



UNIVERSITY OF  
**TORONTO**

OFFICE OF THE VICE PRESIDENT & PROVOST

**REVIEWS OF ACADEMIC PROGRAMS AND UNITS**

**January – June, 2010**

Report to the Committee on Academic Policy and Programs  
September 21, 2010

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## Provostial Reviews

## REVIEW SUMMARY

<b>DIVISION/UNIT:</b>	<b>Faculty of Applied Science and Engineering</b>
<b>DATE:</b>	May 5-6, 2010
<b>COMMISSIONING OFFICER:</b>	Vice-President and Provost
<b>PROGRAMS OFFERED:</b>	<i>Note: The academic undergraduate and graduate programs are reviewed separately.</i>
<b>Undergraduate</b>	BASc in Chemical Engineering, Civil Engineering, Mineral Engineering, Bioengineering, Environmental Engineering, Sustainable Energy, Electrical Engineering, Computer Engineering, Engineering Science, Aerospace Science, Biomedical Engineering, Electrical and Computer Engineering, Infrastructure Engineering, Nanotechnology, Engineering Physics, Engineering Mathematics, Statistics and Finance, Materials Science, Mechanical Engineering, Industrial Engineering
<b>Graduate:</b>	Aerospace Science and Engineering, MAsc, MEng, PhD Biomedical Engineering, MAsc, PhD Clinical Engineering, MHSc Chemical Engineering and Applied Chemistry, MAsc, MEng, PhD Civil Engineering, MAsc, MEng, PhD Electrical Engineering and Computer Engineering MAsc, MEng, PhD Materials Science and Engineering, MAsc, MEng, PhD Mechanical and Industrial Engineering, MAsc, MEng, PhD Advanced Design and Manufacturing, MEngDM
<b>EXTERNAL REVIEWERS</b>	
<b>Canadian</b>	Prof. Adel Sedra, Dean, Faculty of Engineering, University of Waterloo
<b>International</b>	Prof. Vijay Dhir, Dean, Henry Samueli School of Engineering and Applied Science, UCLA Prof. Steve Director, Provost and Senior Vice-President for Academic Affairs, Northeastern University
<b>PREVIOUS REVIEW DATE:</b>	2005
<b>SUMMARY FINDINGS AND RECOMMENDATIONS OF PREVIOUS REVIEW:</b>	<u>Academic Programs:</u> <ul style="list-style-type: none"><li>• The curricula are very similar to those of other top North American universities with UofT students receiving more hands-on laboratory instruction.</li><li>• Laboratories and computing facilities are modern, well-equipped, and well-maintained.</li><li>• Curriculum content is kept up-to-date by the research-engaged faculty.</li><li>• The Faculty should continue to examine its curriculum from the perspective of broadening career opportunities for its graduates.</li><li>• Canadian engineering educators may need to become more involved with the licensing process for professional engineers.</li></ul> <u>Undergraduate programs:</u> <ul style="list-style-type: none"><li>• The new first year course for all students entitled "Engineering Strategies and Practice" is a most worthy undertaking.</li><li>• The undergraduate programs are successful in attracting and retaining top students, and in providing an excellent academic experience.</li><li>• The Faculty should give careful consideration to having the math and science departments provide instruction in basic math and sciences that are currently taught by Engineering faculty.</li><li>• The educational experience provided to students beyond the classroom is less rich than that offered by peer institutions. Student-led activities, such as student branches of professional engineering societies, national or international honorary societies, student-alumni programs, and exchange programs, should be encouraged.</li></ul>

### *Graduate programs*

- Faculty members have substantial graduate teaching assignments and further increases in enrolment should be undertaken only after serious deliberation.
- Some students expressed concern that the PhD standards and processes for dissertation were not clearly conveyed, with uneven performance standards across the Faculty.

### Faculty members:

- Most faculty members are active in research and graduate student supervision. The Faculty is fully competitive with comparable units at top 10 North American research universities.
- The teaching staff are providing good teaching experiences, being especially strong at integrating lecture, laboratory, and computer simulation as complementary instructional components.
- The Faculty has many excellent relationships with cognate units. Excellent opportunities for student learning are one important result.

### Governance and long-term planning:

- The Faculty Council is ineffective. Leading members of the faculty do not participate, it is difficult to achieve a quorum for action, and the Council has not been influential in key matters of budgeting and space allocation.
- Critical matters affecting the whole Faculty relate to teaching assignments and the high student-faculty ratio. Another key issue is the balance to be struck between teaching and tenure-track faculty, and lecturers or other non-research appointees.
- More members of the Faculty need to be involved with advancement and outreach to industry, alumni, the professional accreditation bodies, and groups underrepresented in the faculty and student body. The DEEP Summer Academy for pre-college students is a specific program that should be expanded to encompass all science and engineering programs at the University of Toronto.

## **DOCUMENTATION PROVIDED TO REVIEWERS:**

Terms of Reference  
Faculty of Applied Science and Engineering Self Study, April 2010  
Previous External Review Report  
Towards 2030: A Third Century of Excellence at the U of T, Framework

## **CONSULTATION**

The reviewers met with the Vice-President and Provost; Vice-Provost Academic Programs; Dean, Vice-Deans and Associate Deans of FASE; Chairs and Directors of academic units; junior and senior faculty members; administrative staff; undergraduate and graduate students; representatives from cognate units; members of the external community; and the Advisory committee for the Search for the Dean.

## **FINDINGS AND RECOMMENDATIONS - OVERALL ASSESSMENT AND SPECIFIC ISSUES**

The reviewers were very impressed with the accomplishments of the Faculty and the substantial progress it has made under the leadership of Dean Amon. The Faculty has enhanced its diversity at all levels, created programs to increase the number of women students and faculty, expanded outreach activities to high schools, and revitalized the development operation. The Faculty's profile has been raised both nationally and internationally. The reviewers contend that the research enterprise in the Faculty is thriving and that funding, publication and citation rates are outstanding when judged against international standards. Excellent new faculty have been hired, and Engineering enjoys excellent collaborative relations with a number of other Faculties. The Faculty is making effective use of the new budget system of the University and appears to be financially strong.

## **Undergraduate Studies**

The Faculty offers excellent undergraduate programs to well-qualified students. The entering average of the first year students in 2009 was 88.9% and has shown a steady increase over the past few years. The student body is culturally diverse and in the last four years there has been an increase in the percentage of female and international students. Currently 23.9 % of the first year students are females.

With the establishment of the Engineering Communication Program, the Faculty deserves to be congratulated for placing emphasis on communication skills that are so important for engineers to succeed in the profession and in academia. However, there are a few issues with the program that can be improved: The program is diffuse and there is no mechanism to assess its effectiveness, it is not consistent across disciplines, and students claim that they do not receive sufficient feedback on their written work in a timely manner. The Engineering Strategies and Practice course serves a very important educational function of exposing students to design process, problem solving, project management, team work, ethics, and communication.

The curriculum is quite constrained and demanding and students have to typically take five courses per term to graduate within four years. There is a need for revision of the curriculum to make it more flexible and to recognize the evolving nature of engineering. Participation in student clubs is limited because of the little free time the students have beyond their formal educational activities.

The Professional Experience Year Internship Program is an excellent program under which students carry out 12-16 month paid internships (including two summers) in industry nationally and internationally. Students value this program and more than half of them participate in it. Four month summer internships are also available to students under the Engineering Summer Internship Program, however, efforts should be made to invigorate the program to increase participation. Further, more opportunities for undergraduate student research experiences are encouraged.

The tenure and tenure-stream faculty teach three half courses per year on average, are engaged, and give importance to classroom and laboratory teaching. Although a mechanism for evaluation by students of faculty teaching is in place, students are not sure if their feedback is valued. Policies on course evaluation by students and evaluations of students may need review. There appears to be no process in place for training and evaluation of teaching assistants. Finally, academic counselling activities for both first-year and upper-year students need to be reviewed in the context of changing student needs.

## **Graduate Studies**

The graduate program is in excellent shape. Over the past four years, the Faculty has expanded enrolment in graduate programs, and in particular the PhD and MEng. The Faculty attracts outstanding students from across Canada and abroad. The average number of research graduate students per faculty member stands at five which is reasonable, the 25% graduate proportion of the total student body is excellent in the Canadian context. Significant enhancements to the MEng program have been introduced including the Entrepreneurship, Leadership, Innovation and Technology in Engineering (ELITE), the Engineering and Public Policy (EPP) certificates and the Prospective Professors in Training program.

Although it is highly desirable and even essential that research graduate students receive full funding, the periods of funding commitment were viewed as rather long: two years for the MASc and a total of six years for doctoral students. Both numbers were viewed as somewhat excessive and this has had the opposite effect to that expected of funding graduate students, that is, it has resulted in lengthening the time-to-degree which is relatively high at U of T Engineering.

As is the case in many Canadian Universities but unlike the situation in U.S. schools, the Faculty expends substantial effort and resources on the MASc degree. In the reviewers' view, some of this effort should be directed toward the PhD program. The review team was impressed with the size and quality of the MEng program.

Even though an annual average of one graduate course per faculty member should result in a reasonable number of course offerings, the reviewers heard calls for increasing the number and scope of graduate courses. They also heard some criticism of the unevenness of the quality of graduate instruction and the need for a standardized method for evaluating graduate teaching.

## **Research**

The Faculty's research enterprise is extensive, comprehensive, and of very high quality. Most of the faculty are active researchers engaged in leading-edge work, and have been very successful in attracting external funding. The publication and citation rates are outstanding as judged by international rankings.

The Faculty has recently established a number of interdisciplinary and multidisciplinary centres and institutes. The reviewers felt these initiatives should be encouraged, but cautioned however that to be successful each center must have a critical mass of interested faculty members and must have sufficient resources.

An important and laudable initiative that the Faculty has undertaken is the establishment in most Departments of the position of Associate Chair, Research. These academic administrators can no doubt play an important role in helping colleagues with their research proposals, setting up consortia to apply for large research and infrastructure grants, and promoting research opportunities in their Departments.

The Faculty needs to increase its industry-funded research and to facilitate the transfer of research results to the market place. The reviewers heard many remarks to the effect that the University's intellectual property policy is not sufficiently effective, and that the process of negotiating research contracts needs streamlining.

The Faculty is engaged in fruitful research collaborations with the Faculty of Medicine. Given U of T's extremely rich medical research environment, Engineering should strive to sustain and indeed expand these collaborations. Another research collaboration worthy of note is the recently established Cities Centre, which is a collaboration with the John H. Daniels Faculty of Architecture, Landscape and Design, the Faculty of Arts and Science and the School of Graduate Studies. Given U of T's geographical location at the centre of a great city, pursuing this research theme is most appropriate.

## **Organizational Structure and Resources**

The Dean has made significant changes in the administrative structure of the Faculty that seem to have been well received by the faculty and staff and have improved the Faculty's operation. The Dean's open style of communication with the faculty is appreciated. Some did express concern over how well the University's budget model will work inside the Faculty. The reviewers suggest that the Dean's budget director hold regular meetings with the departmental budget administrators to facilitate the success of the new budget model.

Several department chairs and faculty members commented that space was an issue. Although the reviewers did not have sufficient time to study space issues, it appears to them that the total space holdings are reasonable.

## **ADMINISTRATIVE RESPONSE**



UNIVERSITY OF TORONTO  
FACULTY OF APPLIED SCIENCE & ENGINEERING

*Cristina Amon, Dean*

September 2, 2010

Professor Cheryl Regehr  
Vice-Provost, Academic Programs  
University of Toronto  
27 King's College Circle

Dear Cheryl

I write in response to the Report prepared by the external reviewers based on their visit to the Faculty on May 5 & 6, 2010. We are very pleased with the overall content of the review report and are grateful to the reviewers for their time, their keen observations and the thoughtful recommendations they have made. For ease of reading, a summary of each major issue identified in the review report is followed by the Faculty's administrative response.

1. The reviewers are positive about the Engineering Communication Program but suggest that improvements could be made with respect to structure and student feedback.

**Administrative Response:**

As stated by the reviewers, our Engineering Communications Program is a unique feature of our Faculty and provides excellent educational value for our undergraduate students. As we also indicated in the Self-Study, we agree that assessment of the communication program's effectiveness across our programs is required. We plan to address this through a recently initiated Faculty wide committee (the Graduate Attributes Committee) in the context of the development of Graduate Attributes/Degree Level Expectations for each of our programs. These will be consistent with new requirements for Engineering Accreditation in Canada and Quality Assurance in Ontario. Communications is identified as one of the 12 Graduate Attribute categories that will be developed, mapped to courses and linked to measurable criteria. Regular assessment of our students, along with their feedback, will be analyzed on a program wide basis for continuous improvement.

2. The undergraduate engineering program is described as "quite constrained and demanding" and the reviewers suggest that it is time to revise the curriculum to increase flexibility and to "recognize the evolving nature of engineering".

**Administrative Response:**

We recognize that the engineering curriculum is highly constrained and time-demanding which limits the time our students have to pursue co-curricular and extracurricular activities. We will be addressing this issue as part of the curriculum review taking place in the context of the development of Graduate Attributes listed above. In particular, curriculum content and student workload will be considered carefully.



3. The Summer Internship Program is described as excellent and the reviewers suggest that efforts should be made to encourage more students to become involved in the program. Further, more opportunities for undergraduate student research experiences are encouraged.

Administrative Response:

The Engineering Summer Internship Program (ESIP) is a recent initiative that builds upon our highly successful Professional Experience Year (PEY) program and its employer base, providing our second and third year students with preparation, direction and training for their careers in addition to placements. Student interest continues to be strong with 537 students (more than 55% of our 3<sup>rd</sup> year students) placed in internships through the PEY program and 289 students registering for ESIP in 2009. We note that the required \$100 fee for ESIP does result in a low number of students who report their placement to the Engineering Career Centre. We plan to continue to grow the ESIP placement opportunities through raising the awareness of it with students and employers. In addition, we plan to review the fee structure in a way that encourages the reporting of placements by students. We also note that a typical PEY placement includes employment for two summers and one academic year. Therefore, more than half of our students are engaged in meaningful engineering employment for at least two summers through a PEY internship.

While we have not regularly tracked the number of summer research undergraduate students, recently assessed data indicates that we have 292 students employed as summer research assistants across our Faculty in 2010. In addition, we had 10 undergraduate students participate in summer research internships in Singapore in 2009 and 7 students in 2010. We have actively encouraged summer research at the Faculty level since 2006, and launched an annual Undergraduate Engineering Summer Research Day (<http://unerd.skule.ca/>) event, in which undergraduate students make presentations (oral and poster) to students, faculty and alumni. This event included 72 student presentations in 2010 and attracts many more attendees including students (undergraduate and graduate) and faculty. Increasing opportunities for students to engage in research work over the summer will be provided across the Faculty. Exposure to research during the academic year happens at varying degrees through faculty members who bring aspects of their research to the classroom experience. A more active participation in research takes place among the large percentage (over 40%) of engineering students who undertake a research thesis in their final year.

4. Questions were raised about the methods for teaching evaluation, the impact of student evaluations on teaching at both the graduate and undergraduate levels, and the training of teaching assistants.

Administrative Response:

We recognize that the quality of instruction by our faculty and our teaching assistants is of critical importance to the education of our students, and we must continue to be dedicated to continuous improvement. We will improve our course evaluation system by working with the University's Course Evaluation Working Group to develop an effective and flexible centralized on-line system that takes advantage of the latest research to provide a useful bank of questions to draw upon. In addition, this past year we have worked with our student run Engineering

Society to provide undergraduate course evaluation information on the Engineering Society's website along with a section for comments and other course information.

With regards to graduate courses, historically each Department/Institute has developed its own evaluation process, spanning the use of the same undergraduate evaluation form to the use a specialized simplified form. During the fall term of the 2010-11 academic year, the Vice-Dean, Graduate Studies, in conjunction with Associate Chairs and Directors for Graduate Studies, will work to develop a standardized form and processing procedure for evaluating graduate courses. As stated above, the University is implementing an on-line course evaluation system which we will consider for use in graduate courses. We have tasked our Teaching Methods and Resources Committee to develop and implement initiatives to support improved teaching across the Faculty, including workshops on various aspects of teaching, sharing teaching best practices and implementing a teaching award for Teaching Assistants to recognize excellence. In the coming year, the Committee will examine improvements to the mandatory training of our teaching assistants and, in the context of a new course evaluation system, to improve the evaluation of teaching assistants.

5. The current time-to-degree for MASc and PhD degrees were considered high by the review team. Efforts should be made to reduce these numbers. In addition, the reviewers suggest that some of the substantial resources that are expended on the MASc degree as a terminal degree should be directed toward the PhD program.

Administrative Response:

We propose to deal with the time-to-degree issue by standardization of the funding commitment across the Faculty and attempt to reduce the length of the periods of guaranteed funding. In particular, we have been successful at reducing the guaranteed funding duration for the MASc to 20 months. The Faculty will explore ways in which we can address the reviewers' comment on the high time-to-degree for PhD students.

We have implemented a fast-track option that now permits successful MASc students to transfer to a PhD program within their first year of study. We will actively encourage the use of this improved promotion mechanism.

6. While research was viewed as outstanding, the reviewers encouraged the further development of industry collaboration, resulting in an increase of industry-funded research.

Administrative Response:

The Faculty has been working in a proactive manner with the Vice-President, Research Office to identify ways to improve the timely processing and coordination of research contracts. Our faculty members are responsible for a large percentage of the research contracts processed at the University and so the Faculty has made a commitment to provide the financial resources necessary for the University research contracts office to add an additional contracts officer. We will continue to monitor this issue with the goal to facilitate the administrative process which will result in an increase in the industry-funded research conducted in the Faculty.

7. While the Faculty has done well under the University of Toronto Budget Model, some concerns were raised about the application of the model at the departmental level. Ongoing analysis and assessment of the budget by the Dean and the Senior Academic Administrative Team is recommended.

Administrative Response:

Details of the Faculty's new budget allocation process were included in the Self-Study, however, we did not have the opportunity to engage in a detailed discussion on this topic during the short visit of the review team. The budget model implemented within the Faculty in 2010 is a hybrid of an RCM-based and an expense-based approach. While it takes some of the attributes of the University's new budget model, the Faculty's process has been modified substantially. The key differentiating feature and one that is not in keeping with the RCM philosophy, is the allocation of approximately \$135,000 per academic FTE to each department. This construct was designed to recognize the on-going expense of a tenured faculty member which does not change as quickly as fluctuations in student enrolment.

The Faculty's hybrid model gives the departments and institutes autonomy to manage their budget and provides incentives to increase revenues and contain costs. This has been achieved by drawing on the principles behind the University's model such as the transparency and attribution of revenues and costs.

The Dean will continue to conduct annual budget meetings with the Chair or Director of each academic unit and the Chief Administrative Officer of the Faculty. In these meetings we review each unit's budget position and the associated implications for achieving its goals. Budget managers have access to expert support from the CAO's Office, and training on the new budget allocation process is on-going. We also plan to review the model's effectiveness once it has been running for a few years to ensure that it continues to foster collaboration, and is driven by academic considerations along with prudent fiscal management.

We are grateful for the opportunity to address these issues raised by the review team and look forward to the continued development of the future directions of the Faculty of Applied Science and Engineering.

Sincerely



Cristina Amon

## Divisional Reviews

## REVIEW SUMMARY

<b>DIVISION/UNIT:</b>	<b>Aboriginal Studies Program</b> Faculty of Arts and Science
<b>DATE:</b>	March 29, 2010
<b>COMMISSIONING OFFICER:</b>	Dean, Faculty of Arts and Science
<b>PROGRAMS OFFERED:</b> Undergraduate	Aboriginal Studies, BA: Spec, Maj
<b>EXTERNAL REVIEWERS</b>	Prof. Link Kesler, Director, First Nations Studies Program, University of British Columbia
<b>PREVIOUS REVIEW DATE:</b>	1999
<b>SUMMARY FINDINGS AND RECOMMENDATIONS OF PREVIOUS REVIEW:</b>	<p>Curriculum and Pedagogy:</p> <ul style="list-style-type: none"><li>• The core program would be greatly enhanced if students were provided with more opportunities for “cultural experience” involving linkages with the external community. Since there are no set of models or precise policies to follow in the field of Aboriginal Studies Program, the Program should look to other programs such as Women’s Studies and Jewish Studies with regard to involvement with the outside community and Medicine and Law with regard to involvement of non-academic practitioners.</li><li>• The level of funding is inadequate. The Program is unable to offer enough courses and students are finding it difficult to fulfill course requirements.</li><li>• Student advising could be strengthened with regard to helping students select appropriate support courses from other departments.</li><li>• There could be greater coordination and integration of support faculty from other departments.</li><li>• A goal of the program should be to develop a fourth year composed largely of Aboriginal Studies Program courses.</li><li>• The Program should evaluate, consolidate and augment its support services, which should include remedial training in reading, writing and study skills, computer literacy, career planning and placement, and degree planning.</li></ul> <p>Space – the reviewers strongly recommend the continued association of the program with First Nations House, and suggest that more space in this building be allocated to the program so that the director and sessional faculty have office space there.</p>
<b>DOCUMENTATION PROVIDED TO REVIEWERS:</b>	Self-Study, 2009 Terms of Reference Summary of Program Enrolments Catalogue materials
<b>CONSULTATION PROCESS:</b>	The reviewer met with twenty-two people in personal interviews or small groups of up to three, including teaching faculty, administrators and support staff, students, and one visiting scholar. The reviewer also met with other faculty and staff associated with the First Nations House.

## FINDINGS AND RECOMMENDATIONS - OVERALL ASSESSMENT AND SPECIFIC ISSUES

The reviewer commented that the formation of much of the program’s core around Aboriginal culture and perspectives distinguishes the program and is both a defining and valued feature. The concentration on language and availability of community-based instructors has had the advantage of providing a base for

the integration of community-based cultural perspectives in the curriculum. Relations between the program and First Nations House, and the services it provides, are regarded uniformly to be of major benefit to the program.

The reviewer noted that at this stage in the program's development there are a variety of challenges the program is facing. In particular:

- It was suggested that a thorough review of the curriculum be undertaken that considers core courses, the breadth of the curriculum the program is able to offer, the alignment between the academic program and access programs, and the degree to which the program prepares students for employment and/or further study. This review should occur in collaboration with the larger strategic planning for Arts and Science in order that priorities and supports can be aligned.
- It was identified that the role of research and research faculty be should be addressed and integrated more fully into the mission and curriculum.
- A consideration of structural issues related to governance and community engagement was recommended.

### **Structure, Content, and Quality of the Program**

The Aboriginal Studies Program offers an extensive set of courses. However, given the relatively small number of core faculty who are associated with the program and also teaching on cross-appointments, a limited number of regular courses can be taught at any one time by core faculty. That means that to cover the breadth of the curriculum, the program necessarily relies on sessional and adjunct faculty. While in some categories of courses this may be a functional or desirable solution, it may be less desirable for other core courses and may impose a significant constraint that can best be addressed over time through the addition or association of more faculty who can teach the core and address the breadth of the curriculum.

While the curriculum of Aboriginal Studies Program has been revised over time by the interests and academic specialties of participating faculty, there seems to have been a clear attempt to define curricular areas and to address them specifically, and to define a signature core. While some of the resulting areas in the curriculum lie very directly in the Arts and Sciences framework, others, such as Aboriginal health and Aboriginal literacy, lie at some greater distance. In these respects, the Aboriginal Studies Program, while located in the Faculty Arts and Sciences, has a second ambitious identity as a unit with a wider campus reach. Given the limited faculty resources of the Program, this broad curricular reach does raise some strategic questions regarding the comprehensiveness of the curriculum.

It appears that decisions were made early on that shaped the Program around the study of Aboriginal languages, and upon courses that would ground students in understandings of Aboriginal cultures and viewpoints, built in association with the language courses. Local circumstances both internal and external to the university were significant in these choices. The formation of much of the Aboriginal Studies Program core around Aboriginal culture and perspectives distinguishes the program and is both a defining and valued feature. It does, however, in the perceptions of some students, set courses grounded in Aboriginal perspectives at odds with courses they encounter in other areas of their curriculum. There is a need for providing strategies for thinking through such oppositions and contrasts and further defining and refining points of interaction and strategic engagement.

The more recent addition of research faculty associated with departments in the Faculty of Arts and Science creates additional possibilities for curriculum that integrates Aboriginal perspectives and understandings with research approaches and advanced analytical methods available from those disciplines.

Figures for the past three years indicate significant enrolments with a large enrolments in a small number of courses and much smaller enrolments in more advanced and specialized courses. The number of majors at advanced levels is relatively small. This is not atypical of other programs in this discipline, but devising strategies to attract more majors should always remain a priority. If a curricular review is undertaken, a clear articulation of what the major offers students in terms of employment and future study should be part of its considerations: it was not clear to the reviewer that the value of the degree in those more practical dimensions is clearly in focus, though its value in personal and educational terms was often expressed. In addition, the Aboriginal Studies Program, by encouraging or allowing for larger generalist classes, may usefully be informing a wider university clientele about Aboriginal matters.

Some concerns were expressed in interviews that suggested that tensions exist that are common to indigenous studies programs: between the broad reach of the survey course and the recognition that many students lack basic foundations in the discipline; between the curriculum's relation to access programs and the need to develop and maintain an academic standard that will set the stage for work at a more advanced level; and between the need to affirm Aboriginal identity, a core premise of many access approaches, and the more critical approaches to identity common in advanced study in many areas.

The opportunity exists to build on existing strengths towards a full academic deployment and to extend work in the discipline into the research and graduate programs that will develop the academic leadership and professors of the next generation. There are healthy indications of growth and maturity in the program.

Efforts to maintain the links the program has to community experts should continue to be supported. Community based expertise is a signature feature of this program. The reviewer noted, however, that it should be recognized that the engagement of community expertise in an academic context is complex and must be pursued with attention and care.

The reviewer recommended that the Program should conduct a thorough review of its curriculum. Opportunities to take full advantage of its research faculty and its established programs in languages and culture should be fully explored as parts of this review. The alignment of the program to access programs and programs of student support should be fully considered and articulated.

### **The Aboriginal Studies Faculty**

UofT is fortunate to have community experts, curricular specialists, and research faculty, all with significant accomplishments, participating in the Program is part of a strong dynamism in the program, but it also presents some structural problems and, perhaps, the need for new forms of alliance and accommodation.

Research should be more prominent and form an essential and more visible aspect of the program. Support for the research activities of faculty that are of value to the program needs to be fully developed. It is critical that the activities of research faculty from other departments be integrated into the program and equally important that the core and signature contributions of other faculty not be lost or diminished. Activities of research faculty and research relevant to program objectives and operations should be supported in the undergraduate program. The reviewer suggested that it not be presumed that research activities relevant to the program are automatically supported by other units.

Faculty expressed satisfaction with the system of cross-appointments that supports faculty participation in the program and thought that the flexibility they allow is valuable. Some participants felt that at least one full-time faculty appointment would strengthen the program. Some of the faculty associated with the program are nearing the age at which retirement is a possibility. The circumstance of Indigenous Studies as a young field should be kept clearly in focus.

The reviewer recommended that efforts to continue to build the cohort of faculty associated with the program should be continued, and, in recognition of the particular structure of the job market in Indigenous Studies, a multi-year program of faculty hiring be implemented to address any potential opportunities or impeding vacancies.

### **Staff and Student Support, Space and Physical Location**

Staff support for the program functions well. The Aboriginal Studies Program has its own small library collection. Relations between Aboriginal Studies Program and First Nations House and the services it provides are regarded uniformly to be of major benefit to the program. Faculty found teaching classes within the combined space valuable in the limited instances in which it was possible. Nearly everyone expressed a desire for a larger space, but there was some ambivalence surrounding indications that these units might soon be moving to a new location. Considerable effort has clearly been made in the current physical space to develop a sense of community and identity, and rumors of relocation often bring with them a certain anxiety in Indigenous communities for historical reasons.

## **Governance**

Governance in Aboriginal Studies Program appears to have operated in a fairly informal manner, with general discussions or talking circles the primary means of developing input and consensus, and subsequent administrative decisions primarily the purview of the director. This is a model that many other small Indigenous studies programs have shared. The program has now grown to the point where there would seem to be a critical need for some more formal procedures that allow for clearer participatory decision making, and that is likely to be essential if necessary discussions on curriculum and direction are to take place effectively. The director should establish, in consultation with all participating faculty, a clear governance structure that can support extended and deliberative discussions about curriculum and the future of the program.

## **Graduate Program**

The desire expressed by many for the development of a graduate program is worthy of exploration. A graduate program would take advantage of the graduate faculty now available to the program and provide a way to further engage their research expertise. It would allow Aboriginal Studies Program to define itself more clearly on the research level, and it would bring graduate students into the community who could assist and mentor undergraduates. Externally, it would provide an important venue to develop additional capacity in a discipline that now needs to support the work of advanced scholars. The reviewer and faculty members noted that this is not a step to be taken lightly, and not simply for the purpose of increasing the profile or prestige of the program. It is only worth doing and only sustainable if it is clearly designed around a defined approach and academic mission that make it valuable to students and to faculty who participate in it.

## **Conclusions**

The Aboriginal Studies Program is at a very significant point in its development. It is imperative that the work of the foundational faculty in this program and its newer Arts and Sciences research faculty be integrated, that the research activities of newer faculty be recognized and supported in the program, and that the integration and defining purposes of the curriculum be clarified. It is also important that university administrators understand clearly the potential of this unit to mature into a fuller and more complete address of Indigenous Studies as a field that is also maturing internationally. The reviewer recommended that advancement priorities for the program must be articulated and supported by the Faculty of Arts and Sciences and the university development offices. Substantial opportunities for funding undoubtedly exist, but there does not seem to be a current plan for engaging them, or clear support from A&S or the university for doing so. As well, the Faculty and the university should take the occasion of this review to reflect on the long and arduous path that has led to the development of Indigenous Studies at U of T to its present point. Units such as Aboriginal Studies Program often begin in marginal circumstances and must struggle for years to achieve stability and full academic and intellectual expression. The achievement of those who have developed this program should be recognized.

## **ADMINISTRATIVE RESPONSE**





23 August 2010

Professor Cheryl Regehr  
Vice-Provost Academic Programs  
Simcoe Hall, Room 225  
University of Toronto

**Re: Review of Aboriginal Studies Program and Centre for Aboriginal Initiatives**

Dear Cheryl,

As commissioning officer the Dean welcomes the wide-ranging report of the external reviewer, and expresses his appreciation for the reviewer's insightful presentation of the strengths and challenges of the Program and Centre. Following discussions with the director, members of advisory group, and the director search committee, the following responses to the comments and recommendations of the reviewer are offered.

It should be noted at the outset that the Aboriginal Studies Program (ABS) and Centre for Aboriginal Initiatives (CAI) have been guided by an interim director since 1 July 2009. Following a formal director search process, this director was reappointed as the director of the Centre for a three-year term. The director has accepted the reviewer's mandate to supervise the reinvigoration of the Centre.

**Establishment of clear governance structure**

The reviewer recommends the ABS/CAI to establish a clear governance structure that can support extended and deliberative discussions about the curriculum and the future of the program. The director has begun discussion with individual members of ABS and CAI concerning appropriate governance, with the goal to developing a structure that integrates university and indigenous philosophies of governance. These proposals will be developed in a series of meetings over 2010-11, and implemented in winter 2012. The reason for the somewhat lengthier timelines here, and elsewhere, is that two of the ABS faculty are on leave in 2010-11, and therefore are not readily available for consultation.

**Curriculum review**

The reviewer also recommends ABS/CAI to conduct a thorough review of its curriculum. ABS/CAI has begun curriculum review through discussion of the goals of Aboriginal Studies in 2010, as well as through Curriculum Renewal Initiatives Funding, where the centre is examining the underpinnings of language and culture teaching and how to further incorporate Aboriginal worldviews. ABS/CAI plans a series of meetings to discuss the vision of the ABS curriculum. It plans to propose a revised curriculum in either fall 2011 or fall 2012, depending on the availability of the faculty on leave in 2010-11.

**Support for research and research faculty**

The director will make the reviewer's recommendation that the program support its research faculty and research relevant to the program an agenda item on the next faculty meeting. The members of ABS/CAI will brainstorm ways of doing this and follow through on those suggestions that are agreed to have priority.

**Building faculty cohort**

The reviewer recommends that program make efforts to continue building its faculty cohort. The Faculty of Arts & Science's Strategic Planning Committee recognizes the importance of maintaining sufficient teaching complement in Aboriginal Studies to offer a strong program. The CAI retains funding in its budget equivalent to one-half of an unfilled position, and the SPC has invited the CAI to make a formal request to the new Faculty Appointments Committee to seek funding for the other half to allow it to make a new joint appointment with another unit in the Faculty. The director will initiate the faculty hiring in the coming year. In the meantime, the funds in its budget can be used in 2010-11 for the purpose of hiring a CLTA or sessional lecturers.

**Engagement of community expertise**

ABS/CAI is pleased to see this described by the examiner as a signature feature of the program. One reason why this is a leading Aboriginal Studies program in Canada can be attributed to its engagement with community in academic programming and research. With funds from MTCU, the centre is working with the Centre for Community Partnerships to further develop a community-based research program.

**Clarifying advantages of pursuing a major in Aboriginal Studies**

The centre will add a section onto its website to communicate advantages of pursuing Aboriginal Studies. It will also review its communication and recruitment strategies to attract students into Aboriginal Studies program, including working closely with the University of Toronto Career Centre, and creating and publicizing opportunities for undergraduate students to be involved in faculty research.

**Collaboration with the Faculty of Arts & Science and university as a whole for development priorities.**

ABS/CAI looks forward to working with the Faculty of Arts & Science's development office to move forward on development priorities.

Please let me know if any further response is required.

Yours sincerely,



Meric S. Gertler, FRSC  
Dean and Professor of Geography & Planning  
Goldring Chair in Canadian Studies

## REVIEW SUMMARY

<b>DIVISION/UNIT:</b>	<b>Department of Astronomy and Astrophysics</b> Faculty of Arts and Science
<b>DATE:</b>	April 12-13, 2010
<b>COMMISSIONING OFFICER:</b>	Dean, Faculty of Arts and Science
<b>PROGRAMS OFFERED:</b>	
<b>Undergraduate</b>	Astronomy and Astrophysics, BSc: Maj Astronomy and Physics, BSc: Spec Planetary Science, BSc: Spec (w/ Depts of Chemistry, Geology and Physics)
<b>Graduate:</b>	Astronomy and Astrophysics, MSc, PhD
<b>EXTERNAL REVIEWERS</b>	
<b>Canadian</b>	Prof Michael De Robertis, York University
<b>International</b>	Prof Gregory Fahlman, Herzberg Institute of Astrophysics Prof Saul Rappaport, Massachusetts Institute of Technology
<b>PREVIOUS REVIEW DATE:</b>	2005
<b>SUMMARY FINDINGS AND RECOMMENDATIONS OF PREVIOUS REVIEW:</b>	<p>The Department is in good standing overall.</p> <ul style="list-style-type: none"><li>• <i>Faculty:</i> The quality of research ranges from very good to outstanding. The reviewers' only concern was with the issue of recruitment and retention. In order to attract excellent researchers, the Department will need to continue to maintain a strong congenial and intellectual environment and give the faculty the support it needs to carry out research. Students stay in the major and specialist programs because the faculty are active and productive researchers.</li><li>• <i>Undergraduate education:</i> The Department should discuss a new advising plan for students and undertake a review of the content and timing of undergraduate courses.</li><li>• <i>Graduate Education:</i> Since it is possible for less motivated students to take the minimum number of courses and then to focus too narrowly on their thesis projects, the reviewers suggest requiring more courses or a more difficult and broader examination before the end of the second year of study. Graduate students would benefit from more guidance and mentoring and from more contact with the Canadian Institute for Theoretical Astrophysics (CITA) in the early stages of their research. The Department should increase its international recruiting efforts, especially in the United States.</li><li>• <i>Relations with other units:</i> The combination of CITA and the Department is unique and noteworthy. Interactions with the Department of Physics are limited; a closer interaction would benefit undergraduate and graduate students. There does not appear to be a strong coordination of programs at the research and graduate level with UTM and UTSC.</li><li>• <i>Facilities:</i> The reviewers recommended that the University, the Department and CITA meet and plan to increase the available space as soon as possible.</li></ul>
<b>RECENT OCGS REVIEW DATE</b>	2004/05
<b>DOCUMENTATION PROVIDED TO REVIEWERS:</b>	Self-Study, 2007.
<b>CONSULTATION PROCESS:</b>	The reviewers met with faculty, staff and graduate students.

## **FINDINGS AND RECOMMENDATIONS - OVERALL ASSESSMENT AND SPECIFIC ISSUES**

The reviewers find that “the Department continues to flourish in a culture of academic excellence that leads to world-class status in the field of astronomy and astrophysics. The remarkably collegial environment contributes to a high morale among faculty, staff and students.” The Department is the only university department in Canada devoted solely to astronomy and astrophysics. There is a remarkably high and sustained level of recognized scientific productivity among faculty members. The reviewers comment on innovative and creative undergraduate courses and programs and the high student satisfaction with undergraduate education. Key issues:

- The review points to the need for strategic planning regarding the hiring and complement levels of both faculty and staff.
- The reviewers identified some challenges with space and facilities, including the Department library.
- While the reviewers discuss recruitment of graduate students at some length, this is an issue that extends beyond the Department and Faculty and is a challenge at the University as a whole.
- The reviewers identify a number of issues related to the quality of graduate education, the structure of the graduate curriculum, and the satisfaction of students with graduate courses. It would appear that a review of the graduate curriculum is urgently needed.

### **Faculty Complement**

The Department is closely linked to two other academic units, the Canadian Institute for Theoretical Astrophysics (CITA) and the newly established Dunlap Institute (DI). These units add research strength and capability at the graduate level in astronomy and astrophysics. Each Department faculty member is actively and successfully engaged in research. The Department has internationally recognized strength in the broad subfield of extragalactic astronomy and cosmology. Other notable strengths are in the subfields of star formation, exoplanets, and high-energy astrophysics related to compact objects. The balance between breadth and focus seems about right for the overall size of the Department.

The scientific interests of the Department have been broadened recently through an increasing emphasis on instrumentation development, which will also be the focus of the recently established DI. Though a detailed staffing plan for the DI awaits the appointment of its first Director, faculty appointments will likely be joint positions with other academic units. The reviewers recommend that the majority of the DI joint appointments be with the Department. This will help address concerns arising from the heavy burden placed upon the relatively few Department staff to service all the undergraduate teaching on the St. George campus, as well as assuming the major responsibility for administering the graduate program, including teaching. An appropriately structured DI will generate considerable synergies with both the Department and CITA.

Successful instrumentation development requires a facility on which instruments can be tested and utilized to enhance their effectiveness. Most of the U of T's peer institutions in the U.S. have guaranteed access to an observatory telescope. Even if these are not necessarily first-tier facilities, they provide the necessary outlets for training observational astronomers as well as a context for experimental work and instrumentation development. This is another area that will require a strategic approach if the emphasis on instrumentation in the Department and the DI is to be sustained on a world-class level.

UTSC and UTM have faculty members in the graduate astronomy program administered by the Department. The graduate Chair has not always been consulted regarding academic planning and to participate in all search committees for which the candidate would be in the graduate program. The reviewers endorsed a strong astronomy and physics presence at UTM and UTSC, whose faculty and students should contribute significantly to the graduate program and research profile of the University. The reviewers suggested that the possibility of establishing a separate Physics & Astronomy Department should be considered for both UTSC and UTM.

## **Administrative Staff**

While staff morale is high overall, there are some concerns. Individual workloads have increased over the past two years, largely due to duties associated with the closing of the David Dunlap Observatory and the launching of the DI. The workload is unlikely to diminish until the DI is a fully functioning unit, presumably with its own administrative staff. If this is further delayed, some form of relief from the current burden on the administrative staff should be considered.

The most critical staffing issue involves the Department's IT support, which now is the responsibility of a single individual who must manage a very complex system. The stop-gap measures of part-time student support and "self-management" have been problematic. The Department is under-resourced with respect to administrative staff compared with its cognate departments. One possible long-term solution that should be explored involves the sharing, where appropriate, of administrative and technical resources among the Department, CITA and the DI. The greatest efficiencies would be realized if these units were located in the same building.

The departmental librarian is a valuable resource and the reviewers were impressed with her level of engagement in the many issues that confront science libraries today. At the same time, they were surprised to see stacks of bound journals, most of which are readily available on-line. Some thought might be given as to how the space occupied by the Library might be better utilized to foster collegial exchanges within the stimulating environment of a reading room.

## **Organizational Structure**

### CITA and the DI

The Department and CITA have together established a solid international reputation in astronomy and astrophysics. The Department is now eagerly looking forward to the launching of the DI whose presence could further enhance the stature of astronomy and astrophysics at U of T. There are substantial anxieties related to the delay in opening the DI and uncertainties associated with its administrative support. The reviewers recommended that the Dean of the Faculty of Arts and Science ensure that the impact and international profile of this combination is maximized for the benefit of the University.

### Facilities and Location

Communications among the Department faculty and graduate students and between the Department and CITA personnel have been impaired by the partial move into the Astronomy and Astrophysics Building. The reviewers approve of the decision to locate the DI in the building. The Department and DI faculty will be integrated into a common environment, which will help facilitate collegial interactions among the faculty and students, taking advantage of all potential synergies. It would be ideal to extend the same principles to the integration of CITA staff into a common space with the Department and the DI. The reviewers recommend that the Department, the DI and CITA be located in a single building, and strongly urge the University to assign this the highest priority in the next capital campaign to avoid further erosion of the collegial ties between CITA and the Department and to ensure that the new DI is also able to benefit from the presence of CITA.

## **Undergraduate Program**

The overall undergraduate program appears to be healthy, with a variety of degree options, an appropriate range of course offerings, and reasonable enrollments. Student satisfaction with their courses appears good in the survey results. Apart from student surveys, the reviewers found no ready statistics to help them ascertain the strength of the undergraduate program; in particular, there seems to be no compilation of the academic or professional trajectories of the students. They therefore urge the FAS to implement an exit survey of final-year undergraduates and to follow their (academic) trajectories. The reviewers also suggest for future external reviews that arrangements be made for the evaluation committee to speak with a small, but representative sample of undergraduate students.

The reviewers commend the Department for adopting creative and innovative approaches to enhance the undergraduate enrollment of non-science majors in response to an earlier external review. The Department takes undergraduate teaching seriously, and recruitments over the past decade have included individuals with outstanding teaching and communications skills. The reviewers note the recent

success of certain faculty in lecturing the very large introductory Astronomy courses. Student evaluations in these courses are very positive, suggesting that modern pedagogical approaches and methods are working well. To ensure these approaches are maintained, and to allow for further growth in enrollment, the reviewers suggest that the Department consider the appointment of a Lecturer to supplement the faculty teaching complement. This appointment should be in addition to the faculty position required to replace the current Chair.

The reviewers acknowledge that the Faculty of Arts and Science has contributed appreciably to the successful transformation of the introductory courses by providing a substantial increase in the number of teaching assistantships for these large classes.

## **Graduate Program**

### Graduate Students

The majority of graduate students have a very positive view of the program and are pleased with their decision to do their graduate work in the Department. They appear to be a strong cohort of students, from quite diverse locales, working on a broad range of astrophysics topics.

The reviewers were disappointed by the decreased emphasis on recruiting international students, who not only allow for a broader pool from which to select the most talented students, but ultimately lead to international networking that enhances the Department's visibility and prominence. The students themselves are quite keen to ensure that good students continue to be recruited into the Program, and were concerned that the department appears to lack an organized strategy toward graduate recruitment. The Department should consider more involvement of the senior graduate students in the recruitment of new students, both at the campaign level and also at the admissions level.

Most of the graduate students seemed pleased with their duties as TAs, especially the tutorials associated with the large undergraduate courses. The reviewers suggest that TAs avail themselves of the opportunities provided by the University for training, and that a program for TA mentorship be considered.

Quite a few of the graduate students articulated the concern that inflation has effectively eroded the minimum salary for graduate students. They feel that their support level, all factors considered, including cost of living, is relatively low in comparison to other Canadian and US universities. Another concern is that the Department does not obviously attract students from their peer group of American universities, mainly due to the relative value of the Canadian to the US dollar. It would seem that a more strategic approach to graduate recruitment would be worthwhile.

The quality of the graduate students appears to have improved in the past five years, and more Department students are now being supervised by CITA faculty. "First choice success rate" is an important metric in any recruitment exercise and the reviewers suggest that it would be useful to future reviewers if that were tracked systematically. The Department should continue to monitor and explore ways of enhancing the quality intake to its graduate program.

### Graduate Teaching and Research Program

The Department has a direct-entry PhD program that emphasizes the early involvement of students in advanced research. Students are required to participate in two short research projects, and the formal requirements for the program were reduced to four one-semester courses and an oral field exam. In response to the last review, the Department is now developing a two-step PhD examination process. The single oral exam is to be split into two parts: one testing astrophysics breadth, and the other a student's proposed thesis research. Although there seems to be a broad consensus that the introduction of two early research projects is an excellent development, faculty and students are of mixed opinion about the reduced number of courses. There remains some concern that the students will not be as broadly educated in astrophysics as they should be. One solution is that students may still enroll in the traditional program that proceeds through an MSc degree that emphasizes course work. A second solution is to strengthen the advisory committee structure to ensure that students receive sound advice on improving their general background knowledge.

The reviewers were surprised to learn that there is widespread agreement among the graduate students concerning the lack of structure and consistency in Department's graduate courses. Students expressed the view, confirmed in survey results, that the graduate courses, in general, are not well taught, and that

the expectations for the students' background, work load, and level of difficulty varied widely from course to course. In the course of their visit, the reviewers did hear that staffing the graduate courses is generally secondary to ensuring that the undergraduate courses are well taken care of. It is unfortunate that there is a perception that graduate teaching matters less than undergraduate teaching. The reviewers therefore urge the Department to offer a suite of carefully organized and well-taught graduate subjects.

In view of the high satisfaction ratings in undergraduate teaching, coupled with the outstanding research accomplishments of the faculty, the reviewers do not believe the problem with the graduate courses is an intrinsic inability to teach or communicate. The formal graduate courses have suffered, yet the faculty continues to provide strong guidance in the development of the students' research program. It is unlikely that all teaching demands can be met without some increase in the faculty complement, which would allow for a rebalancing between teaching at the undergraduate and graduate levels. The reviewers would urge the Faculty to address the financial stress under which the Department is operating.

Another general source of concern among the graduate students is that faculty-student communications are far from optimal. The "first-year committees" did not seem to be functioning as well as they should, and not adequately providing students with the best advice on the coursework that they should be pursuing. The Department should consider reducing the number of faculty members on the first-year committee to two, and adding a senior graduate student.

## **ADMINISTRATIVE RESPONSE**



24 August 2010

Professor Cheryl Regehr  
Vice-Provost Academic Programs  
Simcoe Hall, Room 225  
University of Toronto

**Re: Department of Astronomy and Astrophysics (DAA)**

Dear Cheryl:

As commissioning officer for the review, the Dean is pleased to read the reviewers' very positive assessment of the Department's academic and research programs, and shares their enthusiasm. The Department is committed to pursuing, insofar as possible, the initiatives they recommend and provides the following responses to specific recommendations.

**Personnel and Faculty Complement**

The reviewers recommend that the DAA immediately proceed to the recruitment of a new Faculty member with priorities in the areas of Instrumentation and Computational Astrophysics. The reviewers also recommend that the majority of the Dunlap Institute (DI) joint appointment be with the DAA.

The Department is pleased to learn that the recommendations of the Faculty of Arts & Science's Strategic Planning Committee (SPC) are in harmony with the reviewers' recommendations. The SPC has recommended allocating two new faculty positions to DAA. One of the new positions, together with one half of the current Chair's salary remaining in DAA, will provide for up to four new junior positions that will be shared 51/49 DAA/DI. The second position, added to a position from CITA, will result in two appointments shared by the two units 51/49 DAA/CITA. Joint appointments with the DI should attract outstanding candidates. The reviewers' recommendation prioritizing the areas of Instrumentation and Computational Astrophysics also echoes a longstanding priority. The Department will reconvene discussions with its faculty about this priority as it contemplates future appointments.

**Maximizing the collective impact of DAA, CITA, and DI for the benefit of the University**

The Dean of the Faculty of Arts & Science welcomes this recommendation, and is committed to ensuring that the impact and international profile of the DAA, CITA, and DI are maximized for the benefit of the University. The recent recruitment of the first director of DI heralds a



key step in this process, and the prospect of joint DAA/DI appointments promises to cement a very strong working relationship between the two units. Similarly, expected collaboration between DAA and CITA around appointments and undergraduate and graduate teaching will further encourage closer cooperation. Finally, the Faculty will pursue with enthusiasm the reviewers' suggestion that administrative, technical and support staff from the three units could work more collaboratively for the mutual benefit of all faculty and students involved.

### **Facilities and location**

The Chair of DAA and Directors of CITA and DI agree with the reviewers' recommendation that the DAA, and the DI and CITA be located in a single building be made a high priority. The Faculty's SPC has also encouraged closer integration along these lines, and the Faculty is pleased to adopt this as a high priority for fundraising. FAS will establish a project planning committee to lay the groundwork for an actual building as part of the capital planning process arising from academic planning. In the meantime, the Department will facilitate communications between faculty members and their graduate students and postdocs by a policy of locating research groups together. The Department will also consider ways to facilitate DAA faculty members interacting with one other and with graduate students, as well as CITA and DI personnel (once hired), on a more regular basis.

### **Graduate student recruitment**

The reviewers recommend that the DAA consider more involvement of senior graduate students in the recruitment of new students. The Department believes that strategic recruitment of the very best national and international students is crucial for its success. The issue of student recruitment is, in fact, an issue that extends beyond the Department and Faculty, and is a challenge at the University as a whole. The Department has therefore taken note of this recommendation, and will follow up on this matter.

### **Graduate education**

Finally, the reviewers recommend that the DAA offer a suite of carefully organized and well-taught graduate subjects. The reviewers' visit occurred in the middle of a multi-year internal review of all major aspects of the graduate program, in the context of the successful introduction of the direct entry PhD program and the reduction in time to degree to match the guaranteed funding commitment. The Department has successfully revamped its qualifying examinations and implemented revisions this spring. In response to the reviewers' advice concerning the need to provide carefully organized and well-taught graduate courses, the Department wishes to underscore that there are no peers in Canada offering the range of graduate courses and programs that are being offered by the Department. Nevertheless, the Department will take this recommendation seriously and address it fully. The Department is committed to making improvements through focused planning and restructuring and this will be greatly helped by the additions of new faculty complement to the tri-campus Graduate Department.

With respect to three-campus complement issues that may affect the graduate program, graduate faculty members from UTM and UTSC have been an important integral part of the DAA-tricampus Graduate Department since its inception. Over the past several years, with faculty renewal on those campuses, FAS and the Department have worked cooperatively with colleagues in UTM and UTSC. We welcome the commitment of the new Dean of UTSC to forming a new department of physics and astronomy; and we await further developments in astronomy at UTM.

Please let me know if any further response is required.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Meric S. Gertler". The signature is fluid and cursive, with the first name "Meric" being the most prominent.

Meric S. Gertler, FRSC  
Dean and Professor of Geography & Planning  
Goldring Chair in Canadian Studies

## REVIEW SUMMARY

<b>DIVISION/UNIT:</b>	<b>Employment Relations Program</b> Woodsworth College, Faculty of Arts and Science
<b>DATE:</b>	December 11, 2009
<b>COMMISSIONING OFFICER</b>	Dean, Faculty of Arts and Science
<b>PROGRAMS OFFERED:</b>	
<b>Undergraduate</b>	Employment Relations, BA: Spec, Maj
<b>Graduate:</b>	n/a
<b>EXTERNAL REVIEWER</b>	Prof. Daphne Taras, Associate Dean (Research), Haskayne School of Business, University of Calgary
<b>PREVIOUS REVIEW DATE:</b>	1999
<b>SUMMARY FINDINGS AND RECOMMENDATIONS OF PREVIOUS REVIEW:</b>	<p>The program was reviewed with the Industrial Relations program as part of a cluster review. The program was considered to be a “good start” and was supported by the students that were interviewed. The reviewers felt that better publicity for the course offerings could result in a substantial increase in enrolment.</p> <p>The reviewer was concerned with the limited number of courses taught by faculty members associated with the major program; many courses were taken from offerings in other departments. They suggested adding an advanced seminar for senior students.</p> <p>The reviewer reported that students were critical of students who were admitted solely for the Certificate in Human Resource Management and who would not otherwise have qualified for admission. This apparently resulted in a substantial reduction in the quality of courses. The reviewer suggested that instructors associated with the courses in which regular and certificate-only students are enrolled should be consulted to verify the seriousness of the problem and to propose solutions.</p>
<b>DOCUMENTATION PROVIDED TO REVIEWER:</b>	Self-Study, November 2009 Terms of Reference Faculty member CVs Employment Relations 2009/10 Undergraduate Handbook
<b>CONSULTATION PROCESS:</b>	The reviewer met with the Vice-Dean, Interdisciplinary Affairs, Faculty of Arts and Science; Principal of Woodsworth College; Director of the Employment Relations Program; Acting Director of the Centre for Industrial Relations and Human Resources; teaching staff and students.

## FINDINGS AND RECOMMENDATIONS - OVERALL ASSESSMENT AND SPECIFIC ISSUES

The review report commends the Employment Relations program for its high quality, breadth and depth, student satisfaction, engagement of faculty members, facilities, and its contribution to the integration of human resources and labour relations. The reviewer concludes that this is an impressive program. Nevertheless, the reviewer does make a numbers of suggestions regarding curriculum planning, faculty complement planning, and the increased integration of the Employment Relations program and the graduate Master of Industrial Relations and Human Resources degree.

## Structure, Content and Quality of the Program

The reviewer provided a thorough review of the scholarly and practical context in which employment relations is studied in North America. U of T was commended for having distinguished itself in reconciling the tensions between the fields of Industrial Relations and Human Resources, allowing both to flourish within the Employment Relations Program and within the Centre of Industrial Relations and Human Resources (CIRHR). These free-standing, vigorous, and well-resourced programs allow Industrial Relations to coexist with Human Resources, and allow both fields to mingle in pursuit of more comprehensive training for students. This is a significant competitive advantage for U of T, and the reviewer recommended that the Program develop mechanisms to market and celebrate that it provides a comprehensive training in all matters affecting employment.

The current size of the program is under 140 students. The reviewer considered that the program is small relative to its potential, particularly if efforts were made to recruit students who are interested in business but do not qualify for, or wish to be trained in a BComm program. There are lengthy waiting lists for almost every offering in the Employment Relations Program, and only the existence of caps or budget constraints prevents courses from growing. Residual is accommodated through summer session teaching. Given the demand there could be another section or two per year staffed by doctoral candidates at the CIRHR and at Rotman.

The Employment Relations program is enriched by opportunities, such as public lectures, presented at the adjacent CIRHR.

The reviewer reported that students are impressed with the quality of the program instruction and the mix of practitioners and scholars. Student satisfaction is taken very seriously. The program is well-run and the quality of instruction is high. The reviewer concluded that the program meets its objectives for specialists and majors, noting opportunities for improvement.

## Program Administration and Governance

The Employment Relations Program is well administered. The Program works well in tandem with the CIRHR and the two have a strong working relationship.

*Program Oversight:* The full-time professional program administrator, who is retiring, is to be commended for the breadth of courses and excellent selection of dedicated instructors and staff. There is some sentiment among faculty in the Employment Relations Program and at the CIRHR that his replacement should be drawn from the ranks of academics. The next academic administrator should have strong program administration skills and attention to detail.

*Expanding and Recalibrating the Curriculum:* Faculty members consider it is an appropriate time for a curriculum review to evaluate the course offerings and possibility of program expansion to meet the growing demand. However, the program has a significant vulnerability in that only one of the eight instructors is fully appointed of the Program. The reviewer concurred that an academic review is required, and presented specific areas for consideration. The suggestions may require streamlining of program, perhaps with deletion/combining of some current courses:

- development of an introductory course that brings together human resource management and labour relations;
- a greater emphasis on data analysis skills and business literacy;
- consideration that course offerings include negotiations beyond collective bargaining, if the program is broadened to include labour relations concerns;
- offering a course in dispute resolution;
- review of optional low-enrolment courses (less than 15 students) to offer a single strong course; and,
- inclusion of a capstone course with teams of students working on projects.

The reviewer noted that the recommendations were meant to generate discussion rather than impose ideas and that the primary recommendation is that a full academic review be undertaken in the next year.

## **Marketing the Program and its Graduates**

The Program could do more to publicize itself and the caliber of its graduates including building stronger alumni relations, tracking of graduates, and celebration of Program success on its website and with professional HR associations. The reviewer suggests a number of measures to improve marketing, but notes that this would depend on the program's willingness and ability to expand.

## **Facilities and Support Staff**

The physical facilities are wonderful, and the proximity to the excellent CIRHR Library is a strength. Within Woodsworth College, the spaces seem ample with good meeting spaces for students.

## **The Student Experience**

The Employment Relations Students' Association (ERSA) is one of the ways students can meet each other and bring vitality to their experience. The reviewer suggested additional means of enhancing the student experience:

- Students need to meet each other sooner, and a gateway/introductory course could be beneficial.
- Greater use of the adjacent residence facility by Employment Relations students. (Students with an interest in Employment Relations could prioritize the residence in applications.)
- Supporting student participation in the dedicated HR annual competition in Montreal, known as Excalibur.

## **Scholarships and Bursaries**

The program is sufficiently strong that it could attract more in the way of scholarships and awards. It would be a realistic goal to add two or three awards based on approaching successful alumni of the program, or corporations who have benefitted from the program graduates.

## **Cultivation of Synergies between the CIRHR and the Employment Relations Program**

The Acting Director of the CIRHR indicates that there is room in the Master of Industrial Relations and Human Resources (MIRHR) program to accept more graduates of the Employment Relations Program. At present, the MIRHR program takes in about 5 students from the Program per year and this could easily be increased to 8 to 10 students. U of T is known to have rigorous grading standards and consideration relative to external applicants may be appropriate. As well, as there is some similarity between the programs, there is some work to be done on consideration of course exemptions or advanced standing status for graduates of the Employment Relations Program that apply to the MIRHR. Stronger linkages between the CIRHR and the Employment Relations Program should also provide opportunities for doctoral students to teach in the Employment Relations Program.

## **Summary of Recommendations**

1. Establish a curriculum review committee to review the program. Without jeopardizing the current strength of the program, the committee should recalibrate it to include an intake or gateway course, a number of new courses, and consider the resource implications of these changes.
2. Consider ways of growing the program as there is demand.
3. In order to grow, the Employment Relations Program must address its vulnerabilities, including the lack of full-time faculty members with a primary allegiance to the Employment Relations Program.
4. The Employment Relations Program is very successful and worthy of a more aggressive marketing effort, stronger alumni relations, and development of additional scholarships for students.

5. The student experience could be enriched by opportunities for earlier interactions among Employment Relations students, earlier attachment to the Employment Relations SA, opportunities to compete with other University students, project assignments that require group work in a community setting, Study Abroad, and a capstone course.
6. The Employment Relations Program should aim to place between eight and ten students per year into the neighboring MIRHR program. There is capacity of the MIRHR to absorb these students. The MIRHR and Employment Relations Program should work together to consider the implications of course duplication.
7. Linkages between the CIRHR and the Employment Relations Program should be encouraged. An expanded Employment Relations Program provides new opportunities for MIRHR students to be teaching assistants, for doctoral students to deliver courses, and for shared curriculum planning.

## **ADMINISTRATIVE RESPONSE**



24 August 2010

Professor Cheryl Regehr  
Vice-Provost Academic Programs  
Simcoe Hall, Room 225  
University of Toronto

**Re: Review of Woodsworth College Employment Relations Program**

Dear Cheryl,

As commissioning officer for the review, the Dean is pleased with the reviewer's very positive assessment of the program, and to her reference to it as an "impressive program". The Woodsworth College is committed to further strengthening the program, and provides the following responses to the reviewer's recommendations.

**Structure, Content and Quality of the Program**

Woodworth College has undertaken a review of the program, and will continue to do this. The College is currently in the process of implementing a new 2<sup>nd</sup> year core course for the program to create earlier and stronger connections with program students and to ensure that 'disciplinary-based' knowledge and competencies are in place from the beginning. The WDW Employment Relations (ER) courses in the program usually fill to capacity. While the College can accommodate all who require specific courses, it is aware of waiting lists for students wishing to get into the ER program and some very popular courses (see future plans below). All students who need a course in order to graduate will be accommodated.

In response to the reviewer's suggestion that the program take steps to improve the data management and analysis skills of students, the College proposes to introduce new assignments in the Compensation course to help students develop their data management skills. As well, other courses will be reviewed to determine how their content and structure could be refined to further enhance students' analytical skills.

The College would like to point out that the "low-enrollment options (optional courses that are not capped, but nevertheless have fewer than 15 students and no wait list)" are not WDW courses for which it is responsible. The reviewer is referring to the small number of ER program students enrolled in anyone of a number of optional "elective" program courses offered in Economics, History, Political Science, Psychology, Sociology and Management. Most of these courses have large total enrolments, and the College has no intention of removing that choice. Indeed, it regards these options as one of the strengths of the ER program.

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### **Program Administration and Governance**

The College has increased the number of full time faculty members teaching in the program in the recent years. In its academic plan to the Faculty of Arts & Science, the College has signaled the need to sustain this, and to consider options for possible expansion. With the recent retirement of the Director of Programs – Bill Bateman – there is now an Acting Director of Academic Programs for 10-11 (Yvette Ali) and a Vice-Principal (Prof. Linda White) starting in 2011.

### **Marketing the Program and its Graduates**

The ER office recently set up a Facebook page from program alumni as part of the UofT Alumni Circle. This will help to build stronger relations between the program and its alumni. The program is planning to send out an alumni survey later this year to track progress of graduates and to re-engage them with the program. The Woodsworth College Alumni Office will assist in these endeavors.

### **Future Directions**

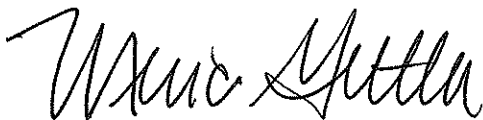
A detailed syllabus for an introductory course in Employment Relations (which currently does not exist) is under discussion. The College hopes to submit it for approval to A&S in the fall of 2010. While mindful of resource implications, the College is currently exploring ways to broaden the curriculum by adding a course on negotiation and bargaining and possibly developing a capstone course for specialists. The College has discussed the possibility of offering an ER course in a Summer Abroad setting, and agreed in principle with the Summer Abroad Office to explore developing a course. Discussions on a service-learning component in specific courses are also actively underway. As well, there is interest amongst faculty to assist students and act as a coach for case competitions. The program office is currently arranging a welcome event for incoming ER students as a way to connect them with each other early in their program. Establishing an ER Mentor program with mentors from the Master program supporting undergraduates is also being considered.

Following the recommendations from Faculty of Arts & Science's Strategic Planning Committee report, the College is now working closely with CIRHR on course, program and development issues of common interest in order to forge an even stronger, more closely integrated working relationship.

Finally, the College is currently working on securing additional awards for students in this program.

Please let me know if any further response is required.

Yours sincerely,



Merik S. Gertler, FRSC  
Dean and Professor of Geography & Planning  
Goldring Chair in Canadian Studies



## REVIEW SUMMARY

<b>DIVISION/UNIT:</b>	<b>Centre for Environment</b> Faculty of Arts and Science
<b>DATE:</b>	January 14-15, 2010
<b>COMMISSIONING OFFICER:</b>	Dean, Faculty of Arts and Science
<b>PROGRAMS OFFERED:</b>	
<b>Undergraduate</b>	Environment and Science, BSc Environmental Policy and Practice, BA Environment and Society, BA
<b>Graduate:</b>	Collaborative Program in Environmental Studies Collaborative Program in Environment and Health
<b>EXTERNAL REVIEWERS</b>	
<b>International</b>	Prof. Richard B. Norgaard, Energy and Resources Group, University of California, Berkeley Prof. John Robinson, Institute for Resources, Environment and Sustainability, University of British Columbia
<b>PREVIOUS REVIEW DATE:</b>	Centre established in 2005.
<b>RECENT OCGS REVIEW(s) DATE:</b>	2005/06 - Collaborative Program in Environment and Health 2007/08 - Collaborative Program in Environmental Studies
<b>DOCUMENTATION PROVIDED TO REVIEWERS:</b>	Self-Study, November 2009 Terms of Reference Centre Annual Reports
<b>CONSULTATION PROCESS:</b>	The reviewers met with the Faculty of Arts and Science Dean, Vice-Dean, Research and Graduate Programs, and Special Advisor to the Dean on External Reviews; Director, Centre for Environment; junior and senior faculty members; administrative staff; undergraduate and graduate CFE students; chairs and faculty members of cognate units; and members of the external community.

## FINDINGS AND RECOMMENDATIONS - OVERALL ASSESSMENT AND SPECIFIC ISSUES

The reviewers identified that the University of Toronto has immense faculty resources in the area of the environment. Many faculty members at U of T are doing critically important research on parts of larger environmental problems. The Centre for the Environment has made significant contributions in terms of identifying faculty engaged in environmental research and teaching; encouraging collaboration between faculty members; and developing learning opportunities.

The reviewers report that many faculty members expressed a strong desire to participate in a process whereby they and the university can address environmental issues in a more integrated and effective manner. UofT's dispersed administrative and academic structure appears to have kept the university from making changes that can reshape the domains of existing units into a more integrated structure for study of the environment.

Student interest in better integration in environmental offerings is also very high. Students praised the courses available and wanted more. Many indicated that they would be students in the Centre for the Environment if it had a direct entry program. The rapid growth of the masters program in environmental sciences (MEnvSci) at the University of Toronto Scarborough suggests that interdisciplinary environmental graduate programs can be successful.

There is currently very little research being organized through the Centre. The reviewers suggest that the Centre is not able to induce faculty members to combine and bring their research efforts to the Centre.

The reviewers note the very significant gains over the past five years:

- Faculty conducting environmental research and teaching are better identified. Faculty members undertaking research in the environment are very substantial.
- Faculty members previously dispersed among three different programs are now working together toward the success of the Centre.
- The needs of graduate students in different programs have been identified and numerous memoranda of understanding between the Centre and individual graduate programs exist.
- The Centre has gained experience on how to develop curricula and teach to prepare students to address environmental issues.
- The Centre has been remarkably successful in developing distance learning opportunities and providing other professional development initiatives including workshops co-sponsored with the corporate sector.
- The Centre negotiated the accommodation of a research unit of Environment Canada focusing on climate adaptation and the Jane Goodall Institute, to provide collaborative teaching and research opportunities for students and the campus as a whole.
- There is remarkable agreement among key participants on how the program is working, what the next steps should be, and how to implement them.

At the same time, the reviewers observed some serious weaknesses that need to be addressed:

- The Centre lacks common physical space for faculty and students. Forming a community serves a very strong functional role in interdisciplinary research, allowing scientists and students through one-on-one discussions to challenge each other's worldviews, theoretical models, the assumptions they lean on, and understanding of evidence. With more interaction, the Centre will be in a stronger position to facilitate opportunities to exchange knowledge between those doing environmental research across the campus.
- The Centre needs more of its own faculty members. Many universities have the "hub and spoke" model, but most have established the hub as a place where a new style of integrative research is accomplished, with faculty members that supervise graduate students.
- The reviewers' discussions with faculty associated with the Centre found widespread agreement that any direct entry program should be at the PhD level to strengthen the interdisciplinary research output of faculty.

### Choices and Alternatives

The reviewers outline in detail four possible futures for the Centre, ordered by the amount of change and institutional commitment/innovation they require.

#### *Option 1 – Continue As Is*

The Centre continues to operate primarily as a provider of collaborative programs with many units on campus, at both the graduate and undergraduate level. These programs serve an extremely valuable function in providing the opportunity for students enrolled in those programs to develop some knowledge of environmental issues, and interdisciplinary skills, that they would not otherwise obtain. However, the combination of a scattered set of locations, lack of core faculty or programs, and high administrative burden are a concern. This scenario could give rise to a decline in the voluntary participation of faculty and eventual dissolution of the Centre and its programs; it amounts to missing significant opportunities for the University of Toronto to capitalize on its strengths and rich history in the environmental area, to take a leadership role in teaching environmental studies, and to develop a rich and varied research program.

#### *Option 2 – Implement the 2004/2006 Proposals*

Of the number of proposals were put forward to strengthen and develop the capabilities of the new Centre, the reviewers consider of particular importance: (i) creation of new direct-entry programs at both the undergraduate and graduate levels, (ii) conversion of the Centre from EDU:B to EDU:A status, allowing the hiring of core faculty; and (iii) obtaining some common space where all the Centre's activities. The reviewers' view is that this scenario is the minimum viable option for the Centre. It would allow it to develop an identity and presence, both within the U of T community and externally. Such a presence would signal U of T's emergence as a more significant presence in the environmental field in Canada and the world. This could be expected to have positive implications for student recruitment, for the potential for partnerships with the private, public and non-governmental sectors, and for fundraising. Such changes would also significantly strengthen the research activities of the centre, allowing the hiring of faculty and admission of grad students required to create a critical mass of research activities. The reviewers recommended defining the Centre through an integrated transdisciplinary philosophy

and methodological approach to doing research with a single direct entry program. They also recommend that the direct entry program be at the PhD level so that the Centre's research capacity as a whole could increase.

#### *Option 3 – Create a School for Environment*

The creation of a new School of Environment, reporting higher up in the university's governance structure, and including the three changes described in option 2 would represent a deeper institutional commitment to environmental studies and science, allowing it to take more of a national leadership role in this area. An important component of this option would be to strengthen the linkages among the operational activities of the campus, the Sustainability Office and the new School. A School for Environment would be better poised to attract funding and provide personnel for large research projects as well as support of on-going units within the School.

#### *Option 4 – Make Environment a University-wide Priority at U of T*

An even stronger step would be to make a university-level commitment to the study of the environment, including but going beyond all of the features of option 3. The university could implement measures that would affect the whole campus. One possibility is to create a university-wide entry-level course on environmental issues. Another is to make it possible for all undergraduate students to do a minor in the environment. Additional measures might include creating regular university-wide seminars on interdisciplinary environmental issues, drawing from faculty and external experts and partners, and fostering collaborative processes intended to increase the number of major interdisciplinary grant projects in this area. Such a step would be a signal that U of T wants to make a globally significant commitment to the study of the environment.

#### Recommendations

The study of the environment is a serious, global, and deeply intertwined with the very nature of industrial society. Major North American universities have made significant financial commitments and substantial organizational changes in response to rising environmental challenges. The reviewers consider that, along with the University of Chicago, UofT has not made substantial investments in the integrated study of the environment. They consider that U of T's students are adequately prepared for, and U of T's faculty are not sufficiently contributing to, finding and implementing solutions to the expanding importance of climate change, ecosystem transformation, species extinction, biodiversity loss, and the proliferation of toxic and non-degradable industrial waste products in the environment.

The reviewers present their views on the four options they have outlined with Option 2 as the minimum required for UofT to sustain some significant presence in the environmental field. Ideally, the reviewers recommended Option 3 or 4, depending on the degree of commitment to this area that the University feels is appropriate and could result in U of T taking a leadership role in environmental studies in Canada and internationally. The reviewers suggested that it is time for the university to act boldly and regain its position in a critical field of research, teaching, and public service. Environment is one of the most pressing topics facing our society.

#### **ADMINISTRATIVE RESPONSE**



23 August 2010

Professor Cheryl Regehr  
Vice-Provost Academic Programs  
Simcoe Hall, Room 225  
University of Toronto

**Re: Review of Centre for Environment**

Dear Cheryl,

The Dean of Arts & Science and the faculty and staff of Centre for Environment (CFE) are pleased with the reviewers' positive assessment of the Centre. The reviewers correctly note, however, that there remains a need for continued, improved integration of environmental teaching and research at the University of Toronto, and that the Centre is well positioned to make a major contribution toward this goal.

In their recommendations, the reviewers identified four options for moving forward: 1) maintaining the status quo; 2) strengthening the Centre in accordance with its original plans; 3) the creation of a School of Environment, whose scope would extend beyond the Faculty of Arts and Science; and 4) making the study of environment a university-wide commitment. The reviewers clearly favour option 3 and 4 combined. Following consultations with its members, the Centre hopes to pursue elements of option 2, with the possibility of moving toward some version of option 3 in the longer term. However, at the current juncture, the Centre and Faculty believe a more prudent approach would be to focus on strengthening the Centre and its existing programs, possibly with new partners. Along these lines, pertinent discussions are currently underway between the Centre, the Faculty of Arts and Science and the Faculty of Forestry to explore new ways forward that expand the Centre's teaching and research scope. Because these discussions are still at a preliminary stage, it is difficult to offer definitive responses to all of the reviewers' recommendations at this time.

**Undergraduate Programs**

The Centre appreciates the reviewers' concern that the status quo may limit the Centre's ability to reach its full potential. However, we would point out in response that undergraduate program and course enrolments have been steadily growing: course enrolments increased by 30% between 2005 and 2009, and programs such as Environment and Society doubled enrolments over the same period. We anticipate that environmental programs will only become more popular in the coming years.

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[www.artsci.utoronto.ca](http://www.artsci.utoronto.ca)

The Centre has made excellent progress in rationalizing the set of programs it inherited from two of its precursor units: the former Division of Environment and the Innis College Environmental Studies program. Within the past year, the BA curriculum has been consolidated and revised. Within the coming year, the Centre will focus on consolidating its BSc programs and revisiting their structure. In doing so, it will work closely with cognate science units within the Faculty.

More generally, the Centre will explore opportunities to engage more permanently appointed faculty to teach its undergraduate courses.

### **Graduate Programs**

With respect to the existing graduate collaborative programs, the number of new students more than doubled between 2005 and 2009. Over the same period, memoranda of agreement have been updated with 24 individual participating graduate units.

The Centre remains very interested in continuing to pursue a standalone graduate program. However, it believes that it makes most sense to start at the Master's level rather than at the PhD level. Considerable effort has already gone into preparing a proposal for a standalone Masters program, based upon two years of intense consultations internally as well as with collaborating departments. The Centre believes that this constitutes the logical foundation for future discussions concerning a new graduate program based at the Centre. However, any such initiative should await the conclusion of the current discussions with Forestry.

### **Research**

The Centre rejects the reviewers' assertion that U of T faculty are failing to make important contributions to fundamental and applied research on environmental issues. The reviewers themselves acknowledge the "immense faculty resources" doing "critically important research" in environment. Nevertheless, the Centre is strongly motivated to enhance the coherence of environmental research within the Faculty and the broader university. Major initiatives already undertaken by the Centre include:

- The development of a searchable environmental research database, identifying over 400 environmental faculty across the three campuses;
- New research projects have been funded;
- New cross-appointed faculty members have been hired;
- Formal research partnerships with external agencies, such as Environment Canada and the Jane Goodall Institute, have been renewed and/or launched;

### **Space**

The Centre concurs with the reviewers on the value of identifying consolidated, common physical space for core faculty and staff. Earlier efforts within the Faculty to address this issue were put on hold while university-wide discussions with respect to environmental research and teaching proceeded. Should the current discussions with Forestry result in some kind of joint initiative, this would logically precipitate a review of space assets and needs to accommodate a larger, integrated environmental initiative within the Faculty. In the meantime, it is important to note that a new student lounge was developed recently, with the support of the Student Experience Fund.

### **Linkages to the Sustainability Office**

One additional recommendation of the reviewers, discussed under their Option 3, is to “strengthen the linkages among the operational activities of the campus, the Sustainability Office and the new School.” It should be highlighted that there is already a long history of collaboration between the Centre for Environment and the Sustainability Office, and at many different levels. The Environmental Studies courses are frequently linked to the work of the Sustainability Office; the program students often serve as interns; some of the students have been hired as staff; the Centre’s own faculty member has been Director since the Office’s inception; research projects, such as “Rewire,” have been administered by the CFE; and the present Director of the Centre for Environment has worked closely with both the Director of the Sustainability Office, as well as the Vice-President, Facilities and Services, in order to support the work of the Office and to better define its mandate. In short, those linkages are already strong between the Sustainability Office and the Centre for Environment.

### **University-wide Environment Initiatives and Outreach**

Under the external reviewers fourth option, “the university would implement measures that affect the whole campus” and make environment a university-wide priority. Such a recommendation, in our view, exceeds the mandate of the review as commissioned, which was to report on the Centre for Environment and its programs, rather than comment on UofT’s tri-campus initiatives in environment.

Nevertheless, it should be pointed out that there has been a significant and growing recognition of environmental studies across the university. The reviewers’ suggestion that “regular, university-wide seminars on interdisciplinary environmental issues” should be created fails to acknowledge that the Centre for Environment already offers such seminars, through two regular seminar series (“Environment” and “Environment and Health.”)

The Centre’s own “Ecolink” website directs visitors to graduate and undergraduate programs and courses in many different departments and units, from Geography and Forestry, to Chemistry, Physics and Engineering. The reviewers do acknowledge the Centre’s initiative to construct a database of environmental researchers across the three campuses, which is accessed through Ecolink. The same website serves to promote environmental seminars and professional development programs across the university. Given the active engagement of the Centre for Environment in building environmental programs, the creation and expansion of the Sustainability Office, the diverse number of environmental offerings available through discrete departments and programs across the three campuses, and the many faculty members teaching in this area, the University of Toronto is, on many levels, a leader in the environmental field, both in terms of teaching as well as research.

It is important to give credit to these strengths, which clearly translate into important initiatives in environmental education and research. Other noteworthy steps include:

- initiatives to strengthen ties with the community, including the CFE Director’s co-chairing, and CFE serving as the secretariat for; the United Nations University Regional Centre of Expertise – an initiative developed together with the City of Toronto, the Toronto Board of Education, and other environmental NGOs;
- expansion of professional development programs; distance education programs have grown from one in 2005, to five in 2010, with enrolment increasing accordingly; participation in annual workshops in Environmental Finance has also expanded

sharply; similarly, Carbon Finance workshops, launched in 2008, have attracted tremendous attention from practitioners in environmental policy and financial services.

- Elevating the public profile of environment at UofT through events such as the Natural City conferences, regular workshops, seminars and keynote presenters such as Robert F. Kennedy Jr., Jane Goodall, Stephen Lewis, former Vice-President Al Gore and President Bharrat Jagdeo of Guyana.

Despite these considerable achievements, the Centre and the Faculty acknowledge that more remains to be done to enhance the coherence of teaching and research in environment. We hope to build upon past successes and, should discussions with Forestry reach successful resolution, forge a new partnership to create a stronger environmental unit.

Please let me know if any further response is required.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Meric S. Gertler". The signature is fluid and cursive, with the first name being the most prominent.

Meric S. Gertler, FRSC  
Dean and Professor of Geography & Planning  
Goldring Chair in Canadian Studies

## REVIEW SUMMARY

<b>DIVISION/UNIT:</b>	<b>Department of Spanish and Portuguese</b> Faculty of Arts and Science
<b>DATE:</b>	January 14-15, 2010
<b>COMMISSIONING OFFICER:</b>	Dean, Faculty of Arts and Science
<b>PROGRAMS OFFERED:</b>	
<b>Undergraduate</b>	Spanish, BA: Spec, Maj Portuguese, BA: Spec, Maj Spanish and Portuguese, BA: Spec Latin American Studies, BA: Spec, Maj
<b>Graduate:</b>	Spanish, MA, PhD
<b>EXTERNAL REVIEWERS</b>	
<b>International</b>	Professor Ana Paula Ferreira, University of Minnesota Professor Frederick de Armas, University of Chicago
<b>PREVIOUS REVIEW DATE:</b>	2004
<b>SUMMARY FINDINGS AND RECOMMENDATIONS OF PREVIOUS REVIEW:</b>	<p>The reviewers consider this to be strong and exciting department and were particularly impressed with its commitment to Portuguese and language training.</p> <p><u>Recommendations:</u></p> <ul style="list-style-type: none"><li>• Hiring priority should be given first to a full appointment in Latin American literature, and second to Hispanic linguistics and 19<sup>th</sup> century transatlantic studies.</li><li>• Joint appointments of junior faculty should be reconsidered.</li><li>• Linkages with other units should be examined to further interdisciplinarity and perhaps attract students from outside the department.</li><li>• Undergraduate program:<ul style="list-style-type: none"><li>○ More courses in Peninsular and Latin American studies</li><li>○ More courses taught in Spanish and Portuguese</li><li>○ More upper level specialized courses</li><li>○ Reduction of class sizes in language courses</li><li>○ Language teaching needs to be more coordinated and professionalized.</li><li>○ Staffing in Portuguese should be fixed at four positions.</li><li>○ More advanced courses in Portuguese could be offered and fewer first year seminars.</li><li>○ The department should consider retaining and reinvigorating the moribund Ibero-American Studies interdisciplinary program as one of its own majors.</li></ul></li><li>• Graduate program:<ul style="list-style-type: none"><li>○ Students should be given adequate training in pedagogy.</li><li>○ Program restructuring should be considered to reduce students' workload from teaching and course work.</li><li>○ Professional development for students should be enhanced.</li><li>○ Funding is needed for students for research travel, language study and conferences.</li><li>○ A field in Luso-Brazilian literature should be added to the MA.</li></ul></li></ul>
<b>RECENT OCGS REVIEW(s) DATE:</b>	2004/05
<b>DOCUMENTATION PROVIDED TO REVIEWERS:</b>	Self-Study, November 2009 Terms of Reference Previous external review report, 2004 Faculty member CVs
<b>CONSULTATION PROCESS:</b>	The reviewers met with the Faculty of Arts and Science Dean, Vice Dean,



Associate Dean, and Special Advisor to the Dean on External Reviews; Chair and the Graduate Director of the Department, Departmental staff; members of the Linguistic group, the Portuguese group, the Peninsular group and the Latin American group; undergraduate and graduate students.

## **FINDINGS AND RECOMMENDATIONS - OVERALL ASSESSMENT AND SPECIFIC ISSUES**

The reviewers described the Department as a “vibrant and congenial unit committed to serving the needs of undergraduate and graduate students.” They commended the Department faculty research productivity and scholarship. The undergraduate program was viewed as having a number of excellent students both as specialists and majors who benefit from the relationships the Department has with other departments and international student exchange programs. Graduate students were described as satisfied with the graduate support provided in the areas of professional development, grant applications, and advice regarding opportunities to enhance their knowledge through courses in other Departments.

The four areas of concentration that were defined in the 2004 External Review have been further substantiated: Spanish and Portuguese Languages, Medieval and Early Modern Textuality, Modern Luso-Hispanic Cultural Studies and Hispanic Linguistics. There seems to have been both continuity and increase in intellectual vitality in the programmatic priorities of the Department since the last external review. Faculty members have strong research profiles and maintain productive research agenda.

The reviewers noted that at this stage in the Department’s development there are a variety of challenges that it is facing including strengthening specific aspects of the undergraduate and graduate Portuguese and Spanish programs and consideration of the allotment of teaching assignments for faculty, lecturers and graduate students, especially with respect to language instruction. The reviewers consider faculty members have many teaching assignments and the large class size are very unusual for a language and culture department in a research university. There is also an unusual tradition in the Department to have tenured and tenure-stream faculty teach year-long language courses; they also teach two required Humanities courses.

### **Undergraduate Education**

The undergraduate program has a number of excellent students in the specialist and major program. Many have taken advantage of the relation the Department has had with Latin American Studies and with Linguistics. Students also seem to profit from the many exchange programs available through the international student exchanges. The reviewers reported that students are happy with the program.

The reviewers noted specific minor issues that should be resolved. Undergraduate students feel that there are not enough undergraduate division courses offered in Spanish, in particular, courses that cover large geographical or chronological spans. Basic introductory courses seem to be offered infrequently and by graduate students who are not necessarily the most knowledgeable on the subject or the teaching methodology. Thus, the reviewers recommend that tenured and tenure-stream faculty move away from teaching language so that they can provide more literature and culture courses for the undergraduate students. In terms of language courses, they also recommended that once the financial situation eases, such courses be reduced in size to allow for more interaction in the classes.

The introduction of the five competencies in the program as degree level objectives has been successful with teaching staff and students. Inasmuch as the teaching of language, culture and literature perforce stimulates critical and creative thinking and communication skills both orally and in written form, there is no question that the undergraduate curriculum in Spanish and Portuguese meets these two competencies. In terms of information literacy, faculty and graduate teaching assistants teach with and encourage active learning with technology to a greater or lesser extent. The reviewers were confident that the teaching of Iberian and Latin American literatures and cultures, from the middle ages to the twentieth-first century, exposes students consistently to themes that either demand social and ethical thought or are in themselves primarily concerned with issues of responsibility towards self, other and others, in different forms of community. The most interesting and challenging of the five competencies integrated in the undergraduate curriculum of Spanish and Portuguese, is the quantitative one, which has been easiest to implement in Linguistics. In sum, the faculty felt that thinking through course offerings in terms of these

competencies added coherence to the program as a whole and that even the quantitative competency allowed them to think of their fields in new ways.

**Portuguese:** This is a unique program in Canada, and the students are very enthusiastic about it. Students noted that Portuguese as an important component of their education either as a major along with Spanish and Latin American Studies or other areas of study. The faculty teaching upper-division Portuguese courses have been pioneers in the Department in occasionally teaching courses in English in order to serve a wider student population. This is noteworthy and a model to follow. In view of the possible retirement in the next few years of two very long-time mentors of the Portuguese program, the reviewers recommended that new hires must include someone who can maintain the ties that the Department has had with the local Portuguese-speaking community, and thanks to which the Portuguese government has continued to support a Lecturer in Portuguese.

**Spanish:** Students feel the need for broader-conceived courses to provide them with a frame of reference for future study. The Department might think about implementing surveys of peninsular and Latin American literatures as well as a transatlantic course to facilitate thinking across strictly defined geographical areas. Teaching at least one transatlantic course a year would be coherent with one of the Department's concentrations, Luso-Hispanic Cultural Studies, that aims to cross the geographical and cultural boundaries traditionally separating the Iberian Peninsula and Latin America.

### **Graduate education**

Although the students are in the main quite happy with the program, there are a number of challenges that must be met.

The students in Linguistics are the happiest and this is directly connected to two factors. One is the faculty's efforts in recruiting only graduate students that match the programs' strengths. The other is the result of the relations maintained between the students of Spanish linguistics and faculty in both the linguistic department as well as other departments that have faculty working in linguistics. This interdisciplinary and interdepartmental component indeed makes for a vibrant program.

Graduate students express satisfaction in terms of the support provided by the graduate coordinator in the areas of professional development, grant applications, and advice regarding opportunities to enhance their knowledge through courses in other Departments.

The reviewers described in detail specific suggestions for inclusion within the graduate curriculum such as a course on Critical and Theoretical Approaches offered by the Department and a formal course in teaching methods.

Very much like the report of 2004, the reviewers found that the M.A. students were concerned regarding pressures in their first year, when they are teaching for the first time and trying to complete 8 half-courses. This issue has not been resolved. The reviewers urged the Department to re-think how to spread courses over a two year period and made specific suggestions.

Although recognizing economic constraints, the reviewers note that at least three areas are in need of faculty and recommend that all faculty be replaced when on sabbatical in order to minimize disruptions to the undergraduate and graduate programs.

The reviewers noted that it is unusual for tenure stream faculty to teach language courses while graduate students are lacking in graduate course offerings (except in linguistics). This is also unusual because some graduate students are reportedly teaching literature courses while their faculty advisors are teaching language courses. The reviewers recommended that researched stream faculty teach at the upper undergraduate level and at the graduate level and the appointment of a full-time Lecturer in second language acquisition have duties of teaching the pedagogy course.

This will allow faculty members to teach much needed undergraduate and graduate literature and culture courses. The lack of enough and varied courses offered by the Department in these areas is notable; and the well-rounded preparation of both undergraduate and graduate students is suffering from it. Ultimately, the graduate program is the most negatively impacted by faculty teaching language courses.

They suggest re-considering the possibility of hiring lecturers and sessionals, as needed, for the teaching of language. A Lecturer with a background and research in second language acquisition/applied linguistics should be recruited immediately. This lecturer would help coordinate language courses and teach a course based on the latest research on pedagogy. Entering graduate students should be required to take this course. This will strengthen, in different but interconnected ways, both the undergraduate and graduate programs.

We reviewers noted specific research areas that would be helpful to develop in the department that would add to the present foci of excellence in the Department.

Communication between faculty and students needs to be improved, perhaps with a handbook for graduate students, improvements to the Department's website, and election of a graduate student representative as a link to the faculty. The reviewers also recommended that graduate students be both recognized and further mentored by the opportunity to read their work at regular Research Colloquia, so as to provide graduate student with regular opportunities to present their research and to have feed-back from their peers and from faculty.

Finally, the present financial situation also seems to impact graduate students and faculty in a number of ways: there is need for funding for student and faculty travel; funding for events and to regularly invite speakers; and funding for a more regular and reliable computer replacement program for faculty.

## **ADMINISTRATIVE RESPONSE**



24 August 2010

Professor Cheryl Regehr  
Vice-Provost Academic Program  
Simcoe Hall, Room 225  
University of Toronto

**Re: Review of the Department of Spanish and Portuguese**

Dear Cheryl:

As commissioning office of the review, the Dean is very pleased to read the reviewers' very positive assessment of the Department. Given that the Department will not be able to hold a faculty meeting to discuss the reviewers' report until September, the Chair has offered the following responses to recommendations with a promise to discuss more fully specific plans with his colleagues in September.

It should be noted at the outset that as of 1 July 2010, the Department is guided by a new Chair, who accepts the reviewers' mandate to maintain and enhance the Department's strengths in teaching and research. The new Chair has also expressed a commitment to engage in the process of developing a framework, terms of reference and objectives for, and the new School of Language, Literature, and Culture as proposed by the Faculty's Strategic Planning Committee.

**Faculty replacements and hiring**

The reviewers recommend hiring in three areas: 1) an immediate replacement of retiring faculty in the Portuguese program; 2) a nineteenth-century specialist with specialization in Peninsular; and 3) a Lecturer with a background and research in second language acquisition/applied linguistics. The Department anticipates a retirement of two Portuguese faculty in the next few years. The Strategic Planning Committee has allocated a teaching-stream position in Portuguese language upon retirement in this area. The Department agrees with the reviewers about the hiring of the two other positions. The Department believes that the hiring of a language lecturer is particularly important were the department to implement the reviewers' recommendation (see below) that faculty be moved away from teaching language courses.

### **Reorganization of teaching content and arrangements**

The reviewers recommend that the Department remedy the current absence of a major figure who teaches the canonical authors of the Golden Age/Early Modern period. As well, the reviewers recommend that tenured and tenured-stream faculty no longer teach language courses, thus freeing them up to teach much needed undergraduate and graduate literature and culture courses. The reviewers note that the well-rounded preparation of both undergraduate and graduate students suffers from the lack of sufficient and varied courses offered by the Department in these areas. The reviewers believe that ultimately, the graduate program is the most negatively impacted by faculty teaching language courses. To relieve the ostensible pressure from tenured and tenure-stream faculty resulting from the demand that faculty teach language courses, the reviewers thus suggest that the Department consider hiring sessionals and additional lecturers in the future.

Given the financial constraints, the Department does not expect additional hiring to remedy the absence of the teaching faculty in Golden Age/Early Modern field, and hopes to continue to make use of the two spousal appointments. As to the dearth of dissertations in the field, the number of dissertations in medieval and early modern textuality have always been far fewer than those in the Latin American area – a historical trend in this department. The continued teaching of “canonical authors of the Golden Age /Early Modern” is also currently undertaken by two other faculty members: Professors Munjic and Blackmore.

The overwhelming majority of faculty in the Department would like to move away from language teaching, thus making it possible to increase intermediate and advanced-level instruction and promote an even more rigorous scholarly departmental culture. Such a move however might entail a re-structuring of the language courses. The department will set up a committee to consider various alternatives. In the past, the department has avoided hiring sessionals for language teaching but will certainly consider the possibility of sessionals in future faculty meeting.

### **Graduate education**

The reviewers recommend that a course on Critical and Theoretical Approaches should be part of the curriculum in the Department of Spanish and Portuguese at the graduate level. The reviewers also urge that the Department re-think how to spread courses over a two year MA period so as to relieve pressure from entering graduate students. It is suggested that in their second year the students can prepare an MA thesis/research paper that would introduce them to the kind of research that will be expected of PhD students. The reviewers find that MA coursework compressed into one year and without any type of final evaluative component (i.e. a thesis) is not appropriate to determine whether students can or should embark on the PhD. Finally, the reviewers recommend that a graduate student handbook be made available; a graduate student representative be created as link to the faculty; and that a Research Colloquium be instituted so as to provide graduate students with regular opportunities to present their research and to have feedback from their peers and from faculty.

The Department has already taken steps in implementing the recommendation of a Critical and Theoretical Approaches course and such a course will be offered this coming year.

The Department has, for quite some time, been aware of the problems of the 1-year MA. A 2-year MA was a good solution when there was no guaranteed funding. The department will be discussing the possibility of having some graduate seminars held in the summer, thus

spreading over an additional 3 months the very heavy course load of the 1-year MA. Such discussions will commence in September.

The Department, however, disagrees with the recommendation that the 2-year MA include a thesis/research paper, since this would add additional pressure on faculty members the reviewers themselves describe as already stretched and overworked. Further discussion of this question must proceed within the wider context of reconsidering the overall structure of the MA program.

The Department is aware of the need for better communication between faculty and students and has begun to consider several measures. The recommendations for a graduate student handbook and graduate student representatives are welcome and will be discussed by the faculty in September.

Finally, the recommendation to reinstate the graduate student Research Colloquium is somewhat perplexing given that it was implemented several years ago, and has been up and running since then.

### **Undergraduate education**

At the undergraduate level, the reviewers recommend that the Department consider implementing surveys of peninsular and Latin American literatures as well as a transatlantic course to facilitate thinking across strictly defined geographical areas.

The Department believes that the implementation of additional courses, specifically the suggested “surveys of peninsular and Latin American Literature as well as transatlantic courses to facilitate thinking across strictly defined geographical areas” would become possible if our faculty can be redeployed from language courses. The department will discuss this more fully in September.

Please let me know if any further response is required.

Yours sincerely,



Meric S. Gertler, FRSC  
Dean and Professor of Geography & Planning  
Goldring Chair in Canadian Studies

## REVIEW SUMMARY

<b>DIVISION/UNIT:</b>	<b>Department of Molecular Genetics</b> Faculty of Medicine
<b>DATE:</b>	April 22-23, 2010
<b>COMMISSIONING OFFICER:</b>	Dean, Faculty of Medicine
<b>PROGRAMS OFFERED:</b>	
<b>Undergraduate</b>	Molecular Genetics and Microbiology, BSc, Specialist and Major (offered through Arts & Science) MD: Undergraduate medical program
<b>Graduate:</b>	Molecular Genetics, MSc, PhD Genetic Counselling, MSc
<b>EXTERNAL REVIEWERS</b>	
<b>Canadian</b>	Prof. Richard A. Rachubinski, Department of Cell Biology, University of Alberta
<b>International</b>	Prof. Kenneth C. Burtis, Dean, College of Biological Sciences, University of California, Davis
<b>PREVIOUS REVIEW DATE:</b>	2003
<b>SUMMARY FINDINGS AND RECOMMENDATIONS OF PREVIOUS REVIEW:</b>	<p><i>Departmental Organizational Structure/Communication</i> was considered by faculty to be effective and not requiring any change. Despite this, the reviewers suggest that the Executive Committee meet regularly, with pre-advertised agenda items that would allow for organized input from departmental faculty.</p> <p><i>Financial Issues:</i> The Faculty should set clear academic benchmarks to guide the budgetary process and enable departments that show increased research and teaching activity to reap some financial budgetary benefits. The funding transfer from the central administration needs to be supplemented to reflect the increased enrolment.</p> <p><i>Undergraduate Arts and Science Education</i> Both the merger of the two specialist programs into one program with two distinct streams and the review of the global program offerings are proceeding well. Students expressed a desire to see more participation of faculty advisors in their orientation days when they are faced with decisions concerning the choice of majors.</p> <p><i>Undergraduate Medical Education:</i> While medical students felt that they had excellent exposure to high quality clinical teaching, they felt somewhat disconnected from MGM. The reviewers suggest that integration of students might be assisted through their inclusion in the social activities of the department.</p> <p><i>Graduate Education:</i> Some course offerings were perceived by students to not be of sufficient quality and quantity. An interdepartmental "menu" of courses could be generated to provide increased course offerings and flexibility for graduate programs. The second issue concerned students' feeling of lack of involvement in departmental issues. At a minimum, students should be included in the Department's graduate committee.</p> <p><i>Research</i> The Department has an outstanding record of research achievements that makes it the "best biomedical research department in the country" and "poised to be one of the best in the world".</p> <p><i>Challenges</i> Movement of faculty from their existing department to the new Centre for Cellular and Biomolecular Research will allow members to</p>

relocate to lab space that maximizes interactions with colleagues as well as providing an opportunity to upgrade the remaining space in MSB. This tremendous opportunity also brings considerable uncertainty and anxiety within the existing research groups. The Faculty of Medicine should undertake a communication strategy in order to ensure a widespread “buy in” from the scientific community and to address the concerns raised.

*Postdoctoral Fellows* have little formal status within MGM. Mechanisms should be put in place to ensure that postdoctoral fellows become more involved in the Department.

**RECENT OCGS REVIEW(s)  
DATE:** 2005

**DOCUMENTATION  
PROVIDED TO REVIEWERS:** Terms of Reference  
Self-Study, 2010  
Previous External Review Report, 2003

**CONSULTATION PROCESS:** The reviewers met with the Dean, Faculty of Medicine; Vice Dean, Graduate Affairs, Faculty of Medicine; Vice-Dean, Research, Faculty of Medicine; Associate Vice-President of Research, University of Toronto; Chair, Department of Molecular Genetics; Director, Donnelly Centre for Cellular and Biomolecular Research; Research Institute Directors; Chairs of cognate departments in Medicine; junior and senior faculty members; administrative staff; undergraduate and graduate students.

## **FINDINGS AND RECOMMENDATIONS - OVERALL ASSESSMENT AND SPECIFIC ISSUES**

The Department has achieved excellence and created a whole that is greater than the sum of its parts, despite its complex organization. The reviewers concluded that the faculty associated with the Department of Molecular Genetics are world class, highly productive, well funded, are publishing in top journals, and are winning recognition for their excellence. Undergraduate students in Arts and Science have a very positive view of the MGY program and greatly appreciate the lab courses. Graduate education has been improved even further since the last review.

A number of challenges have been identified by the reviewers with respect to the academic programs, facilities, and Departmental administrative structure:

- Undergraduate program in Arts and Science – The small number of students in the specialist program does not reflect the importance of the discipline in modern biology and further limits teaching opportunities for graduate students. Several positive steps have already been taken (e.g. introduction of a major program in 2009/10) but further development of programming in this area is desirable.
- Undergraduate medical education – The reviewers express concern that Department faculty have been excluded from teaching in genetics for undergraduate medical students.
- Graduate Education – The reviewers express concern over the level of participation of a subset of the faculty in graduate program activities, in part because of the complexities of the relationship between campus-based and off-campus partners. Some questions were raised about research expectations for doctoral students.
- Facilities – Space issues were identified as a major challenge.
- Departmental Administration – The large, diffuse and diverse nature of the Department and its programs create challenges for departmental administration.

### **Education**

#### Undergraduate program in Arts and Science (MGY)

Overall, the students had a very positive view of the MGY program. The major problem facing the undergraduate program is the relatively small number of students matriculating in the major program, and particularly in the



specialist program. This is unsustainable and does not reflect the importance of these disciplines in modern biology. Additional negative impacts of the small enrollment include minimal opportunities for graduate students in the program to get teaching assistantships. One reason behind this failure to attract students appears to be the perceived rigor this program with possible resulting repercussions on their competitiveness for admission to medical school. The reviewers recommend that the Department better publicize the benefits of the MGY programs, including the focus on research experiences and the importance of the topics covered to health care. Efforts are also necessary to continue to increase the variety of courses of interest offered to the students in MGY and other majors to increase enrollments and stabilize the program.

#### Undergraduate medical education

This topic was reassigned to the Department of Laboratory Medicine and Pathobiology in 2006. The current lack of participation of Departmental faculty in providing coverage of genetics for the medical students is troubling to the reviewers. Given the rising importance of this discipline to medicine in the post-genomic world, and the clear predominance of the Department in the area of human genetics, the reviewers believe the reassignment decision should probably be reversed.

#### Graduate education

The Department is to be congratulated for the program improvements that have been accomplished since the last review. Several key changes have been made in both the recruiting of students and the curriculum including changes to the student seminar program, with greatly increased mentoring for the first presentation, and efforts to improve oversight and reduce the time to degree. The rotation program with guided choices for the first two labs and the standardization of student stipends between programs was seen positively by the students and most faculty. Overall the students seemed to have a high opinion of the program and faculty were pleased with the quality of the students.

There are several issues with the graduate program that should be addressed. The level of the stipends seemed very low for the cost of living associated with Toronto. Students reported finding it almost impossible to find opportunities to TA, given the small size of the undergraduate program in Molecular Genetics & Microbiology and a perceived difficulty in obtaining slots in other Arts and Sciences courses. The goal of increasing the number of competitive applicants to the graduate programs would be greatly helped if measures could be taken, such as increased development activities or more tuition reductions or waivers; at a bare minimum, students' concerns about parity with the adjusted levels of a decade ago should be addressed in a completely transparent and consultative process.

A second issue is the level of participation by faculty in all five nodes in graduate program activities. Although students are more or less evenly distributed among the nodes, there is significant concern that participation in teaching activities is not. In one sense, this is just a small part of the larger issue of how to integrate the program across nodes that are not only geographically separated but also programmatically diverse. Nonetheless, it is certainly critical that all faculty who benefit from the students in a graduate program should bear an equal part of the workload in training those students.

A third issue that was noted by several faculty is some disagreement with respect to the quality of independent research necessary for the awarding of the PhD degree. Concerns were expressed about students whose efforts were predominantly collaborative, and whether such students had demonstrated the independence thought necessary for a PhD degree. Given the stellar nature of the programs in the Donnelly Centre, which have attracted a large number of excellent students, this issue should be addressed immediately in a transparent and collegial manner, so that the students do not suffer from confusion or disagreement among the faculty.

A fourth issue was that, despite a more than 50% increase in the number of entering students since the previous review several faculty had found it difficult to compete for students that they had funds to support. Recruitment efforts have improved substantially, but a better web site, more competitive stipends, and perhaps the creation of an umbrella program for admissions might help further these efforts.

#### **Research**

The faculty associated with the Department are world class; highly productive, well funded, publishing in the top journals at an enviable rate, and are winning prizes and recognition for their excellence. There is no doubt that they are significant contributors to the high placement of the U of T in international rankings, and the excellence of recent hires ensures that this will continue to be the case. It was clear to the reviewers that chronic tensions still exist that result from the separation of colleagues into different nodes that operate under very different conditions

and rules. Despite this, it was particularly heartening to note an enthusiastic spirit of collaboration and mutual interest that was leading to scientific and social interactions across the boundaries of different nodes, especially between MSB and the Donnelly Centre. The collaborations between the five nodes are perhaps the most critical single factor in the future excellence of the department, and every possible effort should be made to continue to cultivate collegial interactions that currently exist.

Microbiology was seen by both the faculty and students as an area that had fallen on hard times with the departure of core MSB personnel to the Donnelly Centre, as well as the retirement of a number of faculty who had dropped out of research to focus on teaching. Despite the Chair's desire to rebuild and strengthen the microbiology area through the hiring of four new faculty, although incorrect, the perception still remains that microbiology is old-fashioned, with limited relevance today and limited research potential for the future. The reviewers support the Chair's continued emphasis in redeveloping the microbiology aspect of the Department and goal to hire an additional faculty member in an aspect of modern microbiology research. These developments within the core of the Department, coupled with a continuation of the strong links with microbiologists at the Donnelly Centre and at the other external nodes, will re-establish microbiology to its rightful place as an area of research and educational excellence within the Department.

Although historically some of the core members of the Department were involved directly in research in human genetics, with time this research area has been divested to the external nodes of the Department, particularly at the Hospital for Sick Children. This might have been expected, given the resources required to do this type of research today and its natural affiliation with the hospital milieu. However, the Department remains the academic focus of human genetics at the U of T through its strong links with its members who research in this area at the external nodes. It would be advantageous for the Department to continue to focus on developing and expanding research using model genetic systems of human disease to complement and extend the Department's given excellence in research in human genetics proper.

## **Facilities**

The efforts to date to update and upgrade the space in MSB have fallen far short of that required, if the intention is to retain a strong core for the Department of Molecular Genetics. The Department's core faculty members are for the most part well funded, and support significant parts of the research mission of the Department. They do so, however, in overcrowded conditions with an aging physical plant, embarrassing seminar facilities, and a lack of space to place new hires. The reviewers strongly encourage the administration to address the Department's inadequate facilities.

## **Administration**

This is an enormously complicated department to administer, and the Chair is to be commended for the job he has done over the last five years. The Department has improved substantially with respect to every important metric of success. Particularly important have been his efforts in adding new faculty to the Department; all have been outstanding additions, and the future looks bright, however, there are several areas in which some work remains to be done. These include increasing the lines of communication with the faculty both within the core and in the other nodes and working to find a strategy that maintains curricular standards while engaging a larger fraction of the undergraduate population in the Department's major and specialist programs. There is a perception among many faculty that they have insufficient opportunities for input and consultation on Departmental issues. The reviewers suggest that the Chair endeavor to increase his use of the Executive Committee, increase the opportunity of the faculty to have input at additional regular faculty meetings, and increase the overall transparency of his decision-making processes.

The rapidly falling number of students in the specialist program is disturbing, and must be remedied. It was the reviewers' impression that the Chair is perhaps too focused on his desire to protect the rigor of the program, and is not focusing hard enough on what could be done to entice preprofessional students into the program. Staff and students who are providing academic advice to the pre-meds should be contacted and asked for advice about how students perceive the Department. It should be possible to double or triple enrollments from their current low levels.

There is a critical need to develop a better working relationship with the Directors of the Centres and Institutes; particularly the Lunenfeld and Ontario Institute for Cancer Research. Status-only faculty must participate fully in the duties expected if they are to enjoy the privileges of membership in the faculty of the U of T, but their career

advancement is currently based solely on meeting the research expectations of the institutes to which they belong. Core faculty should not be expected to shoulder additional burdens at the expense of their own research programs just so other faculty can focus exclusively on their research programs while enjoying the benefits of university affiliation. There is no simple solution to this problem, which means that both parties must be willing and eager to communicate, negotiate, compromise, and find the fairest possible solution to the benefit of all concerned.

## **ADMINISTRATIVE RESPONSE**



UNIVERSITY OF TORONTO  
FACULTY OF MEDICINE

Catharine Whiteside, MD PhD

Dean

Vice Provost, Relations with Health Care Institutions

June 30, 2010

Professor Cheryl Regehr  
Vice-Provost, Academic Programs  
University of Toronto  
Simcoe Hall, Room 225  
27 King's College Circle  
Toronto, Ontario, Canada M5S 1A1

Dear Professor Regehr:

Following the external review of the Department of Molecular Genetics I am pleased to provide you with my response to the reviewers' report.

On behalf of the Faculty of Medicine and the Department of Molecular Genetics, I extend a sincere thanks to the external reviewers Richard Rachubinski, Department of Cell Biology, University of Alberta and Kenneth C. Burtis, Dean, College of Biological Sciences, University of California, Davis for their expert, insightful analysis and excellent report. May I also thank all of the faculty and students who participated in the review consultation. The Faculty also recognizes and extends sincere gratitude to the administrative staff in the Department of Molecular Genetics who assisted in preparing the written materials and worked collegially with the Dean's office to organize the review.

Finally, I congratulate Professor Howard Lipshitz and the Department on a very successful and comprehensive review. The report of the external reviewers clearly identifies important recommendations that are the focus of the following administrative response.

**Education:**

▪ ***Undergraduate program in the Faculty of Arts & Science:***

The reviewers identify a trend across all of the life science (Arts & Science) undergraduate programs, namely declining interest of students in specialist degree programs and increasing interest in majors. Enrolment in double major programs does not necessarily reflect a desire on the part of high achieving students to avoid academically challenging programs, but often signifies their interest in a broader undergraduate learning experience. In this regard, the development of a major program in Molecular Genetics is an excellent strategy and will very likely attract many students. The launch of a second year course is

most welcome. I would encourage Molecular Genetics to develop research opportunities for students in the major program as well as laboratory course experience. This approach would also provide more TA-ships for graduate students in Molecular Genetics.

▪ ***Undergraduate Medical Education:***

The Vice Dean Undergraduate Medical Education has undertaken significant curriculum reform that will be implemented in the coming year. Fortunately, it is recognized that all of the basic biomedical sciences, including molecular and human genetics, must be more integrated into the curriculum. This is particularly important in the post-genomic era heralding personalized medicine. Therefore, teaching genetics/genomics with assistance from Molecular Genetics will be undertaken in undergraduate medical education. I agree that the Chair should be in direct communication about this matter with the Vice Dean who also chairs the Undergraduate Medical Education Curriculum Committee.

▪ ***Graduate Education:***

The reviewers comment positively about the academic enhancements to the graduate education program leading to improved standards of performance. The challenge of effectively integrating multiple institutional nodes that are geographically separated is not unique to this department and is a challenge for every Chair. Creating new opportunities by the Chair for more communication with the faculty members and students about this issue is a good first step and commented on by the reviewers. I am in full agreement with the Chair's approach to monitoring the quality of independent research necessary for the PhD degree. Across all of our graduate units in the Faculty of Medicine, ensuring that the doctoral graduate committee and examination members are approved by the Graduate Coordinator, and are held to high standards of performance, are most important. I am satisfied that with the expansion of the doctoral program, the administrative support and oversight are being maintained at a level that guarantees academic excellence.

Equity in distribution of teaching loads across on- and off-campus faculty members is also an issue relevant to all of our basic biomedical science departments. Teaching effectiveness and sustained excellence in teaching are required for academic promotion. The status-only faculty members who are employees of our fully affiliated hospital research institutes report directly to the Vice Presidents Research whose budgets are dependent mostly on Hospital Foundation fund-raising and therefore constrained, particularly during the recent economic recession. The importance of evolving a shared academic mission and vision between the University and the hospital research institutes and their leadership is ongoing and I am pleased that the Chair will be scheduling more opportunities to discuss these matters with the Vice Presidents Research to enhance the working relationship.

Competitive funding for MSc and PhD students in Molecular Genetics is of concern and the reviewers correctly identify that the stipends have not increased proportionate to inflation. It is also the case that harmonization of graduate student stipends across the biomedical sciences has been achieved in the Faculty of Medicine. It is anticipated that stipend increases must occur across all the departments simultaneously, a process that is managed by the Vice Dean Graduate Affairs with all of the Department Chairs. Further, the Faculty must keep in mind the potential for disparities in doctoral student funding across Sectors within the Faculty and with other Divisions at the University. Fund-raising

for students is one of our top priorities and I will be working with all of our departments, including Molecular Genetics to increase graduate student awards that support stipends. In the Faculty of Medicine, TA salaries are not considered part of the graduate student stipend (as insufficient TA opportunities are available for all students).

### **Research:**

It is gratifying to learn from the external reviewers that Molecular Genetics produces research and has recruited and retained faculty that are world class. I agree that this department certainly contributes very positively to the international reputation of the Faculty of Medicine and the University. I also agree that the Medical Sciences Building research laboratory facilities and teaching/seminar space for Molecular Genetics is substandard.

I agree with the Chair that molecular microbiology and infectious disease are very important fields of study for the Department. Alignment of scientists in this field with colleagues in Immunology, Laboratory Medicine and Pathobiology as well as the Clinical Departments of Medicine, Surgery and Pediatrics is also a relevant translational direction for the Department. Recruitment of new faculty will require new funding, probably through fund raising and increased number of competitive external research salary awards.

The human genetics pillar in collaboration with the Hospital for Sick Children and other affiliates and their research institutes, including new recruitment, is a major part of the scholarship (both research and education) for this Department.

### **Facilities:**

The Faculty of Medicine has launched a renovation of all of the research floors of the Medical Sciences Building utilizing graduate enrolment expansion capital funds plus other lines of revenue. We are prepared to work directly with the Chair and his Executive to renovate the Molecular Genetics Department space beginning with the seminar room and student space. The possibility of moving the on-campus faculty to a new location will be examined over the next 5 years. At this time, no specific new space on campus has been identified.

### **Administration and review of the Chair:**

The Department and its leadership has demonstrated that they collegially and collaboratively work with faculty members and senior leadership in many other institutions and departments. I have full confidence that the commitment of the Chair to enhance the working relationships both on- and off-campus will address the concerns raised by some of the hospital partners.

### **Summary**

Congratulations to the Department of Molecular Genetics and the Chair, Professor Howard Lipshitz, for a constructive self-study and positive external review. This outstanding department is positioned to continue on their upward trajectory. The Faculty of Medicine is committed to addressing the key issues raised by the external reviewers with the Chair as quickly as possible.

Sincerely,



Catharine Whiteside, MD, PhD

## REVIEW SUMMARY

<b>DIVISION/UNIT:</b>	<b>Department of Adult Education and Counselling Psychology (AECP)</b> Ontario Institute for Studies in Education
<b>DATE:</b>	November 16-17, 2009
<b>COMMISSIONING OFFICER:</b>	Dean, OISE
<b>PROGRAMS OFFERED:</b>	
<b>Undergraduate</b>	Bachelor of Education, B.Ed. (participation in initial teacher education)
<b>Graduate:</b>	Adult Education and Community Development, MA, MEd, PhD Counselling Psychology, MA, MEd, EdD, PhD Collaborative Programs: Comparative, international and Development Education Workplace Learning and Social Change
<b>EXTERNAL REVIEWERS</b>	
<b>International</b>	Prof. Thomas J. Sork, Faculty of Education, University of British Columbia Prof. Mark Pope, Division of Counseling and Family Therapy, University of Missouri – Saint Louis
<b>PREVIOUS REVIEW DATE:</b>	2006
<b>SUMMARY FINDINGS AND RECOMMENDATIONS OF PREVIOUS REVIEW:</b>	<p>The reviewers found AECP to be a “large, vibrant department with a committed, energetic and productive faculty, dedicated staff and incredibly enthusiastic students.” There was a strong demand for all programs (with the exception of the EdD in Adult Education and Community Development (AECD)). The AECD program is regarded internationally as a world class program, in research, scholarship and teaching. The Counselling Psychology (CP) program has an established reputation as an excellent counselling program in Canada. Quality of teaching as assessed by student evaluations is uniformly excellent. Considerable collaboration occurs within each of the two graduate program streams but very little collaboration across programs. There is little connection between the graduate programs and the initial teacher education programs.</p> <p>The EdD in AECD does not attract enough applicants, and the reviewers supported the departments’ decision to suspend the EdD degree as of 2006/07.</p> <p>There is a strong research culture and evidence of effective research leadership in many areas. There is high quality in the research being undertaken across the department as a whole.</p> <p>The relationships with cognate academic units and external agencies were seen as strong and extensive.</p> <p>Despite the complexities and tensions presented by the two graduate programs, along with involvement in teacher education, most faculty regard the organizational and financial structure as working relatively well. However, governance structure and procedures should be modified to involve an expanded Executive Committee, regular meetings and the inclusion of student representatives at department meetings.</p> <p>The morale of students was high. A “culture of completion” through a variety of mechanisms has been designed to expedite and facilitate student progress through the program. Staff morale was somewhat affected by the feeling they were under-resourced. Although a few faculty members had concerns about the need to participate in initial teacher education, in the aggregate they seemed relatively content with the status quo.</p>

The department is very successful in its recruitment of a large and qualified student applicant pool, and has a strong national and international reputation. The department is clearly committed to respect diversity.

**RECENT OCGS REVIEW(s)  
DATE:** 2003/04

**DOCUMENTATION PROVIDED  
TO REVIEWERS:**

- Terms of Reference and UofT Review Guidelines
- Self-Study, September 2009 (including previous OCGS review and Canadian Psychological Association accreditation report)
- Faculty member CVs
- Previous UofT review summary and administrative response
- OISE's graduate and teacher education calendars
- OISE's annual report
- Department brochures, AECD and CP program guidebooks and handbooks

**CONSULTATION PROCESS:** The reviewers met with the OISE Dean and Associate Deans, Chair and Associate Chair of AECP, Chairs of other OISE departments, junior and senior faculty members, administrative staff, graduate students, and members of the external community.

## **FINDINGS AND RECOMMENDATIONS - OVERALL ASSESSMENT AND SPECIFIC ISSUES**

The reviewers noted that the combination of Adult Education and Counselling Psychology within one department is unique within North America but that this makes logical sense given their focus on adults in the community. The reviewers concluded that these two specializations have strong, highly relevant educational programs that are in high demand. Faculty members in both programs are engaged researchers and most have been successful in attracting external funds.

The reviewers commented that at this stage in the department's history, there are a variety of challenges that the department will face including:

- The need to clarify the distinction between research-focused degrees and practice-focused degrees with respect to delivery methods, enrollment targets and funding. A concern of the reviewers is the potential for undervaluing the important role of practice-focused graduate education.
- Exploration of new options for program delivery including flextime options, doctoral cohorts, balancing class sizes, sharing research methods courses across the department, and sharing a variety of courses across the Counselling Psychology and School and Clinical Child Psychology programs.
- While individual faculty members have strong connections with community partners, relationships between the community and the department as a whole could be strengthened and periodically reviewed. There is a need for continuing efforts to forge cross-departmental collaboration within OISE.
- Increasing the prominence of Initial Teacher Education within the department.

### **Educational Activities**

The Department is a combination that is unique in North America, operating two relatively distinct program areas. Each area serves students with different interests and sites of practice and each area has developed its own unique curriculum. Both specializations have strong, highly relevant educational programs that are in demand. There are two features these programs have in common that support the logic of having them in one department: a primary orientation to working with adults rather than children and engagement with sites of practice – beyond schools – distributed throughout the community. The Department also plays a role in initial teacher education by offering specializations within the BEd, but this role is not large, nor does it appear to be a high priority. Although it is an understandable desire to have



all academic units at OISE engaged substantively in initial teacher education, mandating this engagement via teaching assignments or program configurations that do not adequately recognize the intellectual and experiential backgrounds of faculty is not in the best interests of students or of OISE.

*Student concerns.* The students interviewed were generally pleased with the quality of the student experience. But they did identify some matters that may require attention including an increasing number of sessional instructors teaching core course; doctoral students who received master's degrees at OISE have trouble finding enough "new" courses; and administrative duties are taking an increasing proportion of faculty time making it more challenging for students to get quality time with faculty

*Sharing curricula across the Department.* The reviewers suggest that the area of specialty research methods courses might provide the opportunity for some sharing of courses.

*Access to learning technologies.* The reviewers find it unsatisfactory that commonly used learning technologies must be centrally booked elsewhere in OISE and that there are few technology-equipped classrooms.

*Enrolment tension between programs.* Enrolment goals should be considered in light of the unique characteristics of programs and the professional requirements of graduates, and program-specific sub-goals should be developed where applicable.

*SOS—Students on Seven.* The SOS organization is instrumental in making students feel at home in the department, soliciting student feedback on important issues, and encouraging collaboration and problem solving across the department. The reviewers congratulate the students for their active involvement with SOS and urge the department to continue supporting SOS and involving students in as much of the life of department as possible.

#### The Adult Education and Community Development Program

The AECD Program has a long and distinguished history and is regarded highly internationally for the quality of its scholarship, the diversity of its faculty and students, and excellence of its teaching. Faculty have developed and nurtured several research centres with strong national and international profiles and participate in others based elsewhere within OISE. Retirements and voluntary departures are a key concern of this group.

*Giving the "cohort model" a fair hearing.* The department should give various versions of cohort doctoral education fair hearings and also consider carefully the kind of students who might be attracted to such a program. It may well be the case that a cohort model might not work for students currently enrolled, but developing a cohort model might open doctoral study to a more diverse range of prospective students and help the program maintain its competitive edge.

*Responding to changing Ministry and OISE priorities.* There was some frustration expressed about shifting Ministry priorities and how these influence enrolment targets within OISE. The reviewers suggest developing a long-term plan that incorporates as much flexibility as possible and may help moderate rapid changes in expectations.

*Retirements, secondments and leaves.* The AECD group is feeling particular pressure with 50% of 13 faculty close to retirement, on secondments or leaves. The reviewers see no clear solution to this except to keep staffing levels front of mind during discussions with the Dean's Office and keep the lines of communication open so that those who will not be available for teaching and supervision can be replaced. Greater clarity and consistency about the prospects for replacing departing staff would ease these concerns.

#### The Counselling Psychology Program

The CPP Program is known in the counselling psychology and counsellor education professions for its excellent academic quality and the internationally recognized scholarship, teaching, and academic outreach of its faculty

*Balance course sizes.* One way to increase OISE mean class size is to have a balance between classes that require smaller enrolments (PhD/EdD and clinical classes) and the higher enrolment classes (MA/MEd and didactic courses).

*Share courses.* Several courses in the Counselling Psychology curriculum and the Department of Human Development and Applied Psychology's Child and Clinical Psychology curriculum overlap and could be taught in one section.

*Clarify accreditation restrictions.* CPP faculty are to be commended for seeking and achieving accreditation of their PhD program, awarded in 2006 by the Canadian Psychological Association. CPP faculty are already attempting to clarify the interpretation that CPA accreditation standards restrict enrolments to only full-time students in the PhD and MA courses.

*Expand accreditation and school counsellor education faculty.* The CPP faculty should consider accreditation of their MEd program through the Canadian Counselling and Psychotherapy Association. This would enhance the OISE contributions to education in Toronto and all of Ontario.

*Doctoral students.* All doctoral students should have supervised teaching as part of their academic program and a clinical supervision course. Currently they are supervised as they supervise others, but without any formal didactic training in theories of supervision.

## **Research Activities**

Faculty members in each program are engaged researchers and most have been successful in attracting external funds. Students are aware of the wide range of research being conducted in the department. Some feel they have good opportunities to participate in research activities while others do not, which is not surprising given the large number of students in the department and the variable interests they have in engaging in research. The department hosts or co-hosts five research centres, and the faculty are active participants in several other research units within OISE.

*Implement formal mentoring of new faculty.* A formal faculty mentoring program should be developed so that tenure-stream faculty have at least one official senior tenured faculty member – preferably more -- to assist them with the tenure process. Although every new sessional and full-time faculty member is assigned a faculty “buddy”, this process is apparently not working well and further refinement of this process is recommended.

## **Relationships with Cognate Units and Programs**

Faculty members are reasonably well connected to other units within OISE and the University more broadly. The reviewers were pleased to hear about the role being played by department faculty in providing leadership to various academic and research units. They were also pleased to see that a focus on Aboriginal/Indigenous Education is based in the department

## **Relationships with Government and External Organizations**

AACP faculty have developed some very productive relationships with outside groups and have been instrumental in helping those groups secure funding and access to the intellectual resources of OISE. These relationships provide useful points of contact for faculty and students whose work relates to the community, for arranging placements or internships for various purposes, and as a source for recruiting prospective students into the department's programs.

## **Organizational and Financial Structure**

AACP seems to be a well-functioning, productive administrative and financial unit within OISE. The reviewers have some concerns about internal tensions regarding resource allocation decisions and the uncertainties around staffing levels and enrolment pressures. However, they do not believe that these tensions and pressures are any more acute in AACP than in other departments that are made up of programs that serve distinctly different audiences and come from different intellectual traditions.

*Consequences of devolved budget model.* The current budget model at OISE is thought by some to work against cross-departmental/interdisciplinary collaboration. If this is indeed the case, steps ought to be taken to correct this flaw. If not, then some work needs to be done within OISE to demonstrate to any skeptics the ways in which the budget – or other fiscal tools – can be used to support collaborative work.

*Role of the Peace Lounge in developing community.* AECF is privileged to have an open and flexible social space. The reviewers support the uses being made of this space as a “common” area that reduces the isolation that some individuals might feel if the Peace Lounge did not exist.

## **Vision and Long Range Plan**

The reviewers identify a variety of challenges that the new Chair and all members of the department will face. Some of these are related to the current context of higher education globally, some are specific to OISE and Ontario, and some to the particular features of AECF.

***Culture change:*** There was a change in culture when the former OISE (which housed both of AECF’s programs) merged with the U of T Faculty of Education in 1996. Whereas the former OISE focused primarily on research, the new OISE/UT sought a balance between research and practice. This culture change remains to be completed; matters related to staffing of courses, differences between research-focused and practice-focused degrees and their funding, and others are critical to address and arrive at consensus.

***Resource constraints:*** There is clearly pressure to increase enrolments (and consequently revenue) in some programs while the faculty complement remains static or declines. Deciding where to focus limited resources in the face of enrolment pressure – and shifting Ministry priorities – will have to be done with great sensitivity to the different character of programs and constituencies served.

***Seizing new opportunities in a thoughtful, collaborative way:*** There are opportunities to experiment with a variety of program formats (e.g., doctoral cohorts, flexi-PhD) that should be fully and openly explored in the department. Although they may be judged unsuitable for various academic or economic reasons, it would be a mistake to reject them without first understanding their strengths, limitations, costs, and attractiveness to prospective students.

***Retirements/turnover:*** There is some anxiety over the prospect of a significant number of retirements in the AECF group combined with voluntary departures. There does seem to be a commitment from the Dean’s Office that faculty will be replaced as they retire, but even if they are, their replacements will likely be with junior colleagues whose engagement with doctoral students will be limited in the early years. This will require careful planning to avoid overloading senior faculty with research supervision duties and short-changing students.

***Maintaining balance across program areas:*** AECF is home to varied programs with different objectives serving distinct groups. Some of these programs require significant student supervision while others require much less. The courses in some programs have the potential for higher enrolments while others do not. Accepting more students will require careful consideration of the desired balance of graduate supervision and class size among the programs.

***Sustaining and enhancing external relations:*** AECF has developed valuable connections with external groups and organizations. Some of these are based on personal relationships with a single faculty member, making them vulnerable to retirements. The department should develop a form of “succession planning” so that those external relationships it wishes to maintain can be sustained by more than one faculty member. The department should also periodically review its external relationships and lay out a plan for nurturing new ones with new faculty members.

***Avoiding valuing one group/program over others:*** In research-intensive universities, there is a tendency to regard as more valuable those programs that focus primarily on the preparation of researchers. This is unfortunate in departments and programs that focus on the preparation of skilled educational practitioners. AECF faculty and students are aware that this is an issue and are taking steps to prevent it from becoming a larger problem. The perceived status distinctions between “funded” and “unfunded” students continues to be a concern among students.

***Increasing the prominence of initial teacher education (ITE):*** In AECP there is a small number of faculty engaged primarily in ITE. To avoid further marginalization of ITE and those engaged in it, ITE should be brought more fully into the discourse and language of the department. While it is not expected that the department's engagement in ITE will grow substantially – given the fields of study represented – there could be opportunities to link the work in ITE with other work being done in AECP.

***Maintaining the well-functioning administrative staff:*** The reviewers were impressed with the energy that has gone into recruiting and developing a well-functioning administrative team. It is important to maintain the team while providing opportunities for further development of their careers and further refinements in the way the work is organized.

***Continuing efforts to forge cross-departmental collaboration:*** Although there are clearly limits to the degree of cross-departmental collaboration that can reasonably be expected in a diverse unit like AECP, the reviewers were encouraged to hear that several certificate programs, possibly a new MEd, and Aboriginal/Indigenous initiatives are cross-departmental. They recommend the department challenge itself to identify all areas where cross-departmental collaboration will not only produce efficiencies, but will enrich the intellectual environment for everyone in the AECP community.

## **ADMINISTRATIVE RESPONSE**



March 29, 2010

Professor Cheryl Regehr  
Vice-Provost Academic Programs  
Simcoe Hall, Room 225  
University of Toronto

**Re: Review of the Department of Adult Education and Counselling Psychology**

Dear Cheryl:

We would like to thank the reviewers for conducting a thorough review and writing a thoughtful, detailed report. Their analyses reflect a fair understanding of a complex department, and the department and I agree that there are several recommendations that will be very useful to the incoming Chair, Jeanne Watson, whose appointment begins on July 1, 2010.

The reviewers note that the combination of Adult Education and Counselling Psychology within one department “is unique within North America,” and that the combination is warranted given the shared focus on “working with adults rather than children and engagement with sites of practice...distributed throughout the community.” The reviewers conclude that both programs (Adult Education and Community Development [AECD], Counselling Psychology [CP]) are “strong, highly relevant...[and] in demand.” The reviewers also conclude that “faculty in each program are engaged researchers and most have been successful in attracting external funds.” Specifically, AECD “has a long and distinguished history and is regarded highly internationally for the quality of its scholarship, the diversity of its faculty and students, and excellence of its teaching.” CP “is known in the counselling psychology and counsellor education professions for its excellent academic quality and the internationally recognized scholarship, teaching, and academic outreach of its faculty.”

The reviewers also note—and we agree—that given the retirements and departures in the department, as much clarity as possible regarding new positions as well careful planning for these positions will serve the department well.

Further, the reviewers commented on the need for more technology-equipped classrooms. Since their visit the Chair has arranged with Education Commons to have this equipment installed in both department meeting rooms; in addition, the department had a classroom already equipped with up-to-date technology at the time of the review. “Smart” rooms elsewhere at OISE can be booked through the normal room booking system.

You have asked that we address in particular the following recommendations:

1. *The reviewers identify the need to clarify the distinction between research-focused degrees and practice-focused degrees with respect to delivery methods, enrollment targets and funding. A concern of the reviewers is the potential for undervaluing the important role of practice-focused graduate education.*

The University of Toronto’s policy of funding all full-time research-stream MA and PhD students complicates the distinctions between and the status of academic and professional degrees,

especially in a professional faculty. At OISE, the University's minimum funding commitment applies to full-time MA and PhD students (considered "research-stream") and not to part-time MA, flex-PhD and full- or part-time MEd and EdD students (considered "professional-stream," either because students are working towards professional degrees, or because the students are working professionals). The requirement to provide funding has led to a status distinction that tends to undervalue the important role of practice-focused graduate education, and to much smaller enrollments in full-time MA and PhD programs throughout OISE because of the cost of student funding. In AECP, the FTE enrolment of funded full-time MA students has fallen from 6 (2005-06) to 3 (2009-10), and is projected to fall to 1 (2010-11). The FTE enrolment of funded full-time PhD students has fallen from 36 (2005-06) to 32 (2009-10), and is projected to fall to 28.9 (2010-11).<sup>1</sup> By contrast, FTE enrolment of MEd students has increased from 64.4 (2005-06) to 148.3 (2009-10), and is projected to fall to 139.3 in (2010-11) because of the cap on masters level enrolment.

Because there are only a handful of full-time MA students and many more MEd students, they take courses together.<sup>2</sup> This results in a perceived lack of differentiation between the requirements of research- and professional-stream degrees while students are taking coursework, even though the requirements for degrees are differentiated at the thesis stage. The appropriate ways to differentiate between the MA and the MEd are being discussed at OISE, a discussion complicated by the inconsistent practices of faculties of education in North America, many of which offer only the MEd degree, with or without a thesis. Academic planning in the next year will need to consider where the Institute and its programs will go in order to provide outstanding and sustainable masters-level programming to professional-stream students, as well as to students requiring a pathway to the PhD. The distinction must be substantive, not just financial, and it may be different between the CP and AECD programs, based on their differing structures.

2. *The reviewers recommend new options for program delivery be explored including flextime options, doctoral cohorts, balancing class sizes, sharing research methods courses across the department, and sharing a variety of courses across the Counselling Psychology and School and Clinical Child Psychology programs.*

**Flextime options:** Flextime options for students have been expanded. AECD will gradually increase its number of PhD-flex students, beginning in Fall 2010. CP's proposals for a PhD-flex and part-time MA were approved by the Graduate Education Committee of the School of Graduate Studies in March 2010.

**Doctoral cohorts:** At bi-weekly program planning meetings, the department continues to discuss possible doctoral cohorts, including one in Community Healing and Peace-building, which would involve faculty from both programs. The department and I agree with the reviewers that "developing a cohort model might open doctoral study to a more diverse range of doctoral students." Our enrolment planning includes doctoral cohorts in AECD in 2011-12 and CP in 2012-13, in addition to participation in cross-departmental cohorts.

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<sup>1</sup> The drop in funded full-time enrolment does not reflect decreased demand for these programs: the number of applications AECP receives for its full-time MA and PhD programs far exceeds available spaces.

<sup>2</sup> With the exception of students taking core CP courses, who form a separate cohort of full- and part-time MAs because of accreditation requirements.

**Balancing class sizes:** I agree with the reviewers that “courses in some programs have the potential for higher enrollments while others do not.” The department is concerned that the reviewers’ suggestion that some classes “could have maximum enrollments allowed of 25-35 so as to balance the smaller ones” could lead to graduate seminars with 35 students. My interpretation of the reviewers’ comments is that, while some classes would continue to have small enrollments, others could have higher enrollments to increase overall enrollment figures, consistent with OISE’s overall goal to increase average class size. The department has already made progress on this front. In 2008-09, AECD’s mean class size was 17, up from 12 in 2005-06; CP’s was 14, up from 12 in 2005-06.

**Sharing research methods courses:** Some research methods courses (AEC1103H: Introduction to Research Methods in Adult Education; AEC1145H: Participatory Research in the Community and the Workplace; AEC1405H: Introduction to Qualitative Research, Part I; AEC1406H: Introduction to Qualitative Research, Part II) are already shared across the department. Students must take at least one research methods course in order to graduate.

OISE’s Associate Dean, Research and Graduate Studies has created an OISE-wide Research Methodology Working Group to review options for sharing research methods courses across departments to ensure that offerings are efficient and match student demand. To date, two divisionally funded courses in statistics (HDP1287: Introduction to Applied Statistics and HDP1288: Intermediate Statistics and Research Design) have been approved. They will be cross-listed for all departments and offered annually to meet student demand from within and outside OISE. Flexible modes of delivery are in place for these courses to permit larger class sizes. The working group continues to discuss the creation of OISE-wide introductory courses on general quantitative approaches to research and design, and qualitative approaches to research and design, which could reduce the need for individual departments to offer similar introductory courses. The working group will also improve the existing online listing of Research Methods courses available at OISE so that students from all departments can easily understand which courses might be relevant to them and when they are scheduled to be offered.

### **Sharing a variety of courses across the Counselling Psychology and School and Clinical Child**

**Psychology programs:** Sharing courses between OISE’s two clinical psychology programs (AECP’s CP and the department of Human Development and Applied Psychology’s [HDAP’s] School and Clinical Child Psychology [SCCP]) is a good use of resources, and will expand the culture of sharing between these programs. To date the two programs have shared HDP3204H: Contemporary History and Systems, which examines the historical and philosophical bases of modern theories of applied psychology, with emphasis on counselling, developmental, and educational psychology. CP students also take the statistics courses offered in HDAP, HDP1287H: Introduction to Applied Statistics. I fully support the idea that CP and SCCP seriously consider sharing other courses identified by the reviewers (e.g. ethics, biological bases), and encourage the new Chair of AECP and the Chair of HDAP to facilitate further collaboration.

3. *The reviewers identify that while individual faculty members have strong connections with community partners, relationships between the community and the department as a whole could be strengthened and periodically reviewed. Further they comment on the need for continuing efforts to forge cross-departmental collaboration within OISE.*

AECP is involved in several cross-departmental collaborations within OISE, and it is committed to sustaining them. It is the home department for two graduate collaborative programs (Comparative, International and Development Education [CIDE]; Workplace Learning and Social Change), co-host to two cross-departmental research centres (Centre for the Study of Education and Work; Comparative, International and Development Education Centre) and participates in two other cross-departmental research centres (Centre for Integrated Anti-Racism Studies; Centre for Women’s Studies in Education).

The department also has good external linkages, although as the reviewers comment, they tend to be connected to individual faculty members. The Indigenous Education Network is based in the department; the Social Economy Centre has extensive connections with non-profit organizations; CIDE is linked to global education networks. Institutional connections without faculty champions cannot be sustained, and the department has committed to reviewing its external relationships on an on-going basis.

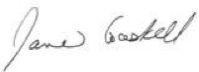
4. *The reviewers recommend that the prominence of Initial Teacher Education [ITE] be increased within the department.*

The department currently has faculty who offer specializations within the BEd Secondary in Business Studies and Technological Education. While OISE is committed to increasing the number of tenure-stream faculty from all departments teaching in ITE, as the reviewers acknowledge, finding appropriate ways for AECP to contribute to ITE is particularly challenging, because AECP faculty's expertise relates to the education or counselling of adults, whereas ITE focuses on the education of school-age children. Indeed, while the reviewers applaud the department's commitment to possibly "introducing a component focused on the adult learner," they also state that "'forcing' this engagement [with ITE] via teaching assignments or program configurations that do not adequately recognize the intellectual and experiential backgrounds of faculty—and their interest in and suitability for engagement in ITE—is not in the best interests of students or of OISE." We agree.

The next Dean of OISE will engage in academic planning within two years of her appointment. Many of the items raised above are ones that also need to be addressed on an OISE-wide basis: the valuation and resourcing of research- and practice-focused degrees, including the prominence of Initial Teacher Education within OISE; flextime options; class sizes; and cross-departmental collaboration, including shared courses and curriculum renewal. We believe the academic planning process will yield positive and substantive outcomes for the whole Institute.

Please let me know if any further response is required.

Sincerely,



Jane Gaskell



## REVIEW SUMMARY

<b>DIVISION/UNIT:</b>	<b>Department of Anthropology, UTM</b>
<b>DATE:</b>	November 3-4, 2009
<b>COMMISSIONING OFFICER:</b>	Vice-Principal Academic and Dean, UTM
<b>PROGRAMS OFFERED:</b>	
<b>Undergraduate</b>	Anthropology, BSc: Specialist, Major Forensic Science, BSc: Major Forensic Science - Anthropology, BSc: Specialist Forensic Science - Biology, BSc: Specialist Forensic Science - Chemistry, BSc Specialist Forensic Science – Psychology, BSc: Specialist
<b>Graduate:</b>	MA, MSc, PhD (tri-campus) (A complete review of the graduate program is scheduled for 2012-13.)
<b>EXTERNAL REVIEWERS</b>	
<b>International</b>	Prof. Judith Irvine, Department of Anthropology, University of Michigan
<b>Canadian</b>	Prof. Michael Blake, Department of Anthropology, University of British Columbia
<b>PREVIOUS REVIEW DATE:</b>	N/A (Department was formed in 2003)
<b>DOCUMENTATION PROVIDED TO REVIEWERS:</b>	Terms of Reference Department of Anthropology Self-Study, 2009 Stepping Up: Academic Plan for 2004-2010 UTM Steps Up Plan 2010 UTM Degree Level Expectations Tri-Campus Framework Enrolment Report 2009 – Office of the Registrar NSSE 2008 Results Facts & Figures 2008 UTM Academic Calendar 2009-2010 U of T Viewbook 2010-2011 UTM Viewbook 2009-2010
<b>CONSULTATION PROCESS:</b>	The reviewers met with the Vice-Principal and Dean, UTM; Vice-Principal Research; Vice-Principal Research; Vice-Dean Graduate, Chairs of Anthropology, UTM and St. George; junior and senior faculty members; administrative staff; and undergraduate and graduate students.

## FINDINGS AND RECOMMENDATIONS - OVERALL ASSESSMENT AND SPECIFIC ISSUES

### Summary

Students in the Department of Anthropology have “high praise for the faculty and for the courses they teach.” The collegial environment is described as strong, particularly with respect to inter-program interactions. The Department’s active research role is impressive given the recent growth in faculty members and scholarly activity and acquisition of research grants has been on the rise over the past five years. The reviewers noted that at this stage in the Department’s development there are a variety of challenges that it is facing:

- The reviewers recommended that the faculty take the opportunity to give thorough and systematic attention to the curriculum and its rationale. In particular they identified issues related to availability of courses, the complexity of the program design and the nature of requirements, and a need for greater links between subfields. In their view, these curriculum issues have limited enrollment in majors and minors, but also have limited the numbers of students who may take anthropology courses as elective choices.

- The reviewers suggest that efforts should be directed at improving the relationship between UTM Anthropology and the graduate Department of Anthropology. This would include determining ways to enhance opportunities for graduate students, particularly teaching assistants, on the UTM campus.
- Physical space is identified as a challenge.
- Recommendations were made to reconsider the staffing arrangement in the Department.
- The reviewers recommended that the Department re-think its governance structure to increase participation in governance and decision making.

### **Size, scope, quality and priorities of the Department's educational activities**

The department has done an excellent job in the past few years in developing course offerings that provide a better balance among the subfields of anthropology. Students gave high praise for the faculty and for the courses they teach. The reviewers found an exciting group of faculty with creative ideas about the discipline and about teaching. Students enjoy their lower- and upper-level courses. Students with strong interests in the discipline and/or with a pre-professional orientation are attracted to a program the design which clearly accommodates their goals.

The reviewers noted several concerns:

- While the overall population of students at UTM has increased dramatically in the last few years, anthropology enrollments have not. Further, there has been a shift of enrollments away from specialist and major degrees toward minors.
- The complicated structure of prerequisites deters intersubfield and interdisciplinary learning, and can even make it difficult for students to complete their degree requirements within four years, especially those who choose anthropology after their first semester.
- The degree structure sharply divides Science from Arts degrees and reaches all the way down into the curriculum, putting subfields into opposition with one another. In spite of the department's expressed desire to be a four-field department, offering an appropriately broad view of the discipline, this structure tends to produce narrow specializations.
- The curriculum structure may create difficulties in delivering 400-level courses, making it difficult for a student to complete a degree program when crucial faculty member(s) are unavailable. Students complained that they cannot count on the courses that they want and need to take being available.
- The reviewers wonder whether UTM is adequately addressing the issue of student preparation, especially lack of writing skills. Faculty expressed grave concern about UTM procedures and resources for assisting student writing or assisting faculty in writing pedagogy.
- The structure of prerequisites, and the year-long format for second-year courses, tends to exclude students in other departments from taking anthropology courses.
- The role of term-limited and sessional faculty in the curriculum needs to be assessed. It may be that the short term of their appointments, and the University's lack of commitment to their positions, endangers significant aspects of the curriculum.

The reviewers recommended that it is an appropriate time for the Department to examine the structure of the curriculum, and the undergraduate programs and student goals it serves. The reviewers suggest that more flexibility be built into the curriculum in order to improve the quality of the program and student enrolments:

- Make it easier for students in other disciplines to take anthropology courses.
- Recognize that recruitment to the discipline is serendipitous and often late.
- Make it easier for advanced students to find links between subfields.
- Reconsider the necessity for the Science/Arts streaming all the way down into the structuring of the Anthropology major.
- 100-level courses: avoid the word "survey" in course descriptions. Aim for lively titles. Titles that include the word "Anthropology" may tend only to draw students who already know what that means and already have some interest in the discipline as such.
- 200-level courses: break the Y courses down into H courses.
- Reduce the complexity of the prerequisite system. Increase the number of courses that have no prerequisites, substitute "permission of instructor" for specific prerequisites, and remove the requirement of chair approval.

- Do not add additional upper-level course requirements to the major or specialist tracks until enough other changes have been made in curriculum, and perhaps in staffing, so that the department can be sure of offering the courses it is requiring.
- Rethink how the Arts and Science degree tracks apply to the program, to the extent that the UTM structure permits doing so. Look to construct courses that cross subfields.
- Establish a committee on Curriculum to debate these issues and formulate proposals for the department faculty.
- Carefully track the trends in enrollments and student preferences, going forward. Goals for future faculty hires need to be related to the curricular and enrollment issues.

## **Research activities**

*Scope, quality and relevance:* The Department is developing a very strong set of research programs, as demonstrated by faculty productivity, student participation in research, and the intensive use of existing lab facilities. The Department's active research role is impressive given the recent growth in faculty numbers and the historic emphasis on undergraduate teaching at UTM.

*Research Productivity:* The research productivity of the department has been strong during the past five years and is on the rise. The success in obtaining external research grants from the top national and international granting agencies and organizations is commendable. The publication records of most of the tenured and pre-tenure faculty are strong and in many cases are clearly making an international impact, which is particularly impressive given the intense period of renewal during the past 4 to 5 years. There is some variation of publication productivity and visibility among faculty: some are very productive and internationally visible while others, though they appear to be active in research, are not regularly publishing the results of their work.

The reviewers recommended that in order to encourage grant-getting and publication success, it might be useful to develop a "research community", where senior faculty can mentor junior faculty and an environment is created to support and foster research activity. It can be very useful, especially in a department where so many sub-disciplines are represented, to have an informal setting where people can discuss grant proposal writing, present the preliminary results of their work, and discuss the most effective strategies for submitting work for publication. As well, the reviewers recommended that the Department develop a standardized CV format.

## **Scope and nature of Departmental connections with other units at UTM and elsewhere**

*Interactions with other programs at UTM:* The collegial environment with respect to inter-program interactions appears to be strong. Faculty frequently interact across disciplines and programs and engage in interdisciplinary teaching and research. There is a lack of connections, however, in some areas: Biology, Ecology and Evolution, Geography, Political Science, Industrial Relations, and History of Religions, History, and perhaps also Sociology. When the new UTM Medical program begins it will be another area where connections with Anthropology might be forged. At UTM, there seem to be factors working against active interdisciplinary ties: a general difficulty in creating community, especially in nonlaboratory disciplines, because of a strong alignment with the St. George campus; a relatively narrow structure to student programs, dividing Arts from Sciences regardless of topic; course-heavy programs, leaving students with fewer electives than in many other institutions; and the structure of prerequisites, a barrier to students from other departments to whom a course topic might otherwise appeal. The joint courses that have been created for Anthropology and Linguistics might also be envisioned with other programs, as well as joint activities. The reviewers suggested that some interdisciplinary team-teaching be implemented on a trial basis to create exciting new connections and courses with wide appeal.

The reviewers were asked to consider the relationship of the Forensic Science program to the Anthropology department and to consider the possibility of a Master's degree in that field. Since they were unable to meet with the head of that program and only met with one of its other faculty, they were not able to consider these questions very fully. Still, a few relevant points did emerge. First, they were told that a Master's degree would not actually be sufficient to qualify a student for independent legal work. Second, the anthropologists teaching in the program meet other instructional needs in the Department, and to grow the program at this point would presumably require additional faculty. However, with the

addition of a medical school at UTM, the reviewers envision a wider set of opportunities for the Forensic Sciences program to develop through collaborations with the medical faculty and medical laboratories.

The reviewers were very impressed the new Hazel McCallion Learning Centre and the resources it provides – especially for undergraduate students. The library holdings in Anthropology appeared to be adequate for general undergraduate work. They may be lacking for upper-level undergraduate research projects in nonlab fields, but the collection is growing and the librarians seemed to be very responsive. The reviewers were also very impressed with new mapping and Geographic Information System (GIS) facility. Staff at the Robert Gillespie Academic Skills Centre work closely with the Department to help integrate student learning and communication skills within the Anthropology course curriculum. Though it is too soon to assess its overall effectiveness, this initiative appears to be promising.

*Interactions with other UofT campuses:* The major advantage of the University's tri-campus structure is that graduate students as well as faculty members have the benefit of a much larger and more distinguished set of colleagues, specialties, and resources than any one campus could host on its own. A major disadvantage is the distance between campuses, which combined with traffic congestion and parking difficulties, is too great for easy travel among them. As a result, some faculty and students spend less time at UTM; and it is reportedly difficult to get good graduate students to serve as teaching assistants at UTM. The reviewers see the need for an increased level of activities and events such as colloquia and workshops to be hosted at UTM and draw participation from the downtown campus. They also recommend that the University subsidize student and faculty use of the bus service more than it does at present, and that more space be allocated for graduate students on the UTM campus.

### **Relationship with external government, academic, and professional organizations**

All of the faculty members belong to the major national and international academic organizations of their discipline or sub-disciplines, and all are active in presenting research results at the annual meetings of these organizations. It is difficult to tell from the CVs just how many have participated as elected representatives of academic organizations. The forensic anthropologists in the Department have all regularly participated in legal cases and investigations for both national and international government agencies. Their work, collectively, shows UTM to be one of the pre-eminent forensic anthropology programs in the country. Other faculty members have participated as expert witnesses in legal cases.

### **Effectiveness of the Department's organizational and financial structure**

*Budget issues:* Since the reviewers are not well trained in accountancy, it was difficult for them to draw very many inferences from the budget information supplied to them. They noted that the department's expenditures for the past several years for more TAs and sessional lecturers have exceeded its planned costs by a factor of 5-15%. It appears to draw on funds allotted for operating expenses to make up part of the instructional deficit. The reviewers suggest that if the Department routinely needs more teaching assistants than planned for by the university, then the university should adjust plans to meet needs.

*Staff issues:* The reviewers were very impressed by the department's administrative staff. The Departmental Coordinator is seriously overburdened and is responsible for duties that would normally be handled by three administrators in most departments. They suggest expanding the hours of the part-time assistant or hiring temporary staff during peak periods, investigating whether some of the financial duties could be handled by a central office, and appointing a faculty member as an undergraduate advisor.

*Department Resources:* The Department is cramped and in need of physical space. The archaeologists and biological anthropologists, in particular, have lab space and storage requirements that are simply not met by the current facilities. As the Department has grown over the past few years, it has become clear that there is currently little sense of departmental cohesion as offices and lab spaces are dispersed throughout the corridors. The proposed renovations should help remedy this situation. Going forward, it will be important for the Department to initiate a space committee that keeps track of space allocations and needs, and tries to ensure that the organization fits well with the Department's overall vision and long-term plan.

*Departmental Governance:* The Department has benefited from the direction and vision of the current chair and other senior faculty members during a prolonged period of retirements and renewal beginning in

2001. The hiring of impressive young scholars and teachers in all four sub-disciplines of anthropology demonstrates a commitment to the stated mission of the department. The reviewers suggest that this expansion presents an opportunity for the Department to rethink its governance structure. There are more people to share the administrative workload and help guide the Department through the next decade. They recommend the creation of sub-groups or committees to help run various aspects of the program, such as: (1) undergraduate curriculum, program planning and student advising, (2) graduate studies, (3) space and resource planning, (4) guest lectures and special events, and (5) an executive committee (overseeing merit evaluations and helping the Chair with other occasional matters). Such committees serve several important functions aside from the obvious one of sharing the administrative workload as well as ensuring that faculty participate in the running of the department, allow junior faculty to build a record of departmental service, and provide opportunities where diverse positions can be discussed and all voices can be heard.

### **Quality of the Department's vision and its long-range plan**

Great strides have been made in building the new Department since UTM's restructuring of 2003, and to a large extent, the Department embodies the aims laid out in UTM's Academic Plan of 2004. While most faculty described their interactions with colleagues in positive terms, the reviewers did sense that there are potential tensions and lines of cleavage that could endanger consensus-building in planning the program's future. It will be important to ensure that faculty members in all the subfields are given equal opportunity to voice their views concerning the department's organizational structure and its directions for future growth. They also sensed that there was an uneven commitment on the part of some students and faculty members to the UTM campus—and that this was a general problem that extended beyond the Department. It is crucial that the Department members recognize and discuss this problem, so that fracture lines and factional interests do not undermine any attempts to create a long-term vision for the Department's future. The reviewers suggest that the Department plan a retreat or two during the coming year to discuss the basis for a shared vision of the key departmental activities: research, undergraduate, and graduate teaching. Building on this, the next step would be to work on a long-term vision for the Department that could make explicit some of the general concepts that come out of the retreat.

### **Assessment of the Department and programs relative to the best of their kind nationally and internationally**

Because the Department is in many respects "new," it is still too early to say precisely how it compares to others in its class. The large number of superb new appointments and existing junior faculty combined with the international stature of senior faculty members suggests there is great potential for it to become an outstanding four-field anthropology department. Many larger departments in Canada and elsewhere do not even try to cover all four fields. The risk of trying to provide comprehensive coverage with small numbers of faculty in each subdiscipline is that the year-to-year course offerings in each area can suffer. The problem is perhaps somewhat ameliorated by the large pool of faculty members in each sub-field at the downtown campus, and by the close connection of the biological anthropologists with the larger Forensic Sciences program. Future hires, such as a medical anthropologist, might well be aimed at bridging the sub-disciplines while at the same time strengthening ties with other departments at UTM.

## **ADMINISTRATIVE RESPONSE**



August 17, 2010

Professor Cheryl Regehr  
Vice-Provost, Academic Programs  
Office of the Vice-President and Provost  
Simcoe Hall, University of Toronto

Dear Cheryl,

### **Administrative Response to the Review of the Department of Anthropology, UTM**

I am writing in response to the Review of the Department of Anthropology, UTM. I will direct this response in the first instance to the questions raised in your memorandum, focusing on the key issues raised in the review. On a general note, I am very pleased with the positive observations made by reviewers: the quality of the department's research activity, the excellent hires that have been made, the high praise that students have for the faculty, and the quality of the administrative staff. Though this is one of UTM's smaller departments, its commitment to excellence in, and integration of, teaching and research is well known throughout our campus.

#### **1. Curriculum Renewal**

The department will be launching a curriculum renewal initiative (CRI) to address the various concerns raised within the review. Although this will involve input from all faculty as well as undergraduate students, it will be spearheaded by a committee consisting of representatives from each of the four subfields (archaeology, biological anthropology, linguistic anthropology, socio-cultural anthropology). It is expected that at least one of these representatives will also be able to speak for the program in Forensic Science.

The curriculum renewal initiative (CRI) will address the following issues:

- a) **New faculty:** Since 2005 the department has grown significantly with new hires in socio-cultural anthropology, linguistic anthropology and archaeology. As such, the CRI will be asking how the curriculum can be restructured and redesigned to better reflect the interests and expertise of the current faculty complement as well as current issues in the various sub-fields. The department aims to provide a cutting-edge curriculum that offers a coherent set of courses to students and will consider options for redesigning or retitling the courses and other ways of generating greater student interest in anthropology. This might include mounting courses aimed at students who may not, at least initially, plan to enroll in its programs.
- b) **Departmental Identity:** The department has a strong science focus reflecting the expertise of several faculty in archaeology and biological anthropology. This is to be expected given the Departmental profile during the 80s and 90s. With its new hires in socio-cultural and linguistic

anthropology as well as archaeology, the department is now in a position to develop other aspects of the discipline – specifically that part of it addressed to fundamental issues in social theory, linguistics and so on. The CRI will ask how the Departmental Identity is currently reflected in the curriculum and ask how it can be updated to better reflect the current composition of the faculty.

- c) **Connections with other departments:** Anthropology occupies a unique position in the social sciences in terms of the range of connections it can potentially forge with other disciplines. The CRI will be concerned to identify possible links to other departments either through cross-listed courses or joint-courses.
- d) **Lecture vs. Seminar Structure:** The CRI will consider ways of maximizing student enrollments while at the same time creating new contexts for small group discussion. One proposal is to refine the distinction between lecture and seminar classes. Lecture classes at the second, third and even fourth year level would accommodate as many as 200-300 students while seminars would be capped at 25.
- e) **Students' Writing:** The department has been involved in decanally funded writing initiatives that have led to measurably improved results, and is in discussion as to further measures that may be taken to improve student writing, in consultation with our staff in the Robert Gillespie Academic Skills Centre.

## 2. Interactions with the St. George Campus

This department, like a number of others at UTM, has faced challenges over the years in defining its relationship to the St. George campus and in making a bi-campus existence work optimally for its faculty and graduate students. The department chair will work with the tri-campus graduate department chair to ensure that faculty contributions to graduate department service routinely leave them with the time and energy to engage in service to our department. In addition, the chair will work with the graduate department to ensure that UTM student have full access to an appropriate supply of well qualified teaching assistants. We will encourage as many UTM-based graduate students as possible to affiliate with UTM, thereby giving them certain privileges (i.e. bus fare) that might relieve some of the impediments to access to our campus. (Teaching assistants are currently funded for their bus fare). The new space being constructed for the department includes enhanced graduate student space. The department acknowledges as well that colloquia have typically been held on the St. George campus, further drawing scholars away from UTM for such events. Using funding from the graduate expansion funds, the Department is working with graduate students (with input from undergraduates) to identify a list of potential speakers for events to be held at UTM.

## 3. Physical Space

The problem of physical space has been resolved to everyone's satisfaction. The Department will be moving in September 2011 to a newly constructed site: the medical academy building. It will have two floors of prime office and research laboratory space, including space for graduate students. An undergraduate teaching lab will be constructed in the second floor of the South Building.

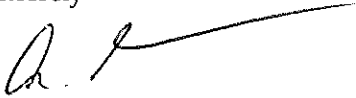
#### 4. Staffing Arrangements

Setting aside some misinformation given to the reviewers about staffing levels in other comparably sized departments, it is clear that there needs to be a re-assessment of workloads in the department to ensure that no one staff member is managing an unreasonable load. I have met with the Chair to begin to implement both short-term and longer-term solutions to these issues.

#### 5. Governance Structure

The new Chair, in setting up the Curriculum Review Initiative, has made some strides in integrating more faculty into the decision-making process. At the same time, the department has a fairly well articulated system for addressing major decision-making, such as PTR; as well, many of its faculty are involved in graduate committees. I would note as well that, with a full-time complement of 11.5 faculty, with a fraction of those on leave each year (and 4 pre-tenure), an elaborate committee structure is not advisable and arguably unnecessary. Nonetheless, the new Chair is committed to establishing an inclusive and transparent decision-making process within the Department and will solicit his colleagues' ideas on ways of ensuring that the key activities of the department are informed by a collective will and voice.

Sincerely

A handwritten signature in black ink, appearing to read 'A. Mullin', with a long horizontal flourish extending to the right.

Amy Mullin  
Interim Vice-Principal Academic and Dean



## REVIEW SUMMARY

<b>DIVISION/UNIT:</b>	<b>Forensic Science Program</b> Department of Anthropology, University of Toronto Mississauga
<b>DATE:</b>	December 2-3, 2009
<b>COMMISSIONING OFFICER:</b>	Vice-Principal Academic and Dean, UTM
<b>PROGRAMS OFFERED:</b> <b>Undergraduate</b>	Forensic Science, BSc: Major Forensic Science - Anthropology, BSc: Specialist Forensic Science - Biology, BSc: Specialist Forensic Science - Chemistry, BSc Specialist Forensic Science – Psychology, BSc: Specialist
<b>EXTERNAL REVIEWERS</b> <b>International</b> <b>Canadian</b>	Max Houck, College of Business and Economics, West Virginia University
<b>PREVIOUS REVIEW DATE:</b>	N/A (Department was formed in 2003)
<b>DOCUMENTATION PROVIDED TO REVIEWERS:</b>	Terms of Reference Forensic Science Program Self-Study UTM Steps Up Plan 2010 UTM Degree Level Expectations Tri-Campus Framework Enrolment Report 2009 – Office of the Registrar NSSE 2008 Results Facts & Figures 2008 UTM Academic Calendar 2009-2010 U of T Viewbook 2010-2011 UTM Viewbook 2009-2010
<b>CONSULTATION PROCESS:</b>	The reviewers met with the Vice-Principal and Dean, UTM; Vice-Principal Research, UTM; Director of the Forensic Science Program; Chair of Anthropology; Chairs and Directors of cognate units; junior and senior faculty members; administrative staff; undergraduate and graduate students and the Chief Forensic Pathologist for the Province of Ontario (OCCO).

## FINDINGS AND RECOMMENDATIONS - OVERALL ASSESSMENT AND SPECIFIC ISSUES

### Summary

This is a troubling review that points to areas of concern related to programs, faculty, administrative structure and facilities. It appears that the viability of the program as a whole is currently in question. The main issues are as follows:

- *Structure and Administration of the Unit* - The reviewer identifies concerns regarding the position of the Forensic Sciences within the Department of Anthropology and suggests that there is ambiguity about the role of Program Director.
- *Curriculum and Academic Programs* – A review of the curriculum is recommended by the reviewer to address issues of coordination of courses and course content, and consistency in the educational experience of students. The reviewer suggests that “The curriculum and course work represent a historical hodgepodge of courses patched onto a science curriculum with no singular goal in mind.” Students apparently expressed concerns that the curriculum lacks depth and is disjointed. The reviewer does not believe that the curriculum would meet the standards of the Forensic Science Education Program Accreditation Commission.
- *Faculty Resources* – The reviewer has concerns that the nature of the faculty complement does not contribute to a strong and coherent program.
- *Space and Facilities* – There is no dedicated space for specialized instruction or laboratories.

## Status and Administration

The UTM forensic program enjoys a high media profile, a strong reputation, and the participation of stakeholders, such as the Centre of Forensic Sciences and the Toronto Police Department. Enrollments continue to be strong and many graduates find work or placement that suits their career goals. The UTM program is typical of forensic science programs that have developed historically through cognate departments with some external practitioner involvement. These programs tend to view forensic science as an applied science and not as a scholarly discipline in its own right. The result is that the forensic component of such programs are given a lesser status in the face of departmental demands from cognate disciplines.

The cognate academic departments all benefit from the forensic program's attraction of high-caliber students, and the program has among the highest enrollment and graduation rates at UTM. It is considered by students to be rigorous, and those that do not succeed in the program simply exit it for another major. The cognate departments see the program as having a high value and are interested in seeing it develop and improve. Any move towards accreditation is seen as positive, as long as the requisite resources are brought to bear to achieve that goal. Faculty with forensic experience is needed at UTM to orient the cognates to the basics of the forensic discipline.

The forensic science program is housed within the Department of Anthropology. The reviewer did not consider this to be an ideal arrangement. There is some feeling among the Anthropology faculty and the Chair that the program distracts the Department from a stronger focus on anthropology as a discipline. Financial tension exists and the support for the Department and the Program are disproportionate to enrollments. The course structure required within Anthropology does not reflect the needs of the forensic science program and limits the number and type of courses that the program can offer.

The program demands, including the number of students and the special methods used in forensic science, require dedicated space for instruction ( particularly wet-laboratories). However, the program has no real infrastructure, sharing laboratory space with other departments.

## Curriculum

The program is divided into four specialists programs, anthropology, biology, chemistry, and psychology; most current forensic programs in the US focus on only one or two specialties, typically biology or chemistry. The curriculum and course work represent a historical mix of courses patched onto a science curriculum with no singular goal in mind, and demanding neither deep nor integrated learning in the forensic sciences. The curriculum is trying to meet two distinct and nearly opposite needs: Those of the students who wish to pursue a true forensic science degree path and those who are interested in the forensic aspects of their discipline. Interviews with students indicated the following:

- A significant lack of communication with and feedback from the program, particularly in the areas of curricular needs, careers, and placement,
- Lacks of curriculum depth and disjointed coverage, and,
- A significant scheduling conflict exists between the organic chemistry and first year physics courses.

The curriculum content is inconsistent, particularly when taught by the sessional instructors who are less-than-fully committed to the program. The complex nature of forensic science demands specialization, and the depth required to understand and apply forensic biology or chemistry would suggest separate degree tracks, rather than high course loads in certain topics. In the reviewer's opinion, the curriculum would not meet the current standards of forensic educational accreditation. The curriculum is deficient in both basic and advanced forensic coursework; forensic biology, particularly DNA analysis, and forensic chemistry are both barely taught at all. The program is nearly totally deficient in dedicated basic instrumentation for instruction and practical laboratories.

Centre of Forensic Sciences (CFS) employees were very enthusiastic about the prospect of the program ultimately offering a Masters of Science in Forensic Science with a focus on biology and chemistry as the core, with courses in statistics, instrumental analysis, court room testimony, technical writing, and public

speaking. If any diversity in curriculum is desired, it would be expansion into toxicology and patterned evidence.

The sessional instructors discussed their status as adjuncts noting that daytime courses makes it difficult for CFS employees to participate in the program as instructors. They must then “rotate” through course assignments to meet the conflicting needs of work and UTM. This results in inconsistent curriculum content taught by different instructors. This also apparently disallows CFS employees to qualify for adjunct status. Sessional instructors are notified of their course assignments with very short notice, making it difficult to plan syllabi adequately.

Non-major students are allowed to enroll in forensic courses, depleting the limited resources of the program, and creating opposing demands for the content – basic science teaching vs foundational forensic science concepts. The lectures are offered by a series of guest lecturers who are forensic practitioners. Although this provides the students with actual experiences from the forensic profession, the “visiting lecturer” approach does not create or provide for a consistent and coherent course curriculum. The reviewer offers a number of specific recommendations regarding particular courses.

Other academic units at UTM capriciously use the word “forensic” to describe some of their coursework; this erodes or damages the reputation of the existing UTM forensic program. The university should monitor the use of “forensic” as a descriptor for courses or programs outside the main forensic program and involve the forensic program director in decisions about new forensic offerings.

## **Personnel**

The Program Director is dedicated and has the correct vision, requisite experience and leadership skills to direct the program successfully. However, he does not have the necessary administrative authority or control over the program to effectively improve it. A robust research agenda is central to a healthy academic program and, given that forensic research funding tends to be lower than for other scientific disciplines, it is imperative that other researchers are brought into these activities. The key stakeholders are keen to become involved in research projects. The Program Administrator deserves recognition for her efforts, although the program staffing is insufficient.

The forensic program relies far too heavily on sessional instructors. The 14 faculty members listed as “forensic faculty” is an outright misrepresentation – they are, in fact, cross-listed and have their academic home in another unit. Moreover, the academic demands on the sessional instructors significantly conflict with their primary duties for their agencies, making it difficult for them to teach and, in the long run, erodes their desire and ability to participate in the program. Only two members of the forensic faculty are active practitioners.

## **Recommendations**

### **Status**

1. The forensic program needs to be able to direct its own curriculum, hire its own faculty, and have its own independent budget. This can be accomplished by being established as a separate department or a department-like structure.
2. The goal of accreditation should be pursued. The appropriate resources and dedicated facilities for teaching and research in forensic topics must be identified and secured.
3. The program must develop a direct formal measure of teaching quality.
4. Sessional instructors should be assigned to specific courses on a regular basis and be informed of their assignments with sufficient lead time to prepare adequate lesson plans. Proper adjunct status should be accorded to any sessional instructor.
5. Discipline-specific course advising and career placement should be provided to the students. The program website should be completely redesigned and organized to two audiences: prospective and current students. International students are a potentially large source of new students and specific marketing efforts should be made to attract them.
6. UTM alumni should be contacted for program feedback, placement, and public relations. The program is urged to develop communication plans for keeping in touch with alumni and utilizing them to improve and enhance the program.

7. UTM should pursue a collaborative effort between the Mathematical and Computational Sciences Department and the restructured forensic program to develop a separate degree track in forensic digital evidence using published standards and guidelines as a basis.

### **Curriculum**

8. The forensic psychology track of the program should be eliminated. The Psychology Department should determine if they wish to develop this track into a separate degree program.
9. The forensic anthropology track of the program should be eliminated and resurrected as a separate degree program within the Anthropology Department.
10. The program should align its curriculum according to published guidelines or enforceable standards. The revised curriculum should emphasize the core forensic disciplines of biology, to include forensic DNA analysis, and forensic chemistry.
11. A graduate program, preferably starting with a Master's offering and perhaps later a Doctorate, in forensic science, emphasizing biology and chemistry, should be developed in conjunction with the cognate Departments and CFS stakeholders. A research thesis must be mandatory to encourage and support research in the forensic disciplines.
12. Forensic toxicology should be explored as a potential degree track at the undergraduate and graduate levels.

### **Personnel**

13. Two full-time faculty members, one forensic biology and one forensic chemistry, should be hired into the independent forensic program.
14. Additional staff should be added to the program to handle the added administrative burden of independence.
15. Sessional instructors should be kept to a minimum but should be scheduled regularly to teach assigned classes, be involved in the development and maintenance of the curriculum, and treated as the valued part of the program that they are.

### **ADMINISTRATIVE RESPONSE**



August 17, 2010

Professor Cheryl Regehr  
Vice-Provost, Academic Programs  
Office of the Vice-President and Provost  
Simcoe Hall, University of Toronto

Dear Cheryl,

### **Administrative Response to the Review of the Forensic Science Program, UTM**

I am writing in response to the Review of the Program in Forensic Science, UTM. I will direct this response in the first instance to the questions raised in your memorandum, focusing on the key issues raised in the review.

The program is clearly at a crossroads, even more so as a result of recent developments. Its director has resigned and the only other full-time academic appointee has retired, leaving the program with no dedicated academic staff. Fortunately, a member of the Anthropology department who teaches in the program has agreed to serve as Director, but the future of the program is clearly in question. I will be meeting with her over the summer and upcoming year to determine what course of action is most appropriate. In the interim, I have halted admission to the program while we investigate some of the issues arising from the review.

#### **1. Structure and Administration of the Unit**

Although the positioning of forensic science within Anthropology might not be ideal, it has been the most appropriate home for the program in the recent past: its past and incoming director are anthropologists and Anthropology has been historically the most committed of the participating departments. The program does not have sufficient FCEs or faculty to be a standalone unit. I am hopeful that, as we assess the future of the program, the already strong collegial relationship between the new Chair of Anthropology and the incoming Director of Forensic Science will help to resolve any tensions that might have arisen over time. As well, the new Chair of Anthropology has signaled that Forensic Science will be addressed as part of the broader curriculum initiative underway in the department.

Administrators of the program have worked hard to build linkages with the professional sector and secure experts from outside the academy to teach many of its courses. Nonetheless, once the new director begins, I will ask her to address some discrete concerns raised (such as the timeliness of advising faculty of their teaching assignments) as well as encourage her to have some rigorous discussions with the participating departments about the program and their roles in it.

#### **2. Curriculum and Academic Programs**

The review presents a very comprehensive but valid critique of a host of weaknesses in the program, ranging from incoherence in the program offerings, deficiencies in both basic and advanced forensic coursework, the lack of permanent academic staff and the lack of adequate laboratory equipment and facilities. The reviewers fail to note that applications to and enrolment in the program have been

declining steadily over the past several years, a factor which raises further concerns. As well, departments affiliated with the program, most notably Biology and Psychology, are disinclined to invest new faculty complement in the areas of forensic biology or forensic psychology. With little cognate support and few academic champions within our faculty, not to mention the highly limited options for additional investment given our current fiscal situation, it may be difficult to imagine how to address these significant inadequacies. Over the next year, I will work with the Director to assess the viability of the curriculum and program.

### 3. Faculty Resources

I strongly agree that the department relies far too heavily on experts in the field who are not engaged in research-intensive careers to deliver many, if not most of the courses in the program. While I laud the program's skills in forging linkages that enable it to utilize such expertise, I am very concerned about the lack of research-stream faculty within UTM teaching in the program. The self-study further revealed that teaching quality in the program, particularly from instructors hired on a sessional basis (many of whom have been teaching in the program for several years), is uneven and well below the UTM average. The lack of dedicated faculty resources is compounded by recent developments: i) as noted above, the director and the one other full-time academic staff member have left the program; ii) the scholar with forensic expertise in Biology has retired and there are no plans to replace this area; and iii) Psychology was given a Forensic Psychology position as part of the *Stepping Up* plan but was unsuccessful in its recruiting efforts and has since chosen to move this position to another area. The outgoing Director argued strongly for greater investment in research-stream faculty in the program but this can only be accomplished if there is sufficient interest among the participating departments. Although recent plans from these departments did not include plans for investment in the forensic area, we will raise this possibility again with the relevant chairs over the next year. Needless to say, the lack of a strong and broad research profile for the discipline within UTM, coupled with the quality of current teaching highlight the need to either rebuild the program entirely or consider its termination. These are serious questions which I will explore over the next year.

### 3. Physical Space

Forensic Science currently has space within the South Building for undergraduate lab instruction. Effective September 1, 2010, the faculty and staff will move to a newly constructed medical academy, where they will have prime space, to include first-rate research labs, office space, and space for graduate students.

Sincerely



Amy Mullin  
Interim Vice-Principal Academic and Dean

## REVIEW SUMMARY

<b>DIVISION/UNIT:</b>	<b>Department of Historical Studies</b> University of Toronto Mississauga
<b>DATE:</b>	December 7-8, 2009
<b>COMMISSIONING OFFICER:</b>	Vice-Principal Academic and Dean, UTM
<b>PROGRAMS OFFERED:</b>	
<b>Undergraduate</b>	Classical Civilization, BA: Maj History, BA: Spec, Maj Diaspora and Transnational Studies, BA: Maj History of Religions, BA: Spec, Maj Women and Gender Studies, BA: Maj
<b>Graduate:</b>	Tricampus History, MA, PhD (A complete review of the graduate program is scheduled for 2014-15.)
<b>EXTERNAL REVIEWERS</b>	
<b>International</b>	Prof. Anthony Pinn, Department of Religious Studies, Rice University
<b>Canadian</b>	Prof. John Zucchi, Department of History and Classical Studies, McGill University
<b>PREVIOUS REVIEW DATE:</b>	N/A (Department was formed in 2003)
<b>DOCUMENTATION PROVIDED TO REVIEWERS:</b>	Terms of Reference Department of Historical Studies Self-Study UTM Steps Up Plan 2010 UTM Degree Level Expectations Tri-Campus Framework Enrolment Report 2009 – Office of the Registrar NSSE 2008 Results Facts & Figures 2008 UTM Academic Calendar 2009-2010 U of T Viewbook 2010-2011 UTM Viewbook 2009-2010
<b>CONSULTATION PROCESS:</b>	The reviewers met with the Vice-Principal and Dean, UTM; Vice-Principal Research, UTM; Vice-Dean Graduate, UTM, Chair of Historical Studies; Chairs and Directors of cognate units; junior and senior faculty members; administrative staff; and undergraduate students.

## FINDINGS AND RECOMMENDATIONS - OVERALL ASSESSMENT AND SPECIFIC ISSUES

### Summary

The reviewers report that the integration of several disciplines into a single unit has met with an enthusiastic response from faculty members. These faculty members were described as being dedicated and having genuine respect for their UTM students. The reviewers view the Department of Historical Studies to be on the cusp of significant transformation and identify that this is an opportunity for enhanced interdisciplinary initiatives. Issues to be addressed include:

- The intersections between scholarly activity of faculty members and opportunities for cross-disciplinary work. This would appear to be an opportunity for planning the strategic direction of the unit and its programs.
- Recommended increased engagement of tenure stream faculty in key courses in the curriculum and in student advising. Students expressed concerns about the limited presence of faculty members on the campus and its impact on the intellectual community and mentoring of undergraduate students.
- The Department enhance the intellectual community in part through mentorship of young scholars, including both junior faculty members and graduate students.
- Staffing arrangement in the Department.

- The Department reconsider its governance structure to increase participation in governance and decision making.

The reviewers believe that the Department is on the cusp of some significant transformations, as a number of professors will reach retirement age in the next few years. They advise that the Department give sustained and systematic attention to its intellectual identity in ways that cut across interdisciplinary lines and take into consideration the somewhat uneven coverage within the various units. It appears that the advantages of interdisciplinarity are not being fully exploited. Some other questions for the Department to consider are whether or not it wishes to develop graduate studies at UTM, its peers in Canada or North America, and areas it should be hiring in the next few years. Faculty members appear to fall into two age groups with different perceptions of the Department. These are not necessarily in conflict, but some energy and leadership will be required to turn those perceptions into a new vision. The Chair has done an admirable job of developing good will among the faculty and students and a solid base from which his successor will be able to build.

## **Recommendations**

### ***Departmental Level***

1. *Better use of tenure stream faculty.* The Department needs more tenure stream faculty given the high rate of growth of the student body. Fiscal constraints have forced the Department to rely heavily on sessional lecturers. More introductory 200-level courses should be taught by the current tenure stream faculty – not only for budgetary but for pedagogical reasons as well. Students complained about the large number of sessionals.
2. *Student advising.* Advising should be done by faculty, not support staff. Students need to have advice on academic programs from those most acquainted with the programs, and the support staff is overworked. The reviewers propose two new service positions within the Department: Undergraduate Advisor and Graduate Studies Coordinator. The Graduate Studies Coordinator would be responsible for promoting a greater graduate student presence on the UTM campus.
3. *Mentorship.* Not all tenure stream faculty have been formally assigned mentors. It is important that a policy be developed and implemented as soon as possible. The Department should also develop a colloquium for faculty to present their research.
4. *Governance.* The reviewers were surprised to see that the Department has no governance structure, by-laws or a constitution, nor does it appear to have any standing committees. The Department has grown over the years and needs a governance structure to ensure objectivity and afford opportunities for its members to become involved in its administration and governance.

### ***Departmental level in concert with the Faculty and Administration***

1. One of the problems with UTM is the attraction and pull of the St. George campus. The reviewers recommend that the Administration look at the development of mortgage assistance for new hires who choose to live in Mississauga.
2. The Department should look at the possibility of teaching graduate courses at UTM, particularly in areas which are its strengths and which distinguish it from the St. George campus. Graduate students who are under the direction of Department faculty should be encouraged to spend time and work at the UTM campus.
3. In general, support staff are overburdened. This could be alleviated by making faculty responsible for advising and increasing staff hours. If plagiarism cases were handled centrally by UTM, it would be more efficient and would allow for greater objectivity in the process.
4. Although excellent teaching stream appointments have been made, future appointments should be made sparingly in order to strengthen the research profile of the Department.

## **ADMINISTRATIVE RESPONSE**





August 17, 2010

Professor Cheryl Regehr  
Vice-Provost, Academic Programs  
Office of the Vice-President and Provost  
Simcoe Hall, University of Toronto

Dear Cheryl,

**Administrative Response to the Review of the Department of Historical Studies, UTM**

I am writing in response to the Review of the Department of Historical Studies, UTM. I will direct this response in the first instance to the questions raised in your memorandum, focusing on the key issues raised in the review. The review provides a thoughtful analysis of the department, highlighting the overall success it has had in hiring and bringing together faculty from a number of disciplines to create a harmonious unit. Many of its courses are hugely popular, with enrolment steadily increasing in the department over the past few years.

**1. Intersections between Scholarly Activity of Faculty Members/Opportunities for Scholarly Work**

In the opinion of members of the department, it is in fact greater than the sum of its parts and members have worked hard to find cross-disciplinary linkages, which is evident in the cross-disciplinary nature of many of the appointments made over the last few years. At the same time, we recognize that this department has an ambitious cross-disciplinary vision, one which is still a work-in-progress. The new chair hopes to exploit the synergies afforded by the significant number of hires (the most recent being in women and gender studies and religion) whose expertise spans more than one discipline. He plans to continue the complement planning which has focused on recruitment of individuals who can speak across disciplines. The chair also hopes that other interests – such as digital humanities, pedagogy, knowledge transfer etc. – can bridge the gaps between various sectors of the department.

**2. Involvement of Tenure-Stream Faculty in Key Courses in the Curriculum and in Student Advising**

Contrary to the impression given by the review, the majority of faculty does in fact teach at least one large introductory course. If a small number have been allowed to teach only smaller upper level courses, the new chair will seek ways to help such faculty develop the necessary skills to teach a wider range of courses. The new chair is equally concerned about the relatively high percentage of courses at the fourth year level that are not taught by continuing faculty, but rather rely on graduate students and sessional instructors for coverage. He is concerned that senior undergraduate students might have very little exposure to established researchers to mentor them and write them letters of recommendations for graduate schools. He will explore ways of rectifying this.

With the support of decanal funding, the new chair has appointed an academic administrator who will assist him in cultivating superior teaching practices and in making the student experience more intellectually rewarding. As well, he is forming a Teaching Excellence and Student Experience Committee. Both initiatives will help to focus attention on some of the issues raised in the report.

I will ask the chair to undertake a rigorous evaluation of the department's course offerings both within and across its various disciplines to see whether more cross-disciplinary synergies can be realized and to ensure that investment is being made in courses that make both curricular sense and are attractive to

students. This exercise might in turn help to even out the current disparity in enrolments, particularly in third year courses, where some courses clearly have substantial waitlists and others appear to be undersubscribed.

Mentorship of junior faculty has been a priority for UTM over the past several years of intense recruitment, with the requirement that all new hires have at least one mentor. I will follow up with the Chair to ensure that mentors have been assigned for all incoming faculty and that the mentorship program is well understood and followed.

### 3. Intellectual Community

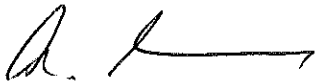
It has been a challenge for departments whose research activities and graduate programs are based primarily on the St. George campus to attract faculty to spend time at UTM outside of their teaching days. The new Chair believes that one cannot compel but can provide incentives for faculty to spend more time here. He hopes to have more research talks given by high-profile scholars that will attract not only UTM faculty, but faculty and graduate students from other campuses. The department has worked to attract graduate students to campus through activities funded through the Graduate Enrolment fund and will continue to do so. As well, with the support of decanal funding, the Chair has appointed a new academic administrator whose mandate is to assist him in fostering a sense of morale, stimulating the intellectual life of the Department and to help to foster an *esprit de corps*. Based on his own experience, the new chair also believes that participation in initiatives such as the Research Opportunity Program are fabulous vehicles for faculty to work closely with undergraduates and to maintain a presence on campus.

### 4. Governance

While the reviewers were incorrect in stating that the Department has no constitution, it is true that the majority of faculty are unaware of its existence and it now fails to reflect the realities and needs of the department. I am not convinced that constitutions at the departmental level are advisable for this reason and for others, particularly if they fetter the Chair's jurisdiction or put unhealthy restrictions on flexibility in decision-making. I will raise these thoughts with the new Chair.

I will encourage him however to respond proactively to the governance recommendations made in the report. I am pleased that he has already developed terms of reference for two committees that will focus on two of the key issues raised in the report: the student experience and the intellectual community. He has plans for reviving a number of departmental events and for an exchange of ideas.

Sincerely



Amy Mullin  
Interim Vice-Principal Academic and Dean

## REVIEW SUMMARY

<b>DIVISION/UNIT:</b>	<b>Department of Physical and Environmental Sciences</b> University of Toronto Scarborough (UTSC)
<b>DATE:</b>	March 29-30, 2010
<b>COMMISSIONING OFFICER:</b>	Vice-Principal Academic and Dean, UTSC
<b>PROGRAMS OFFERED:</b>	
<b>Undergraduate</b>	Astrophysics and Physics, BSc: Major, Co-op Biochemistry, BSc: Major, Co-op Biological Chemistry, BSc: Specialization, Co-op Chemistry, BSc: Specialization, Major, Co-op Environmental Science, BSc: Major, Co-op, Minor Environmental Biology, BSc: Specialization, Co-op Environmental Chemistry, BSc: Specialization, Co-op Environmental Geoscience, BSc: Specialization, Co-op Environmental Physics, BSc: Specialization, Co-op Environmental Science & Technology, BSc: Specialization (Joint with Centennial) Natural Sciences, BSc: Specialization, Co-op Physical and Mathematical Sciences, BSc: Specialization, Co-op Physical Sciences, BSc: Major, Co-op Physics and its Applications, BSc: Specialization
<b>Graduate:</b>	Master of Environmental Science, MEnvSc
<b>EXTERNAL REVIEWERS</b>	
<b>International</b>	Prof. Carl Bender, Physics, Washington University in St. Louis
<b>Canadian</b>	Prof. Martin Sharp, Earth and Atmospheric Sciences, University of Alberta
<b>INTERNAL REVIEWER</b>	
	Prof. Ronald Kluger, Chemistry, University of Toronto
<b>PREVIOUS REVIEW DATE:</b>	N/A Department established in 2002
<b>RECENT OCGS REVIEW(s) DATE:</b>	2007/08 - Master of Environmental Science
<b>DOCUMENTATION PROVIDED TO REVIEWERS:</b>	Self Study Terms of Reference Towards 2030: A Third Century of Excellence at the University of Toronto, 2008 University of Toronto Scarborough Strategic Plan: Setting the Course for a New Kind of Campus, 2008 Think Ahead, University of Toronto Scarborough Annual Review, 2008 Move Ahead, University of Toronto Scarborough Annual Review, 2009 UTSC Calendar, 2009-10 School of Graduate Studies Calendar, 2009-10 Scarborough Campus Students' Anti-Calendar, 2008-09 Physical and Environmental Sciences: Departmental Academic Plan, 2008 Faculty CVs Program Self-studies: <ul style="list-style-type: none"><li>• Chemistry</li><li>• Environmental Science</li><li>• Environmental Science and Technology Joint Program<ul style="list-style-type: none"><li>○ External Review Report, 2008</li><li>○ Review Summary, with Administrative Response</li></ul></li><li>• Physics</li></ul>

- Commentary on Chair's Self-Study
- Framework for Review of Physics and Astrophysics
- Program Proposal for Physics and Astrophysics

OCGS Periodic Appraisal Brief, M.Env.Sc., 2007

UTSC Degree Level Expectations

Schedule of Review Visit

## **CONSULTATION PROCESS:**

On March 29<sup>th</sup>, the reviewers met with the Dean and VP (Academic), Vice-Dean, Undergraduate, Vice-Dean, Graduate Education and Program Development, the Assistant Dean; the Chair of the Department of Physical and Environmental Sciences; the Vice-Provost Academic Programs and the Dean of the School of Graduate Studies; faculty from Environmental Science; faculty from Chemistry; and students. On March 30<sup>th</sup>, the reviewers met with faculty from Physics; technical support staff; scientists from Environment Canada; administrative staff; the Vice-Principal, Research; and again with the Dean, Vice-Dean, Undergraduate and Assistant Dean.

## **FINDINGS AND RECOMMENDATIONS - OVERALL ASSESSMENT AND SPECIFIC ISSUES**

The review points to areas of concern related to programs, faculty, administrative structure, and facilities. Several of the specific recommendations of the reviewers point to the need for strategic planning regarding future directions for this unit and the programs that reside within it. In particular, these relate to the need for a curriculum and academic program review, structure and administration of the department, and the adequacy and suitability of research facilities.

### **Undergraduate Programs**

#### Environmental Science

The 14 distinct undergraduate programs in Environmental Science account for the bulk of the Department's program enrolments. Learning objectives for students in these programs are well defined though it is less clear how individual courses contribute to achievement of these overall objectives. The reviewers identified a number of serious concerns:

- Opportunities for field and laboratory-based education seem to be limited, and students raised this as a concern.
- The major programs do not require students to have grounding in basic mathematics, physics, or chemistry. This indicates that the current program is not rigorous and will severely limit the opportunities of students to move on to graduate school, obtain professional accreditation, and enter some areas of employment. The reviewers noted the administration's response that these issues have been addressed and changes were approved by UTSC governance in 2008-09. The revised Major will be offered for the first time in September 2010. The delay in implementing this change was the result of the need to align with the admission cycle.
- The reviewers identified a lack of course offerings in the important areas of remote sensing and ground surveying, and noted the administration's response that these areas are covered in EESC03.
- Many courses appear to have a local focus, and opportunities for students to take courses that would allow them to develop a broad-based understanding of the socio-economic and geopolitical underpinnings of many major environmental issues, and their possible solutions, seem to be limited.
- Results from student questionnaires show relatively high levels of dissatisfaction with aspects of the programs offered.
- There is a lack of practical, career-related course content.
- Inadequacies of lab space and technical support, and the limited availability of specialized teaching equipment are serious impediments to achieving the stated educational objectives of courses and programs.
- The joint program in Environmental Science and Technology has not attracted significant enrolments. There is both a lack of awareness of the program as well as perception that there are substantial administrative challenges in delivering this joint program with Centennial College.

## Chemistry

The Chemistry and Biological Chemistry programs have very similar requirements and program descriptions. The reviewers suggested that more detailed explanations would assist students to select their programs. The reviewers observed that most professors in Chemistry have research grants, and are actively engaged in research, with faculty from the environmental area being internationally recognized as leaders in their fields. Nonetheless, it was suggested that the balance of professorial staff and lecturers places an unusually large proportion of the educational responsibility upon faculty who are less able to engage in research, and it was recommended that, in considering future appointments, this imbalance be addressed.

The reviewers examined the curriculum in detail and suggested that there is need for more courses in the area of the designated specialist program, especially a laboratory course with biological chemistry content and advanced laboratories. The reviewers were concerned by the lack of a laboratory course and the lack of any laboratory experience for physical chemistry and for inorganic chemistry. They viewed this as a clear deficiency in the program. Organic and biological chemistry research faculty members are required. A closer alignment with the courses at the other two campuses would allow more flexibility for students to take courses on other campuses. There are also concerns about the lack of summer course offerings in chemistry.

The reviewers highlighted significant areas of concern within the undergraduate laboratories: the state of the older laboratories for safe instruction; the design of the fume hoods; the lack of modern instrumentation; and the shortage of technical staff.

Students felt that the co-op program was both a success and failure. Some did relevant lab work that enhanced their education while some did irrelevant office duties. To the extent that the co-op program takes up critical resources, its inclusion should be reconsidered.

## Physics

The reviewers are clear that the physics section has serious problems. While the members of the faculty in general show a strong interest in physics education, of the eleven faculty listed, six are professors emeriti and several more do not conduct research. The selection of undergraduate courses is severely limited and students who are interested in pursuing a physics major must move to the St. George campus to complete the second half of their physics education. At least half of the courses are taught by stipendiary teachers.

The reviewers observed that much of the department appears to belittle the physics group and the communication between this group and the rest of the department is very poor. Several searches for physics professors were terminated or interfered with by the department. The reviewers observed that there is considerable sentiment among those outside the physics group that providing a serious undergraduate education in physics is not necessary at UTSC, and that students who wish to specialize in physics can, and should, do so at the other U of T campuses. They found some hostility towards the physics group and a lack of understanding of the importance of physics courses being taught by experts. The reviewers point out that physics is a standard subject that is taught in essentially all US and Canadian colleges and universities, and provide some examples of physics programs from other institutions that UTSC might consider as a models for physics education.

## **Graduate Program**

The Master of Environmental Science program is very successful, but further growth is constrained by lack of space, the workload of the program administrator, and the ability of the limited number of faculty to support the research experience component of the program. The program provides an excellent opportunity for the department to build long-term relationships with the environment industry, and to use these for the broader benefit of the department. The program is quite strongly focused on preparing students for employment opportunities in Ontario and in the government sector, and the reviewers suggested that there would be value in exposing students to a greater diversity of opportunities in areas like the energy sector. Much of the teaching in this program is done by stipendiary teachers or by tenured faculty on overload.

## Research

Environmental Science: The overall faculty profile is very good and there is clearly potential to build an outstanding group in the medium term. Retention of high caliber faculty members will be an ongoing concern if some of the obvious problems with the operation and resourcing of the department are not resolved. While faculty members hold graduate appointments in six different departments at the St. George campus there is a commitment to conduct research and teaching at UTSC.

Chemistry: The program in the environmental division of the graduate department is an example of successful multi-campus integration. The UTSC researchers in the area are all tenured and have highly respected programs and a fine complement of graduate student participants. Although the core of this group is housed in a new laboratory building, this new space fully occupied, and there is no room for recent hires who still await renovations of older space in another building. Waiting for laboratories and instrumentation has made conducting research very difficult for new faculty members, slowing their career progress and making it difficult for them to attract incoming graduate students. The reviewers consider that providing modern, safe laboratories and supporting facilities should be a prerequisite to the hiring process, not a problem to be solved upon arrival.

Physics: Only a few of the physics faculty have grant support and are publishing research papers. Since a good teaching program thrives in an exciting atmosphere of research and discovery, the reviewers believe it is essential that there be new faculty hires to strengthen the research creativity of the physics group.

## Operation of the department

A global collection of sciences in a single unit does not work well given the size of UTSC. The reviewers observed many problems in the operation of the department including difficulties in communication and administration. The concentration on environmental sciences has resulted in the physics component becoming very small and relatively disconnected. In recent years, chemistry has attempted to expand into areas related to its biological mission, and to overcome its lack of research capacity in biological, organic, and inorganic chemistry. However, the hiring process was seen as poorly conceived and slowly executed.

Given the lack of functioning associate chairs and/or discipline representatives, important issues and problems have not been resolved. There is a lack of communication within the Department and a lack of faculty ownership in the work and future of the Department.

The reviewers were surprised that the Department does not seem to be involved in any way in development activities, and that it has not sought help from industry to assist with solving some of the problems associated with delivery of its laboratory teaching program. There appeared to be no strategy for maintaining contact with departmental alumni, and no way to evaluate the success of the Department's programs in allowing students to enter appropriate career pathways.

## Concerns of various constituencies:

*Students* – The most commonly mentioned concern to reviewers from students was the heavy use of stipend teachers. Some students expressed disappointment with the lack of practical and laboratory experience. Students expressed a desire for more laboratory teaching to be done by professors rather than technical staff. Although courses are listed in the calendar, they were often not available. Students commented that the academic advising they received was not very helpful, and that they received no counseling regarding progression to graduate school. Finally, students did not appear to know whether or not there were opportunities for them to participate in international exchange programs with other universities.

*Technical Staff* – The chemistry laboratory staff pointed out many physical inadequacies; they were dealing with both a lack of space and insufficient support staff. The physics technical staff were very positive about their experience and noted that physics faculty were heavily involved in laboratory teaching. They believe that the laboratories are effective and make the most of very limited resources. The environmental science laboratory staff have had many difficulties, and have had to work with severely limited lab facilities. The faculty associated with their courses had limited connection to the laboratory, as those teaching the relevant courses were normally stipendiary appointments. All technical staff expressed the view that lack of proper office space made it hard for them to perform their duties effectively, and there may have been some

violations of environmental health and safety regulations. Finally, there is no pre-determined budget for the operation of the laboratories, which makes forward planning extremely difficult, if not impossible.

*Administrative Staff* – Their major concern was that the Department is not assigned a base budget in order to properly operate the department, and that there is no budget at all for the operation of the Master's program. This is not conducive to effective planning or departmental morale.

*Faculty* – The reviewers observed that there is widespread dissatisfaction with the way the Department is administered, and there are clear tensions between the physicists and at least some faculty in Environmental Sciences. In many ways, faculty seemed overwhelmed by the scale of their obligations and the lack of resources available to help them meet them.

### **Physical and structural issues**

Given its size, the Department offers an extraordinary number and diversity of undergraduate and graduate programs. To do this it relies heavily on teaching stream faculty and stipendiary instructors. The Department has been innovative in creating new programs, some of which have been very successful; however, it is seriously overcommitted in that it lacks the resources needed to properly meet its existing obligations. The reviewers question whether the diversity of programs is either necessary or cost-effective, and propose offering a smaller number of programs with greater within-program flexibility regarding student options.

### **External Relationships**

The Environmental Science group is to be commended on the efforts it has made to build relationships with industry and government. There appears to be a good working relationship with graduate departments, and the Department of Biological Sciences at UTSC in relation to the delivery of joint programs, but the relationship with Centennial College over the joint program in Environmental Science and Technology needs considerable attention if that program is to succeed. There do not yet appear to be any strong external co-operative relationships in physics or in chemistry.

### **Governance and operation**

The Department has many serious administrative and operational difficulties, and the current model appears to be unable to deal with many of the issues that have arisen. Communication between the faculty and the Department's administration appears to be limited. Formal mentorship of junior colleagues is non-existent. Annual evaluations of staff performance do not appear to include a discussion with individual staff members. Departmental meetings seem to be a rare occurrence. The Chair's position is currently removed from direct participation in the core teaching and research of the department. The reviewers were also made aware of problems with grant accounting by researchers, with various degrees of responsibility being assumed with some difficulty by staff. Each researcher should be directly responsible for his/her own grant statements.

The alignment of the Department's teaching and research with the areas of chemistry, environmental sciences, and physics provides logical points of administrative division that could overcome many of the problems. The reviewers suggest that the unit would operate more appropriately as three departments, each headed by a research-active chair with associate chairs for undergraduate and graduate matters. The M.Env.Sc. program also needs a separate Director who has time to promote the program, to and seek resources to support its further development.

There are problems with the ability of the existing faculty complement to meet its commitments in teaching and research. Core teaching and research areas required in the undergraduate program are not matched by the distribution of faculty expertise. The professoriate is heavily weighted to those with specific environmental interests, while much of the teaching in the core areas is done by dedicated teaching staff. This arrangement does seem to have led to a good working relationship between the Chemistry and Environmental Science groups; however, it has led to an imbalance in the distribution of research expertise. The reviewers are concerned that the present administration may not recognize the extent of the problem, perhaps because there is a lack of awareness of the nature of the modern scientific disciplines.

## Vision and Long Range Planning

The Department's academic plan is essentially a proposal for further growth in student numbers, course and program offerings, and the number of tenured faculty. However, it does not put forward an underlying vision or compelling case for the need for such growth. Nor does it explain whether the growth proposed could generate sufficient revenue to provide the resources needed both to support it, and to address the many problems that exist in meeting current commitments. Greater attention needs to be given to the need for more technical and administrative support staff, more and better space, and the development and ongoing renewal of infrastructure for teaching and research. The plan focuses almost entirely on doing more, rather than on fixing the problems involved in doing what it already does and doing these things better.

## Recommendations

*Departmental Structure:* Positive action must be taken to determine the position of the physics group within the Department and its future role within the institution. The reviewers believe that it is wrong to deny UTSC students an opportunity to take a strong solid undergraduate program in standard modern physics, and recommend the creation of a separate and independent department of physics. The reviewers acknowledged both that a significant number of hires would have to be made, and that there is great resistance to hiring such people, since it is argued that they would spend some of their time on the St. George campus. The reviewers suggest that providing improved facilities for research and a core group of excellent faculty would attract graduate students and would establish a permanent presence at UTSC.

The reviewers suggest that the establishment of an independent physics department might serve as a model for other areas within the DPES, such as Chemistry. The lack of facilities in some areas, and the limited number of research faculty, should be assessed in a restructuring. If physics and chemistry were to become independent departments at UTSC, it follows that the same should happen for environmental science. However, there are good working relationships with biology and chemistry so other structures could also be envisaged. It is important for environmental science to have firm connections to the fundamental sciences and for students to understand the importance of those connections.

*Operation of the Department:* Serious attention needs to be paid to the Department's operations and administration. If the Department retains its existing structure, it is imperative that the new Chair be someone who appreciates and understands all of the subject areas within the Department and who will deal equitably with its diverse members. Associate Chairs should be appointed to manage the graduate and undergraduate programs, and someone should be appointed to direct the M.Env.Sc. program. Discipline representatives, who could serve as advisors for the undergraduate academic programs, should also be appointed. This group needs to meet regularly and be a driver for long-term planning within the department.

The Department needs to engage in a comprehensive strategic planning exercise to set priorities, and to ensure that needs for space, technical and administrative support, and other infrastructure are fully factored into its planning, and not treated as secondary to growth of academic staff numbers. Dealing with existing problems is at least as important as planning for growth. Working out how to achieve the Department's goals within the context of the institution's budgeting and planning processes will be critical to success. The Department also needs to turn its attention to building stronger relationships with its alumni, and to undertaking development activities that can generate new resources from outside the normal University and government channels.

*Programs:* The Department should push ahead with its plan to rationalize the number of major programs in the area of environmental sciences. It should consider what is required to make the joint program in Environmental Science and Technology viable in the long-term, and either take the required actions or consider deleting the program. The Department should be cautious about starting new programs before it has resolved the issues with delivery of its existing programs, and it should avoid doing so if this would add further strain on existing resources.

The Department has well articulated goals for student learning and skills development, but the extent to which these are embodied in the goals of individual programs and courses is unclear. The Department should try to ensure that each course has clear goals and objectives that contribute in a logical progression to the overall learning/skills development objectives of the department.



Efforts should be made to reduce the Department's dependence upon teaching by stipendiary instructors, especially in core courses that are fundamental to specific programs. This can be done through program rationalization to reduce the number of courses that have to be offered every year, and by increasing the number of teaching stream faculty. However, it is recognized that stipendiary instructors can play a valuable role in some programs.

*Departmental facilities:* The lack of research facilities for faculty in chemistry outside the environmental area is a serious problem and the lack of planning for the arrival and start-up of new faculty must be remedied. The teaching laboratories should be expanded and existing ones modified to permit instruction at advanced levels. Lack of adequate laboratory space is also a serious issue for undergraduate teaching in the environmental sciences.

### **Summary and Conclusions**

The reviewers concluded that there are considerable strengths in the Department with its emphasis in environmental areas, but there are considerable challenges in delivering programs and dealing with core sciences. Student interest at the undergraduate level does not coincide with the major direction of faculty research interest. There are serious problems associated with the extent of technical support and the lack of facilities for teaching and research that would be expected for the current size of the institution. The operation of the three core sciences within a single multi-area department has not been a source of administrative strength. It would be logical to create three smaller departments, with active teacher/researchers as chairs that would share staff. Cross-appointments would readily continue the successful existing interdisciplinary environmental area and new alliances could be developed with Biological Sciences at UTSC. Defining departments and courses to provide unhindered relationships of UTSC students and faculty with the other campuses is an important goal for the future success of the institution with the U of T framework.

### **ADMINISTRATIVE RESPONSE**



UNIVERSITY OF  
**TORONTO**  
SCARBOROUGH

Office of the Dean and Vice-Principal (Academic)

11 August 2010

Professor Cheryl Regehr  
Vice-Provost, Academic Programs  
Office of the Vice-President and Provost  
University of Toronto  
Simcoe Hall, Room 224  
27 King's College Circle, Toronto, ON M5S 1A1

**Administrative Response, External Review of the Department of Physical & Environmental Sciences**

Dear Cheryl,

Thank you for your letter of 1 June 2010 requesting my administrative response to the external review of the Department of Physical & Environmental Sciences. The Department of Physical and Environmental Sciences is our leading department in several important ways, including the excellent reputation of the research faculty, the strength and innovation of its graduate programs, and the commitment of its faculty to the Department and to the UTSC project. I am very grateful to the reviewers for their careful consideration of the Department and their recognition of its strengths. We are also grateful for their candid assessment of the challenges facing the Department. We have taken their recommendations seriously and already have begun to act upon them. Immediately following receipt of the external review, I consulted with the UTSC Senior Executive, the Provost's Office, my counterparts at Arts and Science and UTM, and my team in the Dean's Office. Also, the external review was sent to all members of the Department. On 12 May 2010, I met with faculty, students, and staff of the Department to initiate a discussion about the external review and the search for a new Chair. This meeting was well attended and I was very pleased to hear a commitment from all groups to work together to find meaningful solutions to the issues raised in the review.

*Departmental Structure:*

The reviewers recommend the establishment of a separate and independent department of Physics and suggest that this also might serve as a model for Chemistry and Environmental Sciences. It is my belief that the future direction of the Department must be determined in a collaborative and collegial manner; it must also emerge naturally and logically out of academic planning processes currently underway on our campus. The active participation of all members of the Department in wide ranging discussions that feed into planning is crucial if we are to find solutions that are meaningful and inspire enthusiasm and commitment.

At the 12 May meeting and subsequently, the Physicists have made clear their desire to become a separate department; UTSC respects and supports this aspiration. However, there are a number of

preparatory steps that must be taken, all of which have the support of the Physicists:

- a) We must build a viable faculty complement, with an appropriate balance of senior, mid- and new-career research faculty and teaching stream faculty;
- b) Faculty must demonstrate their strong commitment to UTSC and to building vibrant research presence on our campus;
- c) We must strengthen the academic programs in physics, so as to ensure viable enrolments and attract strong students;
- d) The physicists must develop a vision and plan that is both distinct and open to collaboration with other units at UTSC.

Important steps already have been taken towards these ends, including the recent creation of an Associate Chair for Physics, and the initiation of major revisions to the Physics programs that will go through governance in the Fall of 2010. In addition, the Department will be searching for two Assistant Professors of Physics, one in 2010-11 and the other in 2011-12. The Physicists also have indicated the need for an additional faculty member in the research stream; and this need will be considered when the 2011-12 complement plan is developed. The addition of three faculty members will bring the total complement in Physics to nine; there are currently two Full Professors, one Associate Professor, two Senior Lecturers, and one Lecturer.

#### *Operations of the Department*

During the Spring term, we successfully conducted a search for the new Chair of the Department of Physical and Environmental Sciences. The appointment of Professor William Gough as the new Chair was greeted with enthusiasm and has served as a great boost to the morale of the Department. Professor Gough has deep administrative and governance experience, excellent inter-personal skills, and a diplomatic and inclusive leadership style. He already has established a Constitution Working Group and plans to bring forward a new Departmental Constitution for ratification by the Department early in the Fall. Once ratified, the Constitution will be tabled for information at a meeting of the UTSC Academic Committee.<sup>1</sup> In addition, he has created a new administrative structure, including three Associate Chairs (for Undergraduate, Research, and Physics) and a Program Director for the Environmental Science graduate programs. He has begun to discuss the establishment of several departmental committees, including one responsible for communication. I have great confidence in Professor Gough's ability to place the Department on a stable organizational platform and to lead the Department forward in an inspirational, visionary, and transparent manner. In addition, the Vice-Principal Research has taken steps to ensure that appropriate review and accountability measures are in place to ensure all researchers at UTSC take direct responsibility for their own grant statements. The new Associate Chair Research in the Department of Physical and Environmental Sciences will work closely with the Chair and Vice-Principal Research on this.

#### *Departmental Facilities*

The external reviewers rightly emphasized the serious laboratory space and equipment deficit in the Department. Without a new Science Research facility, UTSC's highest infrastructure priority, we will not be able to fully address this need; however, we have already begun to creatively refurbish available space and expect to be in a position to augment it with space that will become available once the new Instructional Centre has been completed in the Fall of 2011 and some secondary space opens up in the existing S-Wing of original Andrews-designed building where the department currently is housed.

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<sup>1</sup> Departmental Governance has been identified as a major area of focus for all academic departments at UTSC during the 2010-11 academic year. I have every expectation that the DPES constitution will serve as an exemplary model.

In early July, a major step forward for the department was made with the establishment of a new chemical instrument centre – Teaching and Research in Analytical, Chemical and Environmental Sciences (TRACES) – which will provide essential research and teaching instrumentation that has been severely lacking at Scarborough. TRACES is slated to open in the early Fall and will:

- a) Provide the key equipment that is critical to support on-site research by recently hired faculty and will enable additional hires in chemistry;
- b) Provide basic infrastructure required to teach chemistry at all the undergraduate and graduate levels;
- c) Enable the accreditation of our undergraduate programs in chemistry;
- d) Provide key instrumentation that is central to making the MSc and PhD in Environmental Science unique and world class;
- e) Provide access to state of the art chemical instrumentation to all at UTSC who require these capabilities.

It is expected that this instrumentation will enable the addition of chemistry laboratory opportunities for undergraduate students that are necessary to achieve excellence in our undergraduate chemistry programs and to attain accreditation. A new technician has been hired to manage the day-to-day operations of the centre, and academic oversight will be provided by a member of the research faculty. The purchase and on-going maintenance of this new instrumentation was made possible from a combination of provostial (AIF), decanal, and private contributions and the valiant efforts of two dedicated members of the Department. We are extremely grateful to them for their hard work and excellent planning and negotiation skills that have enabled the establishment of TRACES. The extensive and involved negotiation and public tender processes had to be kept confidential until finalized and thus were not included in discussions with the external reviewers.

We take seriously the reviewers' warning of potential environmental health and safety violations. Accordingly, I have asked our Office of Campus Safety and Security to look into the matter and anticipate receiving their report at the end of the Summer.

#### *Undergraduate Programs*

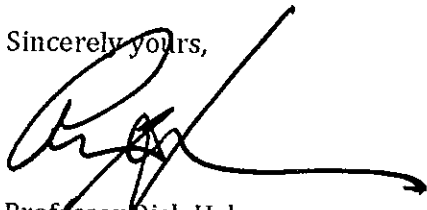
During the 2010-11 academic year, UTSC will be actively engaged in the next steps of our strategic planning exercise, namely to develop detailed, staged, implementation plans for each department that will focus on academic programs as a key driver for departmental complement, research, space, and budgetary plans. During 2009-10, we made important advances towards placing each department on a more sustainable platform (one of the key strategic goals of the campus plan), which will provide a stable and well-resourced foundation for these plans. As part of this exercise we expect to consider the needs for further faculty in Chemistry and in Physics as discussed by the reviewers.

The reviewers pointed to several shortcomings in the undergraduate programs. We recognize that these issues require serious consideration and have begun a careful review of all the programs in light of their remarks and recommendations. As part of the preparation for the external review, the Physics group recognized the need to strengthen its programs and to ensure that students would be able to complete their programs at UTSC. Following the review and consultations with the Dean's Office, they have proposed changes that move the programs forward in a substantial way towards achieving these goals. We have every expectation that these changes will be approved in the current curriculum cycle. The Environmental Science and Chemistry groups have begun to review their programs with the expectation that changes will be ready for the next curriculum cycle. In the coming year, we will work closely with the Department to improve their programs with the goal of

developing strong and attractive programs that we can be proud of and that uphold the standard of excellence for which the University of Toronto is known. We also will be considering the viability of the co-op programs and of the joint program with Centennial College housed in DPES. Where it is clear that we cannot expect to rebuild a program into a strong and attractive one, we will take the necessary steps to close down the program.

By way of conclusion, the Department has already begun moving forward boldly on a number of the key issues and recommendations highlighted by the reviewers. These include the first steps towards the creation of an independent department of physics, the successful search for a chair who recognizes the importance of, and has already begun to incorporate, appropriate departmental governance structures, the renewal and expansion of departmental facilities, and the review and revision (when necessary) of the undergraduate program. Upon successful implementation of these initiatives, these changes will produce an even more effective, thriving, and productive Department of Physical and Environmental Sciences

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Rick Halpern', with a long horizontal flourish extending to the right.

Professor Rick Halpern  
Dean and Vice-Principal (Academic)

## APPENDIX 1

### Externally commissioned reviews of academic programs, completed 2009-10

Additional reviews of programs are conducted by organizations external to the University. Reviews of academic programs by external bodies form part of collegial self-regulatory systems to ensure that mutually agreed-upon threshold standards of quality are maintained in new and existing programs. Such reviews may serve different purposes than those commissioned by the University. A summary listing of these reviews is presented below. These reports compliment the University's Performance Indicators and other institution-wide quantitative measures of our performance towards key goals and compares that performance to its peers<sup>1</sup>.

<b>Faculty of Information</b>		
Master of Information	American Library Association (ALA)	Accredited (next review 2017)

<b>School of Graduate Studies – OCGS Appraisals</b>		
Aerospace Science and Engineering	FASE	GOOD QUALITY
Applied Computing MscAC	A&S	APPROVED TO COMMENCE
Architecture, Landscape and Design	ARCH	GOOD QUALITY
History of Art	A&S	GOOD QUALITY
Astronomy and Astrophysics	A&S	GOOD QUALITY
Economics MA/PhD	A&S	GOOD QUALITY
English MA/PhD	A&S	GOOD QUALITY
Environmental Science PhD	New program, UTM	APPROVED TO COMMENCE
Genetic Counselling	MED	GOOD QUALITY
Global Affairs MGA	New program, A&S	APPROVED TO COMMENCE
Industrial Relations MIRHR/PhD	A&S	GOOD QUALITY WITH REPORT
Information MI/PhD/Diploma	Information	GOOD QUALITY WITH REPORT (MI/PhD) / APPROVED TO CONTINUE (Diploma)
Medieval Studies MA/PhD	A&S	GOOD QUALITY
Nursing Diplomas in Anesthesia Care	New program, Nursing	APPROVED TO COMMENCE
Philosophy MA/PhD	A&S	GOOD QUALITY
Pharmaceutical Sciences	Pharmacy	GOOD QUALITY
Psychology MA/PhD	A&S	GOOD QUALITY
Social Work MSW/PhD	Social Work	GOOD QUALITY
Statistics MSc/PhD	A&S	GOOD QUALITY

<b>Collaborative Programs – OCGS Appraisals</b>		
Bioethics	Health Administration, Law, Medical Science, Nursing, Philosophy, Public Health Science, Rehabilitation Science, Religious Studies, Social Work	APPROVED TO CONTINUE
Developmental Biology	Biochemistry, Cell and Systems Biology, Dentistry, Immunology, Laboratory Medicine and Pathobiology, Medical Biophysics, Molecular Genetics, Physiology	APPROVED TO COMMENCE (MASTER'S) / APPROVED TO CONTINUE (DOCTORAL)
Educational Policy	Educational Administration, Higher Education, History and Philosophy of Education, Adult Education and Community Development,	APPROVED TO COMMENCE

<sup>1</sup> <http://www.utoronto.ca/about-uoft/measuring-our-performance.htm>

	Curriculum Studies and Teacher Development, Second Language Education, Developmental Psychology and Education, Sociology in Education	
Genome Biology and Bioinformatics	Biochemistry, Biomedical Engineering, Cell and Systems Biology, Chemical Engineering and Applied Chemistry, Computer Science, Ecology and Evolutionary Biology, Laboratory Medicine and Pathobiology, Medical Biophysics, Medical Science, Molecular Genetics	APPROVED TO CONTINUE