$000	\$000	
INCOME				
Operating Grant				
Basic Grant	105,721	37,687	143,408	[1]
Growth Funding	35,424	(32,191)	3,233	[1,2]
Contingency re Growth Funding	(2,100)	2,100		
Tuition Offset Grant	6,331	348	6,679	
Quality Assurance Fund	5,191		5,191	
Quality Improvement Fund		6,720	6,720	[3]
Transfers to Colleges	(7,749)	(289)	(8,038)	
Performance Fund	1,664		1,664	
Research Performance	806		806	
Research Infrastructure	1,756	(87)	1,669	
Access to Opportunities Program (ATOP)	6,899	(6,899)		[1]
Access for Disabled	467	(5)	462	
	<u>154,410</u>	<u>7,384</u>	<u>161,794</u>	
Tuition				
Undergraduate	119,456	(1,364)	118,092	[4]
Transfers to Colleges	(6,939)	(28)	(6,967)	
Graduate	17,390	117	17,507	[4]
	<u>129,907</u>	<u>(1,275)</u>	<u>128,632</u>	
Co-op Recovery	7,523	(374)	7,149	
Student Services Fee	5,511		5,511	
Research Overhead	5,567		5,567	
Interest	4,000	500	4,500	[5]
Services to Colleges	1,726	37	1,763	
Grant in lieu of Taxes	1,677	70	1,747	
Miscellaneous Income	6,032	1,714	7,746	[6]
	<u>32,036</u>	<u>1,947</u>	<u>33,983</u>	
Total Income	<u><u>316,353</u></u>	<u><u>8,056</u></u>	<u><u>324,409</u></u>	

NOTES TO 2005/06 OPERATING INCOME

- [1] ATOP and pre-2005/06 growth funding have now been rolled into the basic grant.
- [2] This amount is the graduate and undergraduate enrolment growth funding for 2005/06.
- [3] This is a new fund in 2005/06 supporting quality, excellence and change; there is an offsetting expense allocation of \$6,487.0 which is net of college share.
- [4] Final overall estimated growth for domestic and international undergraduate enrolment is 2% and 3.6% growth for graduate enrolment.
- [5] Interest income estimate is based on 2004/05 actuals and available cash and interest rate projections for 2005/06.
- [6] Miscellaneous income estimates are based on 2004/05 actuals plus some new items in 2005/06. The total includes: Health Services and Optometry OHIP and professional services income, application processing fees, non-credit tuition, other student related fees, rental income, parking income, and other general revenues. Many of these items have offsetting expenses.

UNIVERSITY OF WATERLOO
2005/06 Operating Expense Budget

	ONGOING		ONE-TIME TEMPORARY			TOTAL	% of Income	Notes	
	2005/06 Base 05-04-05 \$000	Increase (Decrease) \$000	2005/06 Revised Base \$000	2005/06 One-Time 05-04-05 \$000	Increase (Decrease) \$000	2005/06 Revised One-Time \$000			2005/06 Total \$000
EXPENSES									
Salary and Wages									
Current salaries and wages	197,623	2,468	200,091				200,091	61.7	[1]
Secondments	343		343				343	0.1	
Total salary and wages	197,966	2,468	200,434	0	0	0	200,434	61.8	
Benefits									
Current benefits	38,835		38,835				38,835	12.0	
Maternity leave supplement	175		175				175	0.1	
Faculty professional expense reimbursement plan	1,050		1,050				1,050	0.3	
Total benefits	40,060	0	40,060	0	0	0	40,060	12.4	
Total salaries and benefits	238,026	2,468	240,494	0	0	0	240,494	74.2	
Student Support									
Graduate student support	3,915	120	4,035				4,035	1.2	[2]
Graduate incentive fund	401		401				401	0.1	
Support for international graduate students	3,208		3,208				3,208	1.0	
Senate matching scholarships	160		160				160		
Tuition set aside	11,375		11,375				11,375	3.6	
Undergraduate scholarships/bursaries	1,236	85	1,321				1,321	0.4	
Total student support	20,295	205	20,500	0	0	0	20,500	6.3	
Income Sharing									
Differential tuition	141	(109)	32				32		[3]
Graduate growth		641	641				641	0.2	[3]
Undergraduate enrolment expansion	4,429	(4,093)	336				336	0.1	[3]
International tuition	1,225	(1,225)	0				0		[3]
Total income sharing	5,795	(4,786)	1,009	0	0	0	1,009	0.3	
Sub-total	264,116	(2,113)	262,003	0	0	0	262,003	80.8	

UNIVERSITY OF WATERLOO
2005/06 Operating Expense Budget

	ONGOING			ONE-TIME TEMPORARY			TOTAL	% of Income	Notes
	2005/06 Base 05-04-05	Increase (Decrease)	2005/06 Revised Base	2005/06 One-Time 05-04-05	Increase (Decrease)	2005/06 Revised One-Time	2005/06 Total		
	\$000	\$000	\$000	\$000	\$000	\$000	\$000		
Academic development fund	1,443		1,443				1,443	0.4	
Access for disabled	467	(5)	462				462	0.1	
Audit and legal	360		360				360	0.1	
Base budget adjustment to reflect overhead costs	2,834	(471)	2,363				2,363	0.8	[4]
Contingency reserve	1,000		1,000				1,000	0.3	
Convocation	175		175				175	0.1	
Cooperative academic enhancement	1,000		1,000				1,000	0.3	
Faculty recruitment and retention	1,700		1,700				1,700	0.5	
Insurance	1,391		1,391				1,391	0.4	
Internal financing	449		449				449	0.1	
International fund	417		417				417	0.1	
Interuniversity service teaching	457		457				457	0.1	
Learning infrastructure	1,000		1,000				1,000	0.3	
Leased accommodations	160		160				160		
Library acquisitions	5,963	6	5,969				5,969	1.9	
Municipal taxes	1,677	70	1,747				1,747	0.5	
New initiatives	800		800				800	0.2	
Quality assurance fund	4,962	(1,661)	3,301				3,301	1.0	[3]
Quality improvement fund		6,487	6,487				6,487	2.0	[5]
Special project fund	550		550				550	0.2	
University memberships	369		369				369	0.1	
Utilities and maintenance	11,120	1,000	12,120				12,120	3.8	[6]
Sub-total	38,294	5,426	43,720	0	0	0	43,720	13.3	
Supplies and expenses	26,973	4,194	31,167			0	31,167	9.7	[1,3,7]
Expenditure reduction at 1%	(1,905)	1,905	0				0		[7,8]
Gross expenses	327,478	9,412	336,890	0	0	0	336,890	103.8	

UNIVERSITY OF WATERLOO
2005/06 Operating Expense Budget

	ONGOING		ONE-TIME TEMPORARY			TOTAL	% of Income	Notes
	2005/06 Base 05-04-05 \$000	Increase (Decrease) \$000	2005/06 Revised Base \$000	2005/06 One-Time 05-04-05 \$000	Increase (Decrease) \$000	2005/06 Revised One-Time \$000		
Total gross expenses carried fwd	327,478	9,412	336,890	0	0	0	336,890	103.8
Cost recoveries and chargeouts	(9,330)	(329)	(9,659)				(9,659)	(3.0)
Manageable allowance	(500)		(500)				(500)	(0.2)
Estimated net expenses	<u>317,648</u>	<u>9,083</u>	<u>326,731</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>326,731</u>	<u>100.6</u>
Estimated income							<u>324,409</u>	
Excess income over expenses							<u>(2,322)</u>	

SUMMARY OF FUND BALANCE

Fund balance at April 30, 2005	4,341
Add: Excess income over expenses	<u>(2,322)</u>
	<u>2,019</u>

NOTES TO THE 2005/06 OPERATING EXPENSE BUDGET

- [1] The net increase in current salaries and wages includes a redistribution of budget from non-salary to salary accounts by academic and academic support departments, some additional savings from faculty terminations/retirements and actual salary increase cost adjustments.
- [2] The Millennium Bursary Fund and the Graduate Scholarship Fund have been increased based on the recommendations of the Graduate Student Support Committee.
- [3] Estimates of income sharing funds available in 2005/06 have been adjusted based on revised enrolment data. Current year allocations to academic and academic support units are included in the net change in supplies and expenses.
- [4] The decreased overhead flow to the faculties is based on actual 04/05 research overhead income (allocated on a slip year basis).
- [5] Quality improvement funds available for distribution equal the expected income amount, net of college share.
- [6] There have been significant rate increases in gas and electricity due to non-regulated pricing.
- [7] The net increase in supplies and expenses results from the following: the distribution and transfer of income sharing funds to non-salary accounts, a 1% expenditure reduction applied against non-salary accounts; the reallocation of budget from non-salary to salary accounts by academic and academic support departments; and some other miscellaneous budget adjustments.
- [8] The expenditure reduction of \$1,905.0 has now been allocated to non-salary accounts as determined by each unit.

Housing and Residences 2006/2007 Residence Fees

Student Villages

Student Villages (Two term fee)	2005/06 \$	2006/07 \$	Increase %	Monthly
Dorm Style:				
Single	4,268	4,438	4.00	555.00
Interconnecting	4,073	4,236	4.00	530.00
Double	3,829	3,982	4.00	498.00
Suite Style:				
Single room (4 bedroom suite style)	5,094	5,298	4.00	662.00
Recommendation:	That the Student Villages 2006/07 room rates are approved effective Fall 2006 term			

Minota Hagey

Minota Hagey (Two term fee)	2005/06 \$	2006/07 \$	Increase %	Monthly
Single room	4,452	4,630	4.0	579.00
Recommendation:	That the Minota Hagey 2006/07 room rate is approved effective Fall 2006 term.			

Columbia Lake Village

Columbia Lake Village (One term fee)	2005/06 \$	2006/07 \$	Increase %	Monthly
Single room (4 bedroom townhouse)	2,035	2,116	4.00	529.00
Recommendation:	That the Columbia Lake Village 2006/07 room rate is approved effective September 1, 2006.			

Housing and Residences 2006/2007 Residence Fees

Columbia Lake Village (Two term fee)	2005/06 \$	2006/07 \$	Increase %	Monthly
Single room (4 bedroom townhouse)	4,070	4,233	4.00	529.00
Recommendation:	That the Columbia Lake Village 2006/07 room rate is approved effective for the Fall 2006 term.			

Columbia Lake Village (Apartment style – Rent per Month)	2005/06 \$	2006/07 \$	Increase %	Monthly
Two bedroom	997.00	1,037.00	4.00	N/A
Recommendation:	That the Columbia Lake Village 2006/07 rental rate applicable to full time University of Waterloo students is approved effective September 1, 2006.			

UW Place

UW Place (Two term fee)	2005/06 \$	2006/07 \$	Increase %	Monthly
Suite Style:				
Double Room (Beck Hall)	4,019	4,180	4.00	523.00
Single Room (2 bedroom suite style)	4,603	4,787	4.00	598.00
Single Room (3 or 4 bedroom suite style)	4,358	4,532	4.00	567.00
Recommendation:	That the UW Place 2006/07 room rates are approved effective for the Fall 2006.			

UW Board of Governors
AUDIT COMMITTEE
Report to the Board of Governors
February 7, 2006

This report is submitted for information following the Committee's meeting on November 22, 2005.

1. EXTERNAL AND INTERNAL AUDIT PLANS, 2005-06

On the basis of its review of the audit plans proposed, together with related UW responses, the Committee concluded that the overall approaches and related fees were appropriate and reasonable. Accordingly, the Committee agreed to approve the following audit plans and fees as proposed by the external and internal auditors (Ernst & Young and Deloitte, respectively) and recommended by the Vice-President, Administration & Finance.

[Note: There was no management letter from Ernst & Young; it was confirmed that no points resulted from the 2004-05 audit which required the presentation of a management letter to the Audit Committee.]

2. STATUTORY COMPLIANCE, 2005: Declaration of Compliance; Liability and Board Members

As has been the practice in recent years, UW's legal counsel reviewed federal and provincial statutes which would pose the greatest potential liability for Board members in the event of non-compliance, and identified the following: *Accessibility for Ontarians with Disabilities Act, Building Code Act, Commercial Tenancies Act, Construction Lien Act, Copyright Act, Employment Standards Act, Environmental Protection Act, Fire Protection & Prevention Act, Hazardous Products Act, Income Tax Act, Liquor Licence Act, Occupational Health & Safety Act, Ontario Human Rights Code, Ontario Water Resources Act, Pesticides Act, Tenant Protection Act, Tobacco Control Act, and Transportation of Dangerous Goods Act.*

Staff responsible for institutional compliance have reviewed these statutes and have signed a declaration indicating that there are no areas of substance where UW is not in compliance.

[Note: The Committee also reviewed, in confidence, the Executive Protection Policy, 2005-06 – unchanged from last year. Additional information and brief descriptions of the executive protection provided through Chubb Insurance Company and CURIE available in the Secretariat.]

January 16/06

Rob Caldwell
Chair

University of Waterloo
BOARD OF GOVERNORS
BUILDING & PROPERTIES COMMITTEE

Report to the Board – February 7, 2006

For Approval

1. Centre for Advanced Photovoltaic Devices

Motion: That the Board of Governors award a construction contract to Nith Valley Construction Ltd. for \$3,226,817 (plus net GST).

Background: In 2005, the Board of Governors approved the Building & Properties Committee's recommendation to appoint The Walter Fedy Partnership as design consultants for this project at an estimated cost of \$3,225,000 funded through federal and provincial research grants.

During the detailed design process, it was determined that the research facility would function better in a single-storey structure rather than the two-storey building originally contemplated. Recognizing the need to intensify the use of campus lands, plans were developed to accommodate the initial research facility in a single-storey building which will be constructed with structural and mechanical elements so that two additional floors can be added in the future.

The detailed budget for this 15,812 gross square foot building is:

Construction (including net GST)	\$3,301,356
Professional Fees & Disbursements	475,000
Contingency (4%)	132,644
Connectivity/networks	10,000
Building Permit	27,000
Development Charges	<u>54,000</u>
Total	\$4,000,000

The additional funding required beyond the initial research grants will come from the Faculty of Engineering.

A total of six General Contractor bids was received ranging from the low bid of \$3,226,817 to a high of \$3,466,591 (or six bids within 7% of each other).

2. School of Pharmacy

Motion: That the Board of Governors appoint Ball Construction Inc. as Construction Manager/General Contractor at a fee of \$1,753,542 (including GST).

Background: In 2005, the Board of Governors approved the appointment of Robbie/Young + Wright Architects & Hariri Pontarini Architects for the \$34,000,000 first phase of the School of Pharmacy. In addition, the conceptual design has been approved and working drawings are being completed so that construction can commence in the spring of 2006.

The timelines are extremely tight to achieve partial occupancy in September 2007. Consequently, UW has pursued opportunities to advance the construction schedule by advertising in late November for expressions of interest for a Construction Manager/General Contractor to enter into a CCDC2 Contract as a Stipulated Lump Sum Contract.

The Construction Manager/General Contractor will be required to issue two major bid packages: package one will consist of excavation, footings and foundations (and likely structural concrete); package two will cover all the remaining major sub trades. Sequential tendering of major sub trades is not permitted.

Eighteen responses were received and analysed and a short list of seven firms was invited to submit detailed proposals including fees and a proposed construction schedule. The four proponents (Vanbots, Ball, Ellis Don, and Eastern) who submitted complete proposals were interviewed. The two lowest fee proponents were within 3% of each other, with Ball Construction Inc. submitting the lowest bid.

For Information

3. *Ontario Seed Co. Ltd.* (68 Victoria Street South, Kitchener)

When it met in October, the Board recommended that UW pursue the acquisition of the Ontario Seed Co. Ltd. property, a 3.3 acre parcel adjacent to UW's Downtown Kitchener Campus lands which are being transferred to UW from the City.

Because time was of the essence, the Executive Committee, on behalf of the Board, approved the purchase of the property at a price of \$4,600,000 subject to satisfactory completion of legal and environmental reviews. UW took title to the property on November 15, 2005.

4. *Governance*

The Committee reviewed and provided recommendations on documentation from the Governance Review Committee, including on overarching governance principles and proposed revisions to bylaws and committee terms of reference.

Mary Bales
Chair

University of Waterloo

BOARD OF GOVERNORS

FINANCE & INVESTMENT COMMITTEE

Report to the Board – February 7, 2006

For Information

At its November meeting, the Committee:

- reviewed revenue-expenditures scenarios for the 2006-07 operating budget as preparatory to its February discussions of the draft budget;
- discussed value for money efficiency measures, as demonstrated by various academic and administrative indicators, with a view for future reporting to the Board;
- reviewed the pension plan investment managers' performances and found their performances to be generally satisfactory, with one exception that has already resulted in increased attention by the Pension & Benefits Committee;
- reviewed the Institute for Quantum Computing investment portfolio, as managed by Phillips, Hager & North, and found the returns generally acceptable and within the prescribed ranges;
- reviewed and provided recommendations on documentation from the Governance Review Committee.

Geoff Guy
Chair