

**MEETING OF FACULTY COUNCIL
OF THE FACULTY OF MEDICINE**

A meeting of Faculty Council will be held on **Monday, April 25, 2016**, from 4:00 p.m. to 6:00 p.m. in the **Red Room, Donnelly Centre**, University of Toronto.

AGENDA

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|---|--|--------------------------------------|
| 1 | Call to Order | Speaker |
| 2 | Minutes of the previous meeting of Faculty Council – February 8, 2016 | Speaker |
| | 2.1 Business Arising | |
| 3 | Report from the Speaker | Speaker |
| 4 | Reports from the Dean’s Office | |
| | 4.1 Vice Dean, Research and Innovation | R. Hegele |
| | 4.2 Vice-Deans, Education | S. Spadafora |
| 5 | New Business | |
| | 5.1 Education and Research Committees | I. Witterick
P. Hamel |
| | 5.1.1 <i>“THAT the proposal to amend the admission and program requirements of the Master of Health Science in Medical Radiation Sciences be approved as submitted effective September 1, 2016.”</i> | N. Harnett |
| | 5.1.2 <i>“THAT the proposal to add an Advanced Standing Master of Science in Occupational Science and Occupational Therapy (MScOT) program to the existing MScOT program be approved as submitted effective September 1, 2016.”</i> | D. Dawson
A. Duncan
S. Rappolt |
| | 5.2 Executive Committee | Speaker |
| | 5.2.1 <i>“THAT the proposed amendments to the Terms of Reference of the Board of Examiners - Undergraduate Medical Education and the Board of Examiners - Physician Assistant Professional Degree Program be approved as submitted to take effect July 1, 2016.”</i> | |
| | <i>“THAT the membership of the Board of Examiners - Undergraduate Medical Education be temporarily expanded to allow current members of the both the Board of Examiners - Undergraduate Medical Education and the Board of Examiners - Physician Assistant Professional Degree Program to serve on the newly constituted Board of Examiners - Undergraduate Medical Education for one additional term of service.”</i> | |

6 **Standing Committee Annual Reports**

- 6.1 Education Committee
- 6.2 Research Committee

I. Witterick
P. Hamel

7 **Faculty Council Forum**

Student, Faculty, and Staff Stress in the Faculty of Medicine

D. McKnight

8 **Adjournment**

Speaker

NEXT MEETING: TBD, Fall 2016



UNIVERSITY OF TORONTO
FACULTY OF MEDICINE

**Faculty Council
FACULTY OF MEDICINE**

Meeting Materials – April 25, 2016

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UNIVERSITY OF TORONTO

FACULTY OF MEDICINE

Faculty Council of the Faculty of Medicine
Minutes of the February 8, 2016 meeting
4:00 p.m.
Red Room, Donnelly Centre

Members Present: L. De Nil (Speaker), D. McKnight, T. Young, L. Wilson, M. Connell, T. Coomber, T. Neff, I. Witterick, S. Schneeweiss, G. Bandiera, C. Flaherty, T. Agarwal, M. Gosk, K. Mattina, S. Doshi, D. Moore, D. Dawson, S. Spadafora, P. Hamel, J-Y Yoon, A. Kaplan, G. Yousef, S. Rappolt, R. Hegele, R. Kirsch, D. Goldstein, V. Waters, A. Levinson, M. Giuliani, L. Tate, S. Nixon, S. Wagner, J. Barkin, D. Templeton, B. Papsin, B. Steipe, A. Martin, P. Burns, A. Cochrane, T. Wolever, D. Tweed,

Call to Order

The Speaker called the meeting to order and noted that there was a quorum.

1 Minutes of the previous meeting of Faculty Council – October 19, 2015

The minutes of the meeting of October 19, 2015 had been previously circulated. They were approved on a motion from A. Kaplan and seconded by P. Hamel. There was no business arising.

2 Report from the Speaker

The Speaker indicated that, as per the Faculty Council By-Laws, the Executive Committee received and reviewed External Reviews for the Institute for Life Course and Aging, the Master of Science, Biomedical Communications on behalf of Council

3 Reports from the Dean's Office

3.1 Report from the Dean's Office

Dean Young welcomed Dr. Lynn Wilson and Dr. Rick Hegele to their new roles. Dr. Wilson has assumed the new role of Vice Dean, Partnerships and Dr. Hegele has taken on the newly reconstituted role of Vice Dean, Research and Innovation. The Dean also noted that Dr. Lisa Robinson has taken on the new role of Chief Diversity Officer and has already provided an initial report on the makeup of the Faculty. Dean Young indicated that the current number look great but can always look better. The Dean is looking forward to Dr. Robinson's feedback in many areas across the Faculty including reviews and searches.

Dean Young noted that external reviews have been completed for Surgery, Paediatrics, and Molecular Genetics and these will be coming forward for review at a future governance cycle.

There are also a number of searches underway. The search for the Chair of Paediatrics is complete and the candidates have been shortlisted. The Dean noted that the new Chair of Paediatrics will also be Chief of Paediatrics at SickKids. The search committee for the Chair of Molecular Genetics has been struck and a number of candidates have been identified. Search committees are also being assembled for the Departments of Family and Community Medicine and Laboratory Medicine and Pathobiology.

The Dean noted that Jay Rosenfield is finishing ten years as Vice Dean, MD Program and a search is underway for his replacement.

The Dean acknowledged Dr. Martin Schreiber and congratulated him on his 3M National Teaching Fellowship.

3.2 Vice Dean, Research & Innovation

Dr. Richard Hegele noted that he has been in this role since January 1, 2016 and has been getting acquainted with the portfolio. Among his current priorities is the development of a Faculty of Medicine approach to the Innovation portion of the role. The University is developing metrics to track innovation and Dr. Hegele will be working to ensure that the Faculty is aligned with the central University. In addition, there is a TAHSN research committee that is discussing CIHR's project scheme. There are currently over 4300 registrants for the upcoming competition and Dr. Hegele believes that the current scheme will be difficult to implement and will require adjustments as the competition goes along. There is also a CFI call for applications for 2017 with an emphasis on collaborations between and within institutions. U of T had put in an application to the Canada First Research Excellent Fund which has undergone an initial screening. The TAHSN research committee is also developing a work plan that will include increased coordination in areas such as clinical trials research contracts.

3.3 Vice-Dean, Partnerships

Dr. Lynn Wilson indicated that this new portfolio will be responsible for strengthening relationships with the affiliated hospitals and other institutions. The Vice Dean, Partnerships will also be responsible for initiating, developing, and managing partnerships at all levels including local, provincial, national, and international. In addition, the role will work to develop and strengthen partnerships within the University. Dr. Wilson noted that this role will require the close monitoring of President Gertler's Three Priorities.

Dr. Wilson introduced Meera Rai, the Partnerships and Projects Coordinator, who was involved previously with the development of the Faculty's strategic plan. Dr. Wilson and Ms. Rai have been meeting with stake holders to gather feedback on how best to build this new portfolio. The University and the Faculty are greatly respected for their strength in research and education.

The Government has a number of needs in which they hope the Faculty can play a role. These include providing data to inform policy making, being leaders in quality improvement and safety; more formal training of clinical leaders; being a sources of trusted advice; and ensuring models of education align with working environments.

Hospital partners value the Faculty greatly but community affiliates find it difficult to determine who to approach within the Faculty with questions or proposals for collaboration. The hospital partners hope that the Faculty will provide advice and data regarding the health system and health system transformation; create a space where the hospitals can share innovations in care; align education with the practice environment; build research capacity in community affiliated hospitals; and collaboration on addressing diversity.

3.4 Vice-Deans, Education

Dr. Allan Kaplan indicated that the report (included in these minutes beginning on page 5) was precirculated and offered to answer any questions.

4 New Business

5.1 Education Committee

5.1.1 MD Program Objectives

The following was moved by I. Witterick and seconded by J. Barkin:

“THAT the proposal to align the University of Toronto MD program objectives with a competency-based approach to medical education be approved as submitted.”

Dr. Martin Schreiber indicated that this proposal is intended to align the existing U of T MD program objectives with a competency-based approach to medical education, effective August 1, 2016, for all students in the MD program, regardless of year of entry. In 2003, the U of T MD program adopted the Royal College of Physicians and Surgeons of Canada (RCPSC) CanMEDS Physician Competency Framework as the basis for the medical education program objectives. U of T was among the first medical schools in Canada to ground MD program objectives in the CanMEDS Framework.

In 2013-14, a review of the program’s objectives was commenced under the leadership of Dr. Schreiber due to a desire on the part of the medical school leadership to make the objectives clearer and more usable. In addition, the College of Family Physicians of Canada (CFPC) articulated the competencies of family physicians using the CanMEDS roles framework into a system known as CanMEDS-FM. Compliance with relevant accreditation standards was a major motivator for the review of the existing program objectives. The final reason for the review of and proposed change to the program’s objectives was CanMEDS 2015, a multi-year project by the RCPSC intended to update and further align the CanMEDS framework with a competency-based approach to medical education. This involved a detailed review of all competencies, and also the articulation of milestones for entry into residency training, and all of these efforts are relevant to the development of medical school program objectives.

A Steering Committee and working groups for each of the seven CanMEDS roles were established. The Steering Committee first met in March 2014 with the working groups for each of the seven CanMEDS roles were formed by September 2014. The Steering Committee set a number of review principles including: articulating program-level key and enabling competencies that are consistent with and clearly relatable to, but not necessarily the same as, the CanMEDS 2015 key and enabling competencies; that the program-level key and enabling competencies be generic, not specialty-specific; that the Faculty continue to be mindful of Medical Council of Canada (MCC) Objectives; and that there be defined milestones for each enabling competency.

Over 60 individuals provided feedback to the consultation document including a range of curriculum leaders and teachers, departmental chairs, site directors, and students. In general, the respondents noted that the competencies were comprehensive, thorough, well-written and complete. A recurring concern was the achievability (by students) and usefulness (for teachers) of the competencies, particularly in relation to the “scope” or “level” of achievement expected of medical students. The Steering Committee agreed that concerns regarding the “scope” or “level” of achievement expected of medical students and “usefulness” for teachers would, in general, best be addressed through the development of milestones, which will be a second phase of the program.
The motion passed.

5 Faculty Council Forum

Dr. David McKnight led a panel discussion with Drs. David Tannenbaum and Wayne Gold, the Chairs of the Boards of Medical Assessors and Dr. Susan Edwards, the PGME Director, Medical Wellness on the limits of reasonable accommodation within the Faculty of Medicine.

6 Standing Committee Annual Reports

6.1 Undergraduate Medical Education Board of Examiners

Dr. Blake Papsin thanked Council for allowing him to postpone his report from the autumn meeting. He noted that he was presenting the data from 2014-2015. Dr. Papsin noted that the Board consists of nine Faculty members from a variety of disciplines, two students, and the Vice Dean. The Board meets monthly to allow

for timely and just decisions with most remediations taking place at the end of the academic year. Dr. Papsin noted that one of the metrics for success is the number of appeals and the number of successful appeals and notes that both of these have been nonexistent for a number of years. Dr. Papsin noted there is currently one vacancy on the Board if any Council members are interesting in serving. Students are permitted to submit a written statement to the Board for consideration.

Dr. Papsin noted that most students coming to the BOE and in first and third years. Many students are presented during Pre-Clerkship for information but do not require formal remediation. He noted that the spike in students coming in third year is partially due to the iOSCE being mapped to the third year of the program. There are a number of students who will take Leaves of Absence in order to deal with their circumstance. A question was raised as to whether the Board tracks students who take a leave. Dr. Papsin indicated that if they return, they will still need to return to the Board of Examiners to determine the outcome of any failed courses or assigned remediation. He noted, however, that a small number do not return.

A number of cases are coming forward for professionalism which Dr. Papsin notes is good as it allows early intervention. Cases are assigned to Dr. Erika Abner for an assessment in professionalism with remediation being assigned as appropriate.

Dr. Papsin indicated that, moving forward, the Board will adjust to the new Pre-Clerkship curriculum but expects there to be some growing pains in the first few years. He also notes that there is a plan to merge the UME Board with the Bachelor of Sciences Physician Assistant (BScPA) Board due to their similar make-up. In order to facilitate this, the proposal that will come to Council will see a new UME Board structured with a sub-committee to address BScPA cases. This will allow the sub-committee to meet separately in advance of the UME Board meeting with the ultimate goal of merging the two Boards completely.

6.2 Bachelor of Sciences Physician Assistant Board of Examiners

Dr. Ronn Goldberg was unable to attend due to his clinic schedule but provided the following written report:

The Bachelor of Science Physician Assistant Board of Examiners reviews cases of students in academic difficulty and determines the appropriate course of action, which may include promotion, remediation, failure, suspension and dismissal.

The BScPA Board of Examiners has met three times since reporting at this time last year. Additional electronic approval of grades also took place when the discussion of individual cases was not required. The BOE reviewed the cases of two students since reporting last February.

One student was placed on a modified program and referred for an assessment in professionalism. One student was placed on remediation after failing a course. This student was review by the Board on two occasions and is currently in the process of appealing the Board's decision.

6.3 Appeals Committee

Dr. Doug Templeton indicated that it has been his pleasure to not have to report for a number of years as there have been no appeals and, therefore, he had nothing to report.

Dr. Templeton indicated that the number of appeals has dropped significantly in his time on the Committee. He notes that he believes this is due, in part, to the faculty becoming better at implementing Faculty procedures and policies and that the better accommodation and remediation practices in the Faculty.

Dr. Templeton noted that there was one appeal this academic year from the PGME program. He noted that a PGY4 was removed from the program after a number of periods of remediation. The appeal was denied.

7 Adjournment

The meeting was adjourned at 6:00pm

Council of Education Vice-Deans Faculty Council Report

February 8, 2016

Submitted on behalf of:

Dr. Allan Kaplan, Vice-Dean, Graduate and Academic Affairs

Dr. Jay Rosenfield, Vice-Dean, MD Program

Dr. Salvatore Spadafora, Vice-Dean, Post MD Education (PGME & CPD)

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Office of the Education Vice-Deans, Integrative Activities

1. 2016 EDF Cycle | Timeline

The Education Development Fund 2016 application deadline is February 5th. The formal adjudication process will proceed between February 8th and May 1st. Below is a tentative timeline and is subject to change. For further information, please refer to the [Education Development Fund website](#).

February 5, 2016:	Application process closes at 5pm
February 8 – May 1, 2016:	Adjudication process
May 2016:	Notification of Funding
June 2016:	Deadline for final ethics approval

2. 14th Annual Education Achievement Celebration

The Faculty of Medicine's **14th Annual Education Achievement Celebration** will be held on **Wednesday, May 11th, 2016** from **5:30–7:30pm** in the **Great Hall at Hart House**. This annual evening of celebration hosted by the Education Vice-Deans is a Faculty-wide forum to recognize and showcase excellence in teaching and education. We are pleased to announce that this year's **C.I. Whiteside Education Achievement Keynote Address will be delivered by Dr. Herbert Ho Ping Kong**. To learn more, please visit the [EAC webpage](#).

3. Integrated Projects

Inaugural Annual UPAR Retreat

The **Inaugural Annual University Partnership for Academic Rehabilitation Retreat**, presented by the University Steering Committee for Academic Rehabilitation (USCAR), was successfully held on **Wednesday, November 4th, 2015** from **12–5pm** in the **Music Room at Hart House**.

The retreat consisted of a plenary address, delivered by Walter Wodchis, PhD, Institute of Health Policy Management and Evaluation, entitled: "Implementing Research in Practice: Context, Mechanism and Outcomes," and followed by three short presentations on related topics, and an afternoon of facilitated small group discussion. The purpose of the retreat was to engage the rehab community to identify new opportunities for collaboration in the academic enterprise – in particular exploring the feasibility of designing, developing, implementing and evaluating successful new applied research and educational opportunities at hospital and community sites; Identify and promote best practices among the affiliated institutions, including systematic evaluation and analysis of new and existing programs and initiatives giving USCAR the ability to make strategic recommendations; and to foster knowledge exchange. The University Steering Committee for Academic Rehabilitation (USCAR) will be meeting in February to discuss next steps and begin planning for the 2016 UPAR retreat. A tentative retreat date will be forthcoming.

Undergraduate Medical Education (MD) Program

1. Accreditation

Full Accreditation Survey

In October 2015, we were informed by the Committee on Accreditation of Canadian Medical Schools (CACMS) and Liaison Committee on Medical Education (LCME) that the MD program is in full compliance with all 128 accreditation standards, bringing the program's 2012 accreditation to a successful conclusion, with no further follow-up required. This is a very significant achievement for the medical school, and reflects the collective efforts of the many individuals and institutions involved in the MD program, including students, administrative staff, teachers, the medical school leadership, and our hospital partners. The MD program's next full accreditation survey will take place in 2019–20.

Interim Accreditation Review

Prior to the full accreditation survey in 2019-20, the MD program will engage in an interim accreditation review. As mandated by CACMS, the interim accreditation review is an important part of a continuous quality improvement process. The interim accreditation review takes place at approximately the half-way point of the 8 year accreditation cycle. It is a formative, internal review, intended to help the program:

- detect emerging problems with accreditation standards;
- identify critical issues requiring immediate attention;
- increase local accreditation expertise; and
- develop a culture of continuous quality improvement.

The interim accreditation review process, including data collection and formation of a survey team, is currently being put into place under the leadership of Martin Schreiber, in his capacity as Senior Academic Coordinator, Accreditation. The interim accreditation review site visit is planned to take place in the Spring of 2017.

2. Enrollment

The fall 2015 enrolment counts for the MD program (including MD/PhD students) are:

Year 1	260
Year 2	274
Year 3	250
Year 4	258
<i>Total</i>	<i>1042</i>

3. Curriculum

Foundations Curriculum

The redevelopment of the first two years of the MD program, traditionally called the preclerkship, and which we are now calling the [Foundations Curriculum](#), is well underway. The new curriculum will be

launched for students entering the MD program in August 2016. It will feature a highly integrated program with clinical content from the beginning of medical school, early exposure to patients and the community setting, extensive use of online materials to support learning, and an assessment program designed to support learning. Activity is occurring on multiple fronts to ensure a smooth implementation of the new curriculum.

With respect to curriculum design, a comprehensive blueprint of learning outcomes for each unit has been created. Next steps include the creation of a detailed framework of weekly activities which will then be used to guide curriculum content development. (As noted below under Governance & Leadership, a number of Foundations Curriculum Unit Directors have been appointed and are engaged in the design and development of the new curriculum.)

The development of a new programmatic assessment model that aligns with the new curriculum and will help ensure that students are proficient across diverse competencies, including each of the CanMEDS roles, is also underway. This new assessment model will involve frequent lower-stakes assessments with feedback and individualized coaching designed to support learning.

A variety of resources that new and returning faculty can take advantage of to prepare to teach the new curriculum are being developed, and steps are being taken to ensure that the appropriate technology and resources are in place to support all aspects of the new curriculum, including classroom spaces and new software to support the curriculum design process as well as student assessment.

4. Clerkship Capacity at MAM

Over the last several months Trillium Health Partners has been working to prepare for the August 2016 start of core clerkship for 1T8 (year 3) learners at the Mississauga Academy of Medicine (MAM).

Trillium Health Partners has undergone a thorough review to accurately assess capacity projections for 2016/17. This review included face-to-face dialogue with Programs Chiefs, Education Leads and Program Directors, and a robust assessment of program-specific operational capacity, space allocation and physician and clinical stakeholder engagement. We are pleased to report that based on this internal assessment, Trillium Health Partners will achieve an overall 92% capacity to take core clerks in Mississauga across the ten mandatory clinical programs for the 2016/17 year, representing 5% overall growth from 2015/16, and 18% since the first year of clerkship at MAM in 2013/14. This figure also takes into account unknown variance, and therefore is the best estimate for this year. As more information becomes available in the coming months, this projected capacity may increase, allowing for more rotations at Trillium Health Partners.

The table below provides an overview of the projected capacity at Trillium Health Partners for 2016/17 by program:

Program	2013/14 Capacity	2014/15 Capacity	2015/16 Capacity	2016/17 Capacity
Anesthesiology	100%	100%	100%	100%
Otolaryngology	100%	100%	100%	100%
Ophthalmology	56%	56%	56%	89%
Emergency Medicine	67%	76%	89%	89%
General Surgery	44%	67%	100%	100%

Surgical Subspecialties	100%	100%	100%	100%
Medicine	89%	100%	100%	100%
Obstetrics & Gynecology	56%	61%	61%	78%
Paediatrics	44%	44%	56%	56%
Psychiatry	100%	100%	100%	100%
Family Medicine	100%	100%	100%	100%
Total Overall	74%	83%	87%	92%

This continuing growth is a testament to the ongoing collaboration between and commitment from Trillium Health Partners and our university departments and faculty.

5. Revitalizing the Curriculum Symposium

On Friday, November 27, 2015, the MD program partnered with the Wilson Centre for Research in Education to hold *Revitalizing the Curriculum*, a symposium that highlighted curricular innovations and educational research currently underway within the MD Program. Over 100 education leaders, teachers, researchers and administrators from the University and our partner hospitals attended the symposium, which included a keynote address by Dr. Brian Hodges on the challenges of curriculum reform followed by discussions and interactive small group tasks on topics related the symposium’s overall theme, integration.

6. 2015 Medical Psychiatry Alliance (MPA) Annual Conference

The [2015 Medical Psychiatry Alliance \(MPA\) Annual Conference](#) was held on Oct. 29 -30, 2015. Hosted by the University of Toronto, the theme of this year’s conference was Integration and Complexity in Health Professional Education. Close to 200 people attended the conference, with over 80 health care leaders participating in Expert Think Tank sessions. The conference emphasized the need to take steps that will enable a generation of health leaders and caregivers to better recognize and treat patients with combined physical and mental illnesses. A formal report summary is currently being created to capture the valuable input and feedback generated by audiences from the conference’s discussions and Expert Think Tank sessions.

The 2016 Medical Psychiatry Annual Conference, which will be hosted by The Hospital for Sick Children, and focus on Child and Youth Health, will be held on October 5-6, 2016 at the Peter Gilgan Centre for Research and Learning in Toronto.

7. Consortium of Longitudinal Integrated Clerkships (CLIC) Conference 2016

The University of Toronto MD program is delighted to be hosting the Consortium of Longitudinal Integrated Clerkships (CLIC) Conference 2016, which will take place on October 16-19, 2016. We are excited to partner with the Wilson Centre to highlight and advance the Longitudinal Integrated Clerkship (LIC) research agenda at CLIC 2016. We look forward to welcoming faculty, administrators and students from schools around the world who have a LIC, as well as those who are interested in learning more about them. Conference information and registration details will be available soon.

8. Governance & Leadership

Foundations Curriculum

As noted above, the Foundations Curriculum will be launched for students entering the MD program in August 2016, and will replace the existing preclerkship program.

- Dr. Eleanor Latta was appointed as Unit Director, Foundations Curriculum, Unit 1, "Introduction to Medicine". Unit 1 represents the first eleven weeks of the program, and provides instruction in the foundational medical sciences, social sciences, the culture of medicine, and the role of the physician.
- Dr. Lori Albert was appointed as Unit Director, Foundations Curriculum, Unit 2(a), and Dr. David Chan was appointed as Unit Director, Foundations Curriculum, Unit 2(b). Collectively, Unit 2(a) and Unit 2(b) are called "Concepts, Patients and Communities", and cover 25 weeks in year 1, and 16 weeks in year 2. Unit 2 provides systems-based instruction on foundational sciences, clinical presentations and diseases of the major organ systems. Unit 2(a) includes sections on host defense, oxygen delivery and metabolism and homeostasis, while the Unit 2(b) sections are divided among musculoskeletal, neurologic, special senses, and psychiatric.
- Dr. James Owen was appointed as Unit Director, Foundations Curriculum, Unit 4, "Complexity and Chronicity". Unit 4 covers eleven weeks in year 2, and provides instruction designed with two major goals in mind: to consolidate learning from the preceding three units with a view to preparing students for their further learning in the clerkship; and, to provide students with exposure to a breadth of clinical problems that emphasize complex issues (both medical and psychosocial) and long-term, chronic care.

Clinical Skills

Dr. Katina Tzanetos was appointed as Faculty Lead for Clinical Skills.

Integrated Leadership

Dr. Isser Dubinsky was appointed as Integrated Leadership Portfolio Director in the Institute of Health Policy, Management and Evaluation (IHPE) and Undergraduate Medical Education (UME), Faculty of Medicine.

Office of Health Professions Student Affairs

Although facilitated study groups, such as PREP, are generally characterized by a marked decline in student participation, this year's sessions continued to attract a significant number of students throughout the term. Evaluations of sessions suggested that participants found the use of interactive worksheets, charts and diagrams "really useful," and they appreciated the PREP Leaders' organization, dedication and enthusiasm.

Three submissions from the Counselling team—academic, career and personal counselling—were selected to present at the 2016 CCME in Montreal, Quebec.

The Summer Mentorship Program (SMP) is entering its 22nd year. We are currently in our early application process (of two) and have received 64 applications. Six of those applications are from Indigenous students which represents an increase over this time last year. The 2015 SMP cohort had 61 students, including 11 Indigenous students.

Physician Assistant Program

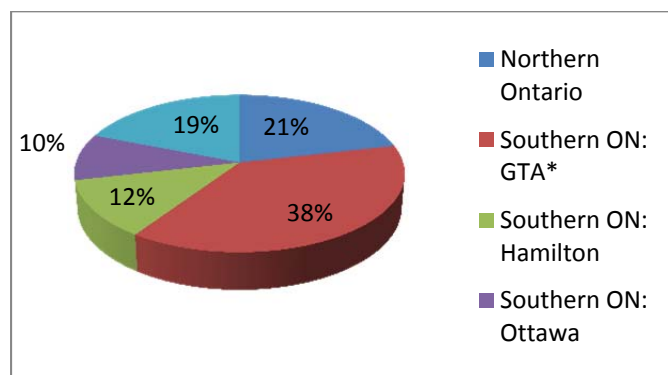
1. National Certification Results

As of January 15, 2016, the detailed report for the October 4 2015 Physician Assistant Certification Council of Canada (PACCC) exam is not available. However, we do know that 100% of our students who were eligible to write the exam were successful. Over the previous four years (2011-2014), our student success rate has ranged from 94% to 100%, with the national average ranging from 82% to 92%.

2. Graduate Employment

As of January 15, 2016, we have information on 22 of the 27 graduates who completed their program December 2015, 15 of whom have confirmed employment as PAs. We maintain an employment rate of 35% in northern or rural communities, which roughly match the Ministry of Health and Long Term Care/HealthForceOntario PA Graduate Career Start opportunities by geographic area (see Figure 2). The currently known employment of our graduates (Classes 2011-2015) includes 40% in Primary Care, 22% in Internal Medicine, and 16% each in Emergency Medicine and Surgery. Other grads have found employment in a variety of other specialties and subspecialties.

Figure 1. Career Start Opportunities by Geographic Area (Fall 2015)



There are concerns regarding the current lull in PA employment opportunities (approximately 40% of the current graduates have yet to confirm employment). This year, HealthForceOntario posted fewer “Career Start” funded opportunities than there were graduates (see Table 1). Prior to this, there have been at least 40% more opportunities than graduates. In addition to the low return on “Career Start” opportunities, there are some alumni whose original employers were not able to sustain their position once the “Career Start” funding ended. While many of these alumni have obtained employment as a PA in another position, not all have been able to do so. Although “Career Start” is not the only route to PA employment, we have communicated our concerns to HealthForceOntario and are awaiting a reply.

Table 1. Career Start opportunities vs. PA graduate numbers, Fall 2015

Total Career Start Opportunities	Approved	42
	Pending	2
	Total potential	42
PA Graduates	UofT	26
	McMaster	24
	Total	50
Ratio of opportunities to Graduates		0.84

Post MD Education (PGME & CPD)

Post MD Structure

As of July 2015 Dr. Salvatore Spadafora took on a new role as Vice Dean Post MD which encompasses both Postgraduate Medical Education (PGME) and Continuing Professional Development (CPD). During the initial phase of his tenure Dr. Spadafora has ensured that key leadership positions are in place for both departments. Dr. Spadafora is now reviewing the organizational structure of both departments with a view to identifying opportunities for integration and collaboration. This work will continue over the next several months.

PGME Section

1. Governance, Staffing

Glenys Babcock joined the PG staff in October 2015 as the Manager, Data & Analytics to lead the data extraction and analysis activities and provide innovative reporting for our partners and government. Glenys holds a PhD in Public Policy from the RAND Graduate School and has held several senior positions in government and industry including Ipsos Reid, Ontario Lottery and Gaming and Toronto Community Housing. She has expertise in process mapping, organizational design, stakeholder relations, and strategic planning.

2. Enrolment

At the request of the Ontario Ministry of Health, the number of CaRMS entry positions for Canadian Medical Graduates at the PGY1 level for the 2016-17 academic session will be reduced by 9 positions – from 347 to 338. At the University of Toronto, the reductions occurred as follows:

Specialty	CMG 2015 PGY1 Quota	CMG 2016 PGY1 Quota	Reduction
Internal Medicine	54	51	-3
Dermatology	5	4	-1
General Surgery	11	10	-1
Neurology	5	4	-1
Ob/Gyn	10	9	-1
Orthopedic Surgery	8	7	-1
Psychiatry	32	31	-1

The number of International Medical Graduate positions will be reduced from 71 to 70 to reflect the transfer of 1 position to the Northern Ontario School of Medicine at the request of the MOHLTC. The total number of PGY1 CaRMS positions is reduced from 417 in 2015 to 407 in 2016.

3. Accreditation

The Internal Review Committee is 2 ½ years through the 6 year accreditation cycle, leading to the RCPSC and CFPC external survey visit in 2019. Approximately 30 specialty programs have been reviewed to date. The review of the 14 Family Medicine program sites will begin this month. Since the September 2015 report to the Faculty Council, Pain Medicine was approved for U of T as a sub-specialty program administered by Anesthesia and will begin accepting residents for July 2016. Of the 19 programs put forward by the Royal College for Areas of Focused Competence, 11 have received accredited status. UofT has received approval for 3 of the AFC programs: Transfusion Medicine and Interventional Cardiology and Cytopathology. The Subspecialty Examination Affiliate program (SEAP) – which allows clinical fellows without the core specialty training to take the subspecialty exam for diplomate certification --- was extended from 5 to 29 programs.

4. Competency Based Medical Education

In 2011, the College of Family Physicians of Canada revised their residency education to a Triple C Competency Based curriculum. Triple C stands (i) Comprehensive care and education (ii) Continuity of care and education and (iii) Centred in Family Medicine. Family Medicine has been developing assessment and feedback tools to make sure residents obtain necessary information about their achievement of targets in this curriculum.

The Royal College of Physicians and Surgeons of Canada has moved to a new framework for residency education with the launch of CanMEDS 2015 this past year and implementation in 2016. In addition, the RCPSC has promoted Competency by Design (CBD) as its new framework for competency based education. Importantly, the RC recently took a decision to delay the original implementation for 2 programs (ENT and Medical Oncology) on this new curriculum, pending further assessment of implementation issues. In the meantime, PGME at U of T is moving forward with CBD implementation to ensure programs are well supported and coordinated with assessment tools, faculty development and learner preparation. The inaugural newsletter for CBME at PGME U of T was sent out November 25, 2015. Susan Glover Takahashi is the PGME central lead to support programs in their transition to CBME.

5. Conferences, Workshops, Leadership, Faculty Development

The Royal College International Conference on Residency Education (ICRE) and the RC Administrator's was held in Vancouver BC from October 21-24, 2015. PG staff presented or participated in 25 events: 8 workshops, 7 papers, 5 posters, 4 panels/forums, and 1 presentation.

The 2nd annual Toronto International Summit on Leadership Education (TISLEP) was held just prior to the ICRE Conference on Tuesday October 20, 2015. Co-hosted by UofT and the RCPSC, the summit saw over 75 international leaders discuss curriculum development for Physician Leadership and essential leader milestones.

As part of its outreach and administrative support to residency program administrators and hospital medical education office staff, PGME offered [12 sessions](#) in this 4-month period including topics such as Medical Trainee Days, re-appointments, CaRMS basic, internal reviews, and the PARO contract.

During this same period, 5 Program Director development workshops were held regarding Best Practices on Admissions and Selection, Assessment, Board of Examiners, Competency Based Education, and Internal Review documentation.

PGME recognizes the critical role played by faculty in teaching and role modeling the core competencies of resource stewardship. To that end, a half-day faculty development workshop took place in November 2015 organized by Dr. Anne Matlow designed to provide faculty the educational tools and resources they require to be most effective.

As noted above, a newsletter to support the implementation of Competency Based Education was developed and the first edition released in December 2015. The newsletter is a communication tool to assist programs and partners in understanding and implementing the transition from time-based learning to CBD and provide resources and curriculum support.

6. Global Health

The Global Health Education Initiative (GHEI) is a 2 year certificate program for medical residents and fellows, consisting of several modules delivered in a seminar format over a two-year period

Applications are now open for the Global Health Education Initiative (GHEI) Class of 2018, with the program to begin September 2016 and run until June 2018. Planning is underway for the 2016 Global Health Day to take place on Thursday June 9, 2016 from 12 noon to 5 pm at the McLeod Auditorium. The opening address on the State of Humanitarianism will be given by Dr. James Orbinski.

7. Projects/Initiatives

The environmental scan of Learner Management Systems was undertaken by an external consultant (Ambit) to consider the needs of both PGME and UGME over the next few years and possible system solutions to meet those needs related to registration, evaluation and other functions such as scheduling and the impact of competency based education. A report was delivered to the Vice Deans who are considering options.

A new Committee is being formed with a first meeting in January to review and develop **Best Practices for Evaluation and Assessment in PGME (BPEA)**. The committee will be chaired by Dr. Linda Probyn and includes representation from residents, Program Directors, hospital division chief, hospital medical education lead and PGME staff. The purpose of the Working Group is to develop minimum requirements for residency program evaluation practices and resident assessments, draft updated Evaluation Guidelines for Residency Education, and recommend implementation strategies including consultations, resources development and faculty development.

Continuing Professional Development Section

1. Governance, Staffing

Professor Suzan Schneeweiss has been appointed Associate Dean, Continuing Professional Development (CPD) for a 5-year term effective November 1, 2015. Prof. Schneeweiss is an Associate Professor in the Department of Paediatrics at the University of Toronto and a Paediatric Emergency Medicine physician at the Hospital for Sick Children. Prof. Schneeweiss is a respected leader in the field of continuing professional development and formerly served as Academic Director, Continuing Professional Development in the Faculty of Medicine, is the Director of Education in the Division of Paediatric Medicine at the Hospital for Sick Children and is a Continuing Professional Development Educator with the Royal College of Physicians and Surgeons of Canada.

Renice Jones has joined the CPD team as the new Manager of Marketing and Communications. Renice brings to the position significant international marketing experience, including the marketing professional programs. Prior to joining CPD she worked at the Schulich School of Business as the Assistant Director, Recruitment and Admissions. Renice holds a Bachelor of Commerce degree in Marketing Management from the University of Guelph as well as a Master of Business Administration in Marketing from Ryerson University.

2. CPD Academic

Continuing Professional Development in the Faculty of Medicine has continued to provide excellence in academic programming. Our annual report went paperless this year, with a user-friendly format that highlights the people and activities that make the University of Toronto Faculty of Medicine leaders in the world of CPD (<http://www.cpd.utoronto.ca/ar15/>). The number of accredited courses continues to grow annually, and while the majority are live events, increasingly innovative methods of learning are being incorporated into courses and conferences, including web-based and simulation-based learning. The 2-day IDEAS Quality Improvement course continues to attract a wide audience from across all professions and sectors. Our fall session and our upcoming winter session are both fully subscribed. The Safe Opioid Prescribing Course successfully completed a fall series. Eight Medical Recording Keeping courses were held over the fall with one course held in Windsor in collaboration with Western University. All programs were well received with excellent evaluations and feedback from participants.

The Advanced Clinician Practitioner in Arthritis Care (ACPAC) program has admitted 9 health practitioners to its current cohort, having graduated 7 health practitioners in June 2015. This cohort includes 3 Registered Nurses and 6 Physiotherapists, with one trainee coming from Saskatchewan, one from Newfoundland, and 7 from across Ontario.

For the third year, University of Toronto CPD presented Essential Skills in CPD (ESCPD) as a pre-conference course with the Association of Medical Education in Europe Conference (AMEE) in Glasgow, Scotland. Participants were inter-professional and represented countries from around the world including Australia, Singapore, Taiwan, Qatar, Mexico and Portugal. Our innovative webinar-based

International CPD Foundations Certificate Program was launched in October 2015 and participants represent a spectrum of professionals from administrative health professionals to physicians and allied health, all deeply committed to advancing CPD.

CPD received the 2015 Royal College Accredited Providers Award at the 7th National Accredited Providers conference for leadership and innovation with our Continuing Education Leadership Program (CELP). Dr. Schneeweiss continues to work with members of the Royal College of Physicians and Surgeons of Canada to develop a white paper addressing the transition to competency-based CPD. Results will be discussed at the National Competency-Based CPD Summit in May 2016. In addition, as undergraduate medical education moves toward a competency-based framework, Dr. Schneeweiss has been working this group in the development of competencies and milestones in lifelong learning.

3. CPD Enrolment & Accreditation

The number of accredited course offerings continues to grow. In the period July 1 to December 31, 2015, 190 courses were accredited through the CPD office. This was up from 172 in the same period last year.

4. Global and Indigenous Health CPD

Building on the success of the inaugural *Indigenous Health Conference (IHC): Challenging Health Inequities*, the next biennial *Indigenous Health Conference: Towards Health and Reconciliation* will take place May 26-28, 2016. In keeping with the TRC recommendations, a primary objective of this conference is to give health care providers skills and knowledge to improve cultural competency and safety for Indigenous populations. IHC fosters dialogue between Indigenous and non-Indigenous participants, and we are anticipating 700 registrants and 150 abstract submissions. The conference will also feature a job fair to assist with recruitment to underserved Indigenous communities. Child Wilton Littlechild from the TRC will be a keynote speaker. Also speaking are Chief Isadore Day from Assembly of First Nations, President Natan Obed from Inuit Tapiriit Kanatami, and Gary Lipinski from *Métis* Nation of Ontario.

5. Innovations and Education

i+e's mandate is to help faculty and departments develop sustainable education-based programs and assets. i+e continues to grow its portfolio of projects. i+e regularly delivers key services related to business development, communications, legal review, marketing and reputation management for education programs.

Since the last report, some recent activities and accomplishments include:

1. As a consequence of recommendations made by the Faculty of Medicine's eLearning Taskforce (see: <http://elearning.innovatingedu.ca/>), i+e is taking on several key initiatives related to eLearning, partnerships brokering and revenue generation. Current initiatives include, but are not limited to:

- a. Establishing Elevate Toronto: "Elevate" is an education company and eLearning platform owned and operated by Utrecht University and University Medical Center Utrecht. An

MOU with Elevate was signed in September 2015 and underpins an initiative to develop a partnership to deliver online education. i+e is supporting contract negotiations, business development and marketing related to this project.

b. HealthSciences Online: i+e continues to work with several departments in the Faculty of Medicine to support online continuing education courses. i+e recently supported a successful application to the Online Ontario Fund program to enhance and update an online Medical Microbiology course.

c. ImageSim: i+e is working with Faculty in the Department of Paediatrics to develop a fully accredited online CPD program called ImageSim. i+e developed the communications and reputation strategy as well as the business plan for the program. <http://www.imagesim.com/>

d. The Innovating Education Seminar Series: organized and presented by i+e, this series introduces education faculty in medicine (life sciences, health sciences, undergrad, postgrad, and CPD/CME) to innovative tools and technologies that enable new ways of creating, presenting and distributing educational content. Since its inception, over 150 faculty and staff have attended the series. i+e plans to develop at least 5 seminars for 2016. For more information: <http://innovatingedu.ca/iess/>

e. LearnDash: LearnDash is a learning management system (LMS) compatible with Wordpress websites. i+e has developed the capacity to create sites capable of delivering online education content using the LearnDash system. i+e is inviting faculty to consider LearnDash when creating online learning resources. <http://innovatingedu.ca/learndash>

2. i+e lead a very successful Stakeholders Meeting for the Advanced Practitioner in Arthritis Care Program (ACPAC). The meeting had attendees from industry, government, health care providers, patient groups and academia. i+e managed all aspects of the communications and stakeholder engagement on behalf of ACPAC. i+e also produced, published and co-authored the ACPAC Brief, a yearly update on the ACPAC program provided to Stakeholders. <http://acpacprogram.ca/acpac-stakeholder-meeting-2015;>

3. The International Pro-Resilience and Efficiency Program (iPREP) is a new continuing education program for police officers and use of force trainers. i+e is working with faculty to develop and support the iPREP program's accreditation through CPD, as well as its communications and reputation management strategy. <http://proresilience.org/>

4. i+e has helped launch a new online resource for Chronic Diseases Management (see: <http://chronicdiseases.ca/>). A description of the CDM resource was previously provided. i+e continues to seek partners for the program and aims to help launch a new CDM Program in 2016.

5. In partnership with the ACPAC program, i+e has co-authored a policy white paper on innovative models of Arthritis care. The paper can be accessed here: <http://acpacprogram.ca/acpac-model-of-care-policy-briefing/>

6. Standardized Patient Program (SPP)

The Standardized Patient Program has three areas of focus: teaching, learning and assessment; coordinating national licensure examinations; and research in academic simulation methodology. The Faculty of Medicine is the primary client of the SPP related to teaching, learning and assessment, with 70% of activities based in undergraduate education. The SPP is heavily involved in 1st-3rd year education (ASCM I, II, end of clinical clerkship rotation OSCEs and the iOSCE). The iOSCE is a summative assessment consisting of a spring and fall exam, concentrating upon integration of knowledge, performance and competence (259 medical students). The Toronto site of the MCC Qualifying Examination has grown over the years and now spans two days in spring and fall (300 candidates). As competency frameworks change there, will be new opportunities for the use of standardized patients in training techniques.

Graduate and Life Sciences Education (GLSE)

Undergraduate Life Sciences Education

1. Events

- a) Second Annual Interactive Graduate School Webinar was held on October 30, 2015 to meet admission deadlines. GLSE invited undergraduate students thinking about graduate studies to explore our interdisciplinary MSc and PhD programs. Streaming was available (also via mobile device) being presented by seven of the graduate departments. The videos are available on the GLSE website.
- b) Fourth Annual Graduate and Undergraduate Research Information Fair was held on November 12, 2015, Medical Sciences Building (10:30 am to 2:00 pm). Exhibitors in attendance included our undergraduate and graduate units, as well as hospitals, Life Sciences Career Development Society and the School of Graduate Studies. Approximately over 1000 students visited this fair. The next fair will be held on November 11, 2016.
- c) Career Centre Seminar – Resumés/CVs for Graduate School and Research – November 12, 2015 (4:00 pm to 4:45 pm). The next seminar will be held on January 25, 2016 (3:00 pm to 4:00 pm), JJR MacLeod Auditorium.
- d) Graduate Alumni Panel Discussion was held on November 12, 2015 (5:00 pm to 6:00 pm). GLSE invited 7 alumni to talk about their graduate school experience and current career.

2. Awards

Undergraduate Faculty Teaching Awards

Four awards will be adjudicated in three categories.

- Excellence in Undergraduate Teaching in Life Sciences
- Excellence in Undergraduate Laboratory Teaching in Life Sciences

- Excellence in Linking Undergraduate Teaching to Research in Life Sciences

Each awardee will receive a framed certificate and \$1,000 cash prize.

Deadline: January 29, 2016

Undergraduate Research Opportunity Program

115 UROP awards were allocated to 10 departments within the Faculty of Medicine. Support is set at \$2,000 per student. The students must be guaranteed at least an additional \$2,000 in compensation from other sources managed by the sponsoring department / centre / institute / program, and are expected to engage in full-time research for at least 12 weeks in the summer.

Deadline: April 1, 2016

University of Toronto Excellence Awards (NSERC & SSHRC)

University of Toronto Excellence Award (UTEA) program is funded by the Vice-President Research. The UTEA program provides eligible undergraduate students with opportunities to conduct summer research projects under the supervision of eligible U of T faculty members. The value of each 2016 UTEA is TBD, and the research term required is 14 weeks.

Deadline: April 1, 2016

GLSE Undergraduate Leadership Awards

Three annual undergraduate student leadership awards in life sciences will be awarded to undergraduate students in the Faculty of Medicine, Arts and Science Programs to be recognized for their leadership and scholarship.

Each awardee will receive a framed certificate and \$500 cash prize.

Deadline: March 4, 2016

GLSE Undergraduate Summer Research Studentship

Seven annual summer research project studentships will be awarded to our third or fourth year major and/or specialist students in our Basic Science departments and in Laboratory Medicine and Pathobiology. The award carries a value of \$4,800 each. The award period is from May 1 – August 31, 2016.

Deadline: April 1, 2016

3. Website

- GLSE is working with the Office of Communications at the Faculty of Medicine on a new initiative to implement Google Analytics to improve our recruitment as well as alumni tracking. The following departments have agreed to participate, Institute of Medical Science, Translational Research Program, Biochemistry, Molecular Genetics, Physical Therapy, Occupational Science and Occupational Therapy and Speech-Language Pathology.
- Update the GLSE website

4. Recruitment Strategies

- Graduate Student Ambassador postcards

Graduate Education

1. Summary of Academic Changes at the Faculty of Medicine

- a. Below is a snapshot of academic changes that have been approved in 2015/16

Number of New Courses	4
Changes to Admission Requirements	1
Change in course weights/rename course	1
Add new degree to existing Collaborative Program	2
Other minor modification	2

2. External Reviews

The following graduate units/graduate programs were externally reviewed in Fall 2015:

- Molecular Genetics
- Rehabilitation Sciences (MSc and PhD program only)

3. Graduate Awards/Initiatives

a) Merit Entrance Scholarships (MES)

The MES centralized recruitment strategy has been changed to adjudication through the individual participating Graduate Units and no longer through the Office of the Vice Dean, GLSE.

b) Graduate Faculty Teaching Awards

The Graduate Faculty Teaching Award Competition deadline was on December 4, 2015. Six awards will be adjudicated in three categories:

- Early Career Excellence in Graduate Teaching & Mentorship
- Continuing Excellence in Graduate Teaching & Mentorship
- Sustained Excellence in Graduate Teaching & Mentorship

Each awardee will receive a framed certificate and \$1,000 cash prize.

c) Queen Elizabeth II Graduate Scholarships in Science and Technology (QEII-GSST)

To better align QEII-GSST application process with the School of Graduate Studies, starting 2016-17 award year, students no longer apply with a hardcopy Cover Page and must now submit an online Cover Page using the Faculty of Medicine website.

d) Weston Brain Institute International Fellowships in Neuroscience

The second year of the Weston Brain Institute International Fellowships in Neuroscience has now been announced under the auspices of GLSE. \$30,000-\$60,000 (6-12 months) will be awarded to Canadian graduate students from the University of Toronto conducting research in neurodegenerative diseases of aging. This award enables outstanding students to travel to and work in world-renowned labs to further their research. The goal is to build international collaborations, foster influential neuroscience research and bring enhanced research capabilities back to Canada.

e) Health Innovation Hub (H2i) Campus Linked Accelerator Program at the Faculty of Medicine

Since May 1, 2015, the Graduate and Life Sciences Office (GLSE) have taken oversight of the finances for the Health Innovation Hub (H2i) program. This program is part of the University's Campus Linked Accelerator initiative funded by the Ontario Government. Professors Paul Santerre and Joseph Ferenbok are the appointed Co-Directors of H2i. The mission of the program is to enable, collaborate, educate and facilitate student initiated translation of health matters. The initiatives that have been launched during the fall 2015 include:

- **MaRS Get Your Bot On!** (Sept 11- 13th, 2015) – H2i Sponsor
- **Lean Startups & financing**--MaRS Seminar Series (Oct – Nov, 2015);
- **IP Confidential** (Early Oct, 2015) – Workshop on BioTech IP
- **Techna Symposium** - Big Machine: Healthcare Built to Learn (Oct 30, 2015)
- **Hacking Food** – student focused initiative to end hunger in GTA (three seminars 2015/2016)
- **Hacking Healthcare 4 Innovation** (H24i) – ‘problem’ to ‘proof’
 - Identify Problems (Sept – Oct)
 - Ideation Hackathon (Nov 20, 2015)
 - Proof-of-Concept (Jan-Apr 2015)

Council of Education Vice Deans Faculty Council Report

April 25, 2016

Submitted on behalf of:

Dr. Allan Kaplan, Vice Dean, Graduate and Academic Affairs

Dr. Jay Rosenfield, Vice Dean, MD Program

Dr. Salvatore Spadafora, Vice Dean, Post MD Education (PGME & CPD)

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Office of the Education Vice Deans, Integrative Activities

1. 14th Annual Education Achievement Celebration

The Faculty of Medicine's **14th Annual Education Achievement Celebration** will be held on **Wednesday, May 11th, 2016** from **5:30–7:30pm** in the **Great Hall at Hart House**. This annual evening of celebration hosted by the Education Vice Deans is a Faculty-wide forum to recognize and showcase excellence in teaching and education. We are pleased to announce that this year's **C.I. Whiteside Education Achievement Keynote Address will be delivered by Dr. Herbert Ho Ping Kong**. To RSVP, please visit: <http://tinyurl.com/goq3uzw>

2. Spring Call for Awards

Every spring and fall, our Faculty's Teaching and Education Awards Committee recognizes individuals who are making significant contributions to medical education. Faculty members who are demonstrating excellence in teaching, education scholarship and leadership in education, are recognized for their contributions by supporting their nomination to a diverse selection of awards. These awards fall under the following 8 categories:

- Early career achievement
- Career achievement and sustained excellence
- Excellence in clinical teaching
- Innovation
- Equity, diversity and gender
- Mentorship
- Program development
- Faculty development

At this time, we welcome nominations for the following awards:

Early Career Achievement

- [CAME New Educator's Award](#)
- [CMA Award for Young Leaders](#)

Career Achievement and Sustained Excellence

- [CAME Ian Hart Award for Distinguished Contribution to Medical Education](#)
- [RCPSC Duncan Graham Award](#)
- [UofT President's Teaching Award](#)

Mentorship

- [CMA May Cohen Award for Women Mentors](#)

Program Development (Incorporating CanMEDS Roles into a Health-Related Training Program)

- [RCPSC Donald R. Wilson Award](#)

To access the electronic nomination form, please visit: <http://www.medicine.utoronto.ca/form/internal-nomination-form-external-teaching-awards>.

Please note: to ensure sufficient lead time for adjudication and preparation of nomination dossiers, the *internal* nomination deadlines are set well in advance of deadlines for final submission.

Please submit online nomination forms and supporting documentation by **5pm** on **Friday, May 27, 2016**.

This deadline will be strictly observed and late nominations will not be accepted. Supporting documentation should be submitted electronically to edudeans@utoronto.ca.

For questions, please contact the Office of the Education Vice Deans, edudeans@utoronto.ca.

3. Community Based Teaching Awards 2016

Established by the Faculty of Medicine in 2012 these awards acknowledge the significant contribution of an increasing number of University of Toronto community-based teachers to the learning of medical students and residents at the University of Toronto. The first award recognizes excellence in community-based clinical teaching in a Community Hospital, the second award recognizes excellence in community-based clinical teaching in a Clinic or Office setting, and the third award recognizes sustained excellence in community-based clinical teaching.

The awards are presented at the Faculty of Medicine's Annual Education Achievement Day Celebration, which will be held on May 11, 2016. Below is a complete list of Award Recipients:

- Dr. Nina Horvath, Department of Family & Community Medicine, in the category of Excellence in Community-Based Teaching (Community Hospital)
- Dr. Rosa Braga-Mele, Department of Ophthalmology & Vision Sciences, in the category of Excellence in Community-Based Teaching (Clinic/Office)
- Dr. Jeff Weissberger, Department of Family & Community Medicine, in the category of Sustained Excellence in Community-Based Clinical Teaching

4. Staffing Announcement

We are pleased to announce that Morag Paton will be seconded into the role of Project and Administrative Manager in the Office of the Vice Deans, Education while Lindsey Fectig is on maternity leave (April 15th, 2016 returning May 8th, 2017). Morag previously held the position between August 2007 and June 2013 prior to moving to the Department of Family and Community Medicine to support the growth of the Office of Education Scholarship. Morag will be joining the office effective Monday April 4th to commence the transition. As of April 15th all Education Vice Deans related enquiries and correspondence should be directed to morag.paton@utoronto.ca. Awards and Education Achievement Celebration related enquiries should continue to be sent to edudeans@utoronto.ca.

Undergraduate Medical Education (MD) Program

1. CaRMS 2016 Match Results

The following are initial statistics; more will be available over the next few months.

92% (237 of 257) of UofT students who applied to Canadian residency positions were matched in the first iteration of CaRMS, which is slight decrease from our 2015 first iteration match rate (95%) and slightly less than the 2016 national average (94%). The match rate of MAM students (91%) is consistent with the match rate of the overall UofT class.

Of the UofT students who were matched in the first iteration of CaRMS:

- 35.4% of the overall UofT class and 35.8% of MAM students matched to Family Medicine, which is consistent with our vision of and commitment to social accountability
- 48.1% matched to UofT residency programs
- 76.4% matched in Ontario

We are actively working with our students who did not match in the first iteration to help them prepare for the second iteration.

2. Admissions

Interviews of candidates for September 2016 entry were held on February 27 and 28, March 12 and 13, and April 10.

MD Program

	Sept 2014 entry	Sept 2015 entry	Sept 2016 entry
Applicants	3463	3488	3118
In-depth/ full file review	1990	1777	1934
Interviews	600	599	599

MD/PhD Program

	Sept 2014 entry	Sept 2015 entry	Sept 2016 entry
Applicants	123	102	95
In-depth/ full file review	88	83	82
Interviews	46	47	37

3. Curriculum

Computing for Medicine

Providing medical students with a variety of educational opportunities that complement the objectives of the MD program's core curriculum is an important strategic direction for UME. Computing for Medicine, which was profiled in the [March 9, 2016 MedEmail](#), is a new "MD plus" program that launched in late February under the leadership of Dr. Marcus Law, Director of Preclerkship Renewal and Academic Innovation. Offered in collaboration with the Department of Computer Science, Computing for Medicine is a 14 month course that provides MD students with a coding boot camp, further coding exercise, and seminars that focus on knowledge application. A total of 61 first and second year MD students enrolled in the first offering of the course, which will be offered again next year to the first cohort of UME's new Foundations curriculum.

Foundations Curriculum

The redevelopment of the first two years of the MD program, traditionally called the preclerkship, and which we are now calling the [Foundations Curriculum](#), is on schedule. The new curriculum will be launched for students entering the MD program in August 2016. It will feature a highly integrated program with clinical content from the beginning of medical school, early exposure to patients and the community setting, extensive use of online materials to support learning, and an assessment program designed to support learning. Activity is occurring on multiple fronts to ensure a smooth implementation of the new curriculum.

With respect to curriculum development, a comprehensive blueprint of learning outcomes for each course has been created, and detailed course-level design is well underway. A variety of resources that new and returning faculty can take advantage of to prepare to teach the new curriculum are also being developed. The development of a new programmatic assessment model that aligns with integrated approach of the new curriculum is also well underway.

Longitudinal Integrated Clerkship (LnC)

In 2016-17, there will be a total of 27 LnC students, comprised of eight students at each of the FitzGerald and Peters-Boyd Academies and 11 students at the Wightman-Berris Academy. Since the initial pilot offering in 2014-15, which involved seven students at the FitzGerald Academy, the LnC has continued to grow towards its ultimate goal of having 50 students (approximately 20% of the class) in a LnC on an ongoing basis. To help support achievement of that goal, the Mississauga Academy of Medicine has committed to offer a LnC in 2017-18.

4. Governance and Leadership

- Dr. Katina Tzanetos was appointed as UME Faculty Lead for Clinical Skills. In that role, she is responsible for the overall integrated design, development, implementation, and evaluation of the various curricular elements in the MD program to develop competencies in clinical skills.
- Dr. Eugenia Piliotis was appointed as Peters-Boyd Academy Director, effective February 1, 2016 for a five year term. Dr. Piliotis has been serving as Interim Academy Director since July 2015.
- Dr. Adrienne Tan was appointed as Interim Medical Psychiatry Alliance (MPA) Fellowship Lead for a six month term, January to June 2016. In that role, she will focus on the development and

delivery of MPA fellowship training to physicians and other healthcare professionals. These initiatives will align with the UME MPA activities to bridge training across the learner continuum.

5. Awards

- Dr. Martin Schreiber, Director of UME Curriculum, was recognized as a 2016 3M National Teaching Fellow by 3M Canada and the Society for Teaching and Learning in Higher Education. He was honoured for his exceptional contributions as a medical educator and as a committed leader in medical education.
- Dr. Lori Albert, course director for Mechanisms, Manifestations and Management of Disease in the current Preclerkship curriculum and course director for Concepts, Patients and Communities-1 in the new Foundations curriculum, received the Canadian Rheumatology Association 2016 Teacher-Educator Award. She was recognized for her many contributions to medical education in rheumatology.

6. Office of Health Professions Student Affairs

Although facilitated study groups, such as PREP, are generally characterized by a marked decline in student participation, this year's sessions continued to attract a significant number of students throughout the term. Evaluations of sessions suggested that participants found the use of interactive worksheets, charts and diagrams "really useful," and they appreciated the PREP Leaders' organization, dedication and enthusiasm.

We have introduced PREP sessions for the OT Program.

Four submissions from the Counselling team—academic, career and two from personal counselling—were selected to present at the 2016 CCME in Montreal, Quebec.

The Summer Mentorship Program (SMP) is entering its 22nd year. We are currently in our early application process (of two) and have received 64 applications. Six of those applications are from Indigenous students which represents an increase over this time last year.

The 2015 SMP cohort had 61 students, including 11 Indigenous students.

Counselling—This year's academic year is reported from August 1 to April 1. Previous years are reflected as August 1 to July 31.

Number of sessions per department:

	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16 Aug-April 1
Personal	640	837	852	962	1075	1394	886
Career	360	450	825	1415	1711	1577	1273
Academic	51	49	48	46	116	139	45

Students							
	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Personal	164	193	189	245	263	284	162
Career	203	247	476	732	738	681	625
Academic	51	59	48	29	62	84	35
Associate Dean	203	168	224	225	211	163	123

7. Physician Assistant Program

HR Changes/Developments

The BScPA Program is expanding its number of appointed faculty. In 2015-16, two additional Physician Assistants (PAs) have received academic appointments in the Department of Family & Community Medicine at the rank of Lecturer, Status only. As practicing PAs, the experience of these educators provides students with the additional perspectives of the real world in this growing profession.

Reorganization of the Program structure continues in our move to a sustainable model of efficiency while maintaining student focus. In April 2015 the clinical office restructured to a part-time Clinical Course Director and a full-time Clinical Placement Officer. In Fall-Winter 2015-16 a Search Committee was established to fill the position of Program Director, as part of the restructuring initiatives. This new position will allow for a division of tasks and responsibilities for the Medical and Program Director, respectively. The intention is to focus the Medical Director role on clinical and academic liaison activities.

Along with internal reorganization of the Program, oversight has evolved. The Department of Family & Community Medicine (DFCM) remains the degree-granting department for the BScPA Program, and the Vice Dean, MD Program remains involved to support the integration of the PA program with UME activities. As of January 2016, the decanal oversight of the BScPA Program falls under the portfolio of the Vice Dean, Partnerships, which also provides the PA program with continuity of leadership.

Evaluation

The Program continues to arrange significant opportunities for students to provide feedback on guest lecturers, courses, Course Directors, clinical placements and the program in general. The annual Course report process has been solidified, with Course Directors submitting these reports prior to annual review meetings with the Program leadership, with a focus on adjustments or updates for the next iteration of the course.

A Graduate Census survey was conducted in October 2015. Seven out ten of our graduates feel that the format of the Consortium of PA Education Program assisted them in finding a job in the area of need. Notable quotes from graduates on their overall satisfaction include:

- “PA’s work is really appreciated!”
- “I feel well trained and prepared as a PA entering practice”
- “I currently love my job...”
- “I feel like I have learned so much since graduation...I do feel that the gap needs to be solidified with regulation of our profession”

Curriculum

In October 2015, the Canadian Association of Physician Assistants (CAPA) released CanMEDS-PA 2015 to replace the former National Competency Profile for Physician Assistants.

The BScPA Program held a Curriculum Retreat in March 2016 where we completed a matrix exercise with our Course Directors and student representative. The main objective of this retreat was achieved: to incorporate the revised competencies into our existing courses. Additional work was done on various key curriculum themes, in efforts to scaffold content and integrate across the program. The goal to



deliver the revised curriculum for September 2016 is realistic and attainable. Significant team building activities allowed for safe and creative discussion, especially when we wore different “hats” in order to share our perspectives. The growth and evolution of the PA program is apparent.

8. MRS Program

2015/2016 MRS Program Enrollment:

- Total Program Enrollment: 257
- Radiological Technology: 110
- Nuclear Medicine and Molecular Imaging Technology: 36
- Radiation Therapy: 111

UHN/Michener Integration

The following is the communication that was sent out to all stakeholders regarding the UHN/Michener integration. At this time there is nothing to update on how this integration will impact the MRS Program.

The Michener Institute of Education at UHN

In 2016, The Michener Institute for Applied Health sciences integrated with University Health Network to become The Michener Institute of Education at UHN. This Canadian-first model for health care education brings together a diploma-granting education institution with an academic health sciences network within a single organization.

The Michener Institute plays a significant role in anticipating and meeting health labour force needs. The integration between Michener and UHN strengthens that role by more deeply embedding teaching in daily clinical practice and research and the country’s biggest teaching hospital and health facility.

Integration presents an opportunity to develop a model of health care education that will:

- Strengthen the role of education as a fundamental part of Ontario’s health system, ensuring quality care and patient safety;
- Create the capacity to rapidly adapt health professional training to meet pressing challenges and to seize new opportunities for innovative health care education solutions;
- Leverage expertise, capacity, scope and scale across the health care continuum by integrating both organizations, which already have established a strong and rich history of partnership and collaboration and which share similar commitments to quality education;
- Integrate education, research and clinical practice; and
- Be the ‘go-to’ applied health solution provider for Ontario.

As we move forward together with UHN, Michener is poised to have a lasting influence on our health care system. Our students, and the commitment to exceptional student experiences, remain at the heart of this vision.

Accreditation

In January the MRS Program received the following communication from the CMA that they were divesting responsibility of accreditation services.

To Program contacts of CMA accredited and registered programs

CMA Accreditation announced today that it will divest itself of responsibility for assessing and accrediting health education programs within the next 24 months.

NewCo – CMA’s newest company and CMA Accreditation’s governing body – has a service delivery mandate that puts an intense and strategic focus on the personal and point of care needs of individual physicians. Following an extensive program review, it has become apparent that accreditation functions lie outside that mandate.

CMA Accreditation is embarking on a responsible exit from these accreditation activities and intends to work closely with all stakeholders.

Current operations

CMA Accreditation will continue to operate for up to 24 months and scheduled accreditation activity within that period will continue to be offered. Given the implications beyond the 24 month period, new applications will not be accepted.

Transition planning

CMA Accreditation will be working with stakeholders to identify go-forward solutions that ensure a smooth transition for everyone involved.

The Canadian Association of Medical Radiation technologists (CAMRT) in collaboration with 9 other professional associations, including CAPA (Canadian Association of Physician Assistants) are working towards a collaborative solution.

Post MD Education (PGME & CPD)

PGME Section

1. Governance, Leadership

Dr. Glen Bandiera was reappointed as Associate Dean, Postgraduate Medical Education for a second five year term beginning July 1, 2016.

Dr. Bandiera is a Professor in the Department of Medicine at the University of Toronto and Chief of Emergency Medicine at St. Michael's Hospital. As Associate Dean, PGME, Dr. Bandiera has the oversight of all accredited postgraduate programs. He also is the PGME lead for Competency-Based Medical Education (CBME). Nationally, he is past Chair of the Committee on Accreditation and Chair of the Specialty Committee, Emergency Medicine at the Royal College and has served as President of both the Canadian Association for Medical Education (CAME) and the CAME Foundation.

Dr. Bandiera has won the Department of Medicine Educator of the year award, the Goldie Award for Education, and the Robert Hyland Mentorship Award for his impact as a mentor. Within the Faculty he was awarded the Mickle fellowship for postgraduate medical education, and has twice won the Helen P. Batty Award for Excellence and Achievement in Faculty Development. Dr. Bandiera has been instrumental in the development of standardized assessment tools for teachers and residents and has recently overseen the development of a national approach to residency selection. He is viewed as an expert in the development of assessment forms and takes on a mentorship role regarding improvements to the rotation, teacher, and resident evaluation methods used in the Faculty. He has authored over 100 peer-reviewed publications and presented over 250 invited lectures, workshops or seminars related to education.

2. Competency Based Medical Education

In 2011, the College of Family Physicians of Canada revised their residency education into the "Triple C" competency based curriculum. "Triple C" stands for (i) Comprehensive care and education (ii) Continuity of care and education and (iii) Centred in Family Medicine. Family Medicine has been developing assessment and feedback tools to make sure residents obtain necessary information about their achievement of targets in this curriculum.

The Royal College of Physicians and Surgeons of Canada (Royal College) has moved to a new framework for residency education with the launch of CanMEDS 2015 this past year, with implementation to follow in 2016. In addition, the Royal College has established Competency by Design (CBD) as its new educational approach for competency based education.

The Royal College recently made a decision to delay the implementation for the inaugural 2 CBD programs (Otolaryngology- Head and Neck Surgery and Medical Oncology), pending further

consultation. In the meantime, PGME at U of T is moving forward with pilot testing the CBD implementation to ensure programs are well supported and coordinated with assessment tools, faculty development and learner preparation. A newsletter for CBME at PGME U of T was distributed in November 2015 and March 2016.

As of February 1st, Susan Glover Takahashi is PGME's central lead in supporting programs in their transition to CBME. This has resulted in a realignment of resources within Post MD to manage this new focus.

3. Accreditation

The University of Toronto is 3 years through the 6 year accreditation cycle, leading to the RCPSC and CFPC external survey visit currently scheduled for 2019. The Internal Review Committee, a standing committee of the Postgraduate Medical Education Advisory Committee, has reviewed approximately 40 specialty programs as part of our mandated quality assurance process. Internal Reviews have also been completed at 8 of the 15 Family Medicine training sites and the Family Medicine Internal Review Subcommittee held its first official meeting in March. Since the February 2016 report to the Faculty Council, the Emergency Medicine, General Surgery, Urology and Adult Respiratory programs have been granted an accreditation status of Accredited Program with follow-up by Regular Survey by the Royal College of Physicians and Surgeons of Canada.

4. Conferences, Workshops, Leadership, Faculty Development

The Canadian Conference on Medical Education (CCME) will be held in Montreal April 15 – 19, 2016. The theme is "Accountability from Self to Society" with participation, presentations, and posters from PGME faculty and staff.

As part of its continued outreach and administrative support to residency program administrators and hospital medical education office staff, PGME offered 7 sessions in the December-March period, including topics such as internal reviews, What's new in POWER, Board of Examiners, remediation, Resident Wellness, along with presentations by CPSO, Touchstone Institute and the Royal College of Physicians and Surgeons of Canada.

During this same period, 4 Program Director development workshops were held regarding CanMEDS 2015, Competency Based Education, and Internal Review documentation.

PGME recognizes the important leadership role played by chief residents and provides ongoing support necessary to them as they tackle the challenges of holding a peer-leader role. A Chief Residents Leadership and Networking Forum was held in February 2016.

A Post MD Appreciation event was held on March 2, 2016 to acknowledge the leadership role of our Post MD faculty in educating tomorrow's health professionals and academic leaders.

5. CaRMS Results 2016

Residency intake positions at the Ontario medical schools were reduced by 25 positions for the 2016 CaRMS match. UofT's portion of the reduction was 9 positions, bringing our quota for the 2016 CaRMS match to 407. All 407 PGY1 positions filled in the first iteration. For the fourth year in a row, the University of Toronto is the only medical school in Canada to fill all of its positions in the first round. Of the 407 filled positions, 337 were filled by Canadian Medical Graduates and 70 were filled by International Medical Graduates. The breakdown of our filled positions is below:

U of T - 2016 1st Iteration PGME CaRMS Match Results			
Discipline	CMG Positions	IMG Positions	Total
Anesthesia	14	4	18
Cardiac Surgery	1		1
Dermatology	4		4
Diagnostic Radiology	8	2	10
Emergency Medicine	7	3	10
Family Medicine - GTA	114	20	134
Family Medicine - Barrie/Newmarket	14	4	18
Family Medicine - Rural	8		8
Family Medicine Integrated Research	1		1
General Surgery	10	3	13
Internal Medicine	53	11	64
Laboratory Medicine	4	3	7
Medical Genetics		1	1
Neurology	4	3	7
Neurology - Pediatric	1	1	2
Neurosurgery	4		4
Obstetrics & Gynecology	10	2	12
Ophthalmology	4	1	5
Orthopedic Surgery	7	2	9
Otolaryngology	5		5
Pediatrics	15	4	19
Physical Med & Rehab	3	1	4
Plastic Surgery	4		4
Psychiatry	32	4	36
Public Health and Preventive Medicine	1		1
Radiation Oncology	3		3
Urology	4	1	5
Vascular Surgery	2		2
Subtotal	337	70	407

The 337 U of T PGME positions for Canadian Medical Graduates were filled by:

- 115 U of T graduates
- 143 from other Ontario medical schools
- 77 from other Canadian medical schools
- 2 from the U.S.

6. Awards

- Dr. Susan Edwards, Director, Resident Wellness was the 2015 recipient of the Resident Doctors of Canada Puddester Award for Resident Wellness. Award winners are those who exemplify creativity and leadership to improve and promote resident wellness and bring about positive, long term improvement to resident wellness in Canada. The award will be presented at the annual Canadian Conference on Medical Education in Montreal, April 17, 2016.
- Dr. Sarita Verma is the 2016 recipient of the Charles Mickle fellowship. The Mickle is awarded annually to a physician who has “done the most within the preceding 10 years to advance and promote sound knowledge of a practical kind in medical art or science by careful and thorough work”. The award will be presented at the Faculty’s annual Education Achievement Celebration on May 11, 2016.

7. Graduation Events

PGME, in conjunction with the Faculty of Medicine’s Advancement Office, has been supporting the graduation events of clinical departments. Events include distribution of certificates and awards, remarks from department chairs and the Associate Dean PGME, reception, photographs, music and activities for children.

To date, the following events have been scheduled for 2016:

Department	Day	Date
Medicine	Wed	25-May
Otolaryngology	Wed	8-Jun
Radiation Oncology	Wed	15-Jun
Medical Imaging	Thurs	16-Jun
Psychiatry	Thurs	16-Jun
Anesthesia	Wed	22-Jun
ObGyn	Thurs	23-Jun
Pediatrics	Mon	27-Jun

8. Global Health

The 2016 Global Health Day will occur Thursday June 9, 2016 from 12 noon to 5 pm at the McLeod Auditorium. The theme is “Health Beyond Borders” with Dr. James Orbinski to deliver the opening address on the “State of Humanitarianism “. The graduation ceremony for the 2016 class of residents in the Global Health Education Initiative will also take place at the event.

Applications for the Global Health Education Initiative (GHEI) Class of 2018 continue to be received.

9. Projects/Initiatives

The Vice Deans received the Report from the external consultants (Ambit) with results of the environmental scan of Learner Management Systems available to support both PGME and UGME needs related to registration, evaluations and other functions. The decision was made to continue the relationship with Knowledge4You with an anticipated move from POWER and MedSIS to MedSIS 3C. PGME has begun the process of analyzing and reassessing our workflow processes to ensure fit within MedSIS 3C.

The Fellowship Education Advisory Committee (FEAC) was established in 2009 as a source of advice to the now Vice Dean, Post MD Programs on the oversight of clinical fellowship training and the management of fellowship issues. The FEAC is preparing a report to provide a comprehensive review of all FEAC activities, products and accomplishments to be published in June 2016.

Over 1,000 international learners are registered annually with PGME. PGME has been liaising with university HR & Equity to ensure that significant, new immigration requirements, processes, and fees do not negatively affect our international learners and training programs.

Diversification of our international learners continues with new training contracts signed with Bahrain, Kuwait.

Registration - Our hospitals now require all trainees to complete 7 mandatory Hospital Health and Safety Policy (HHSP) Modules prior to the start of training at their sites. Five modules are located within POWER:

- Hand Hygiene
- Sharps Safety
- Privacy and Personal Health Information
- Workplace Violence and Harassment
- WHMIS

Two HHSP modules which are a new requirement for 2016-17 are located outside of POWER. They are:

- Worker Health and Safety Awareness
- Working Together: The Code and the AODA (Accessibility for Ontarians with Disabilities Act)

PGCorEd is a series of self-directed multimedia web-based learning modules for PGY1 and PGY2 residents, covering topics in the CanMEDS 2015 Physician Competency Framework. PGCorEd has been refreshed with CanMEDS 2015 content and improved design functionality and is accessible from any mobile device. **Teaching in Residency** is the first module to launch in the new **PGCorEd** series. We anticipate that there will be approximately 6-8 modules launched by January 2017.

Continuing Professional Development Section

1. Governance, Staffing

The CPD Office is in the process of a 5-year review of our strategic plan with a goal of alignment with the priorities of Faculty of Medicine.

Connecting with our audience in new ways continues to be a focus for CPD. To assist in this effort, the CPD Marketing and Communications team has expanded to include a Digital Communication Strategist. On March 1, the team welcomed Mark Berkovich to this new role. Mark has a background in recruitment and communications with U of T and will support the development and implementation of social strategies to connect with our learners. He will also be responsible for CPD's web presence including our main page and conference sites.

2. CPD Academic

Continuing Professional Development has continued to provide excellence in academic programming. The number of accredited courses continues to grow annually, and while the majority are live events, increasingly innovative methods of learning are being incorporated into courses and conferences, including web-based and simulation-based learning.

The 2-day IDEAS Quality Improvement course continues to attract a wide audience from across all professions and sectors. All our courses for 2015-2016 were fully subscribed and an extra winter session was added due to high demand. We are now working with Trillium Health Partners to develop a customized course for physicians at that site. The Safe Opioid Prescribing Course and Medical Record Keeping Courses continue to be successful with excellent evaluations and feedback from participants. The International Foundations CPD Certificate program was successfully launched in October 2015 and consists of 10 monthly 1.5 hour webinar based sessions.

The 2015 CPD Award winners were announced as follows:

- *Colin Woolf Award for Longterm Contribution to CPD - Dr. Shelly Weiss and Dr. Vincent Chan*
- *Colin Woolf Award for Excellence in Course Co-ordination - Dr. Yvonne Chan, Dr. Allen Vescan and Dr. John Lee for Rhinology Update 2015*
- *CPD Interprofessional Health Care Team Award - Dr. Diana Kljenak for Department of Psychiatry, 8th Bi-Annual Community Education Day: Who's Afraid of Borderline Personality Disorder? Using strategies from dialectical behaviour therapy with emotionally deregulated patients*

- *Ivan Silver Innovation Award - Dr. Kazuhiro Yasufuku for the Endobronchial Ultrasound Program*
- *Fred Fallis Award for Excellence in Distance Learning - Dr. Peter Selby for TEACH (Training Enhancement in Applied Cessation and Health) Program*
- *David Fear Fellowship - Dr. Rene Wong*

Dr. Schneeweiss is taking part in a CPD Ontario task force on Physician Assisted Death (PAD) for review of upcoming physician education and resources based on the new federal legislation.

University of Toronto CPD was represented at the World Congress of CPD in San Diego, California with workshops and posters by various faculty members including Dr. Jamie Meuser, Dr. Savithiri Ratnapalan, Dr. Ivan Silver, Dr. Suzan Schneeweiss, Ms. Jane Tipping and Dr. David Wiljer.

Dr. Schneeweiss continues to work with members of the Royal College of Physicians and Surgeons of Canada to develop a white paper addressing the transition to competency-based CPD. Results will be discussed at the National Competency-Based CPD Summit in May 2016. In addition, as undergraduate medical education moves toward a competency-based framework, Dr. Schneeweiss continues to work with this group in the development of competencies and milestones in lifelong learning.

3. CPD Enrolment & Accreditation

The number of accredited course offerings continues to grow. An enrolment report for fiscal year 2015-2016 will be provided in the next Council report.

4. Global and Indigenous Health CPD

Building on the success of the inaugural Indigenous Health Conference (IHC): Challenging Health Inequities, the next biennial *Indigenous Health Conference: Towards Health and Reconciliation* will take place May 26-28, 2016. In keeping with the TRC recommendations, a primary objective of this conference is to give health care providers skills and knowledge to improve cultural competency and safety for Indigenous populations. IHC fosters dialogue between Indigenous and non-Indigenous participants. We have received over 200 abstract submissions and are anticipating 500 to 700 participants. The job fair includes recruiters from Nunavut, Labrador, Sioux Lookout, Northern Winnipeg, and other underserved regions. Chief Wilton Littlechild from the TRC will be a keynote speaker. Also speaking are Chief Isadore Day from Assembly of First Nations, President Natan Obed from Inuit Tapiriit Kanatami, and the president of Métis Nation of Ontario. There will also be a panel on the impact of the environment on Indigenous Health with Dr. David Suzuki.

We are making plans for the North American Refugee Health Conference, which is the largest conference on refugee health globally. In keeping with current world events, our theme will be the Syrian Refugee crisis. We will have speakers from UNHCR, CDC Atlanta and Refugee Health experts from all over Canada. It will take place at the Sheraton Hotel June 12-14, 2017.

5. Innovations and Education

Innovations and Education's mandate is to help faculty and departments develop sustainable education-based programs and assets. Innovations and Education continues to grow its portfolio of projects. Innovations and Education regularly delivers key services related to business development, communications, legal review, marketing and reputation management for education programs.

Since the last report, some recent activities and accomplishments include:

- i. **Innovations and Education is working with Faculty in the Department of Paediatrics to develop a fully accredited online CPD program called ImageSim.** Innovations and Education developed the communications and reputation strategy as well as the business plan for the program. The website is now live and the program is approaching launch shortly. <http://www.imagesim.com/>
- ii. **Innovations and Education continues to host the Innovating Education Seminar Series (<http://innovatingedu.ca/iess/>).** Recent seminars include: (A) "eLearning Strategies and Resources at the University of Toronto" hosted by Laurie Harrison from the University of Toronto's Office of Online Learning Strategies. The seminar resulted in a resource for faculty interest in eLearning resources at the University of Toronto (Resource link:<http://innovatingedu.ca/project/elearning-strategies-and-resources/>). (B) "Entrepreneurs in Education", hosted by SynapTop. (<http://innovatingedu.ca/synaptopeie/>).
- iii. **The International Pro-Resilience and Efficiency Program (iPREP) is a new continuing education program for police officers and use of force trainers.** Innovations and Education is working with faculty to develop and support the iPREP program's accreditation through CPD, as well as its communications and reputation management strategy. Recently, Innovations and Education was successful in fostering an MOU between the University of Toronto (on behalf of iPREP) and Peel Police. This MOU supports a collaboration to further validate the iPREP training paradigm with Peel Police Officers. A press conference and with a press release was done to announce the collaboration. For more information see: <http://proresilience.org/peelpolicepartnership/> and <http://medicine.utoronto.ca/news/u-t-brings-science-based-use-force-training-peel-police>
- iv. **Innovations and Education is working with Health Canada, The Canadian Diabetes Association and Pulse Canada to develop a CPD workshop to be held at the Indigenous Health Conference (<http://www.cpd.utoronto.ca/indigenoushealth/>).** We are also working with these stakeholders to develop an online CPD based on the materials presented at the workshop.
- v. **Innovations and Education is working with the SPOR Network in Diabetes and Related Complications.** This is a newly formed national network funded by CIHR and several high-profile partners (see: <http://www.spornetworkdiabetes.ca/partners/>). We are working to support the Network's communications needs and help develop their identity. Currently, we built a phase-1 web presence for the group in time for an important announcement by Federal Health Minister

Jane Philpott (<http://www.spornetworkdiabetes.ca/press-release/> and <http://www.spornetworkdiabetes.ca/>).

6. Standardized Patient Program (SPP)

As a result of the SPP incurring significant financial losses over the last three years, the decision was made to refocus the unit on supporting the core mission of the Faculty of Medicine and its partners, while also continuing to support large licensure exams. The job responsibilities of all staff-appointed USW positions were reviewed and realigned to support this focus. Eleven USW positions are being eliminated and six new positions created. This change in staffing structure will be implemented over the next few months.

Graduate and Life Sciences Education (GLSE)

Undergraduate Life Sciences Education

1. Events

a) Fifth Annual Graduate and Undergraduate Research Information Fair

This fair was held on November 11, 2016, Medical Sciences Building (10:30 pm to 2:00 pm). Exhibitors in attendance included our undergraduate (8) and graduate units (14), as well as hospitals, Life Sciences Career Development Society and the School of Graduate Studies. Over 1000 students visited our fair.

Similar to last year, this event will include an Alumni Panel event to expose them to different career paths as well as advice in pursuing graduate studies.

2. Awards

a) Undergraduate Faculty Teaching Awards

Four awards were adjudicated in three categories:

i. Excellence in Undergraduate Teaching in Life Sciences

2015-2016 - Cindi Morshead, B.Sc., Ph.D. - Department of Surgery, Division of Anatomy

ii. Excellence in Undergraduate Laboratory Teaching in Life Sciences

2015-2016 - Ahlia Khan-Trottier, B.Sc., Ph.D - Department of Biochemistry

iii. Excellence in Linking Undergraduate Teaching to Research in Life Sciences

2015-2016 - Jagdish Butany, MBBS, MS, FRCPC - Department of Laboratory Medicine and Pathobiology; Martin Wojtowicz, PhD - Department of Physiology

b) University of Toronto Excellence Awards (NSERC & SSHRC)

University of Toronto Excellence Award (UTEA) program is funded by the Vice-President Research. The UTEA program provides eligible undergraduate students with opportunities to conduct summer research

projects under the supervision of eligible U of T faculty members. The value of each 2016 UTEA is tated below and the research term required is 14 weeks.

- i. **UTEA-NSERC (4) - \$6,000: \$4,875 covered by VP Research, remaining by dept/supervisor**
 - Nutritional Sciences (1)
 - Pharmacology and Toxicology (1)
 - Laboratory Medicine and Pathobiology (2)

- ii. **UTEA-SSHRC (3) - \$6,000: entire amount covered by VP Research**
 - Occupational Science and Occupational Therapy (1)
 - Psychiatry (2)

3. Google Analytics

Collaboration with the Office of Communications (Ishita Luther), Institute of Medical Sciences (Michelle Rosen), GLSE presented the power of Google Analytics at the Graduate Administrators Meeting on February 26, 2016. Discovery Commons can generate Google Analytic reports which outline the number of unique visitors, city/country of such visitors and other related metrics for websites under their purview, including GLSE. Such reports can be insightful and help to monitor interest (in events), as well as inform and evaluate recruitment efforts.

Michelle presented on how Google Analytics has been used by IMS to track interest in their events and its impact on recruitment. Our GLSE Work Study Student, Shawn Xiong, reviewed how web traffic changed on GLSE website due to improvements of event logistics and advertising at our most recent Annual Graduate and Undergraduate Research Information Fair.

Graduate Administrators were encouraged contact Ishita to look at ways in which they could utilize Google Analytics to analyze trends and better engage graduate students.

Graduate Education

1. Summary of Academic Changes at the Faculty of Medicine

a. Governance Matters: Graduate Education Under the Portfolio of the Education Committee

As part of the faculty (divisional) governance process, curricular changes require 3 approvals: departmental level, GLSE Graduate Curriculum Committee (consultation and approval across all 13 graduate units) and Graduate Education Committee (consultation and approval from the overall faculty). However, there was an overlap in responsibilities since the membership of the Graduate Education Committee was identical to the GLSE Graduate Curriculum Committee. To resolve this matter, the Graduate Education Committee was dissolved as of September 2015 and all graduate education issues (e.g. minor and major modifications, new programs, program closures) will fall under the purview of the Education Committee of Faculty Council.

b. Curricular Changes

Below is a snapshot of academic changes that have been approved in 2015/16, as of March 31, 2016

Number of New Courses	10
Changes to Admission Requirements	1 ¹
Change in course weights/rename course	3
Change in Program Requirements	2 ²

¹This includes a proposal for an Advanced Standing Option in the MSc Occupational Sciences and Occupational Therapy program (major modification)

²This includes a proposal for a significant change in the MHS Medical Radiation Sciences program (major modification) and substituting a new course in the MHS Translational Research Program (minor modification)

c. Exit of Collaborative Programs to the Dalla Lana School of Public Health

As of July 1, 2015, 4 Collaborative Programs have left the Faculty of Medicine and went to the corresponding faculty:

- i. Dalla Lana School of Public Health
 - Aboriginal Studies
 - Health Services and Policy Research
 - Public Health Policy
- ii. Social Work
 - Aging and the Life Course

2. External Reviews

The following graduate units/graduate programs were externally reviewed in Fall 2015:

- Molecular Genetics
- Rehabilitation Sciences (MSc and PhD program only)

3. Graduate Awards

a) Graduate Faculty Teaching Awards

Seven faculty members were awarded in the following three categories:

- Early Career Excellence in Graduate Teaching & Mentorship Award
 - 2015-2016 – Paul Boutros – Department of Medical Biophysics
 - 2015-2016 – Brian Cox – Department of Physiology
- Continuing Excellence in Graduate Teaching & Mentorship Award
 - 2015-2016 – Jennifer Gommerman – Department of Immunology
 - 2015-2016 – Anthony Hanley – Department of Nutritional Sciences
- Sustained Excellence in Graduate Teaching & Mentorship Award
 - 2015-2016 – Dina Brooks – Department of Physical Therapy
 - 2015-2016 – Brian Cox – Department of Physiology
 - 2015-2016 – Reinhart Reithmeier – Department of Biochemistry

Each awardee will receive a framed certificate at the Education Achievement Celebration on May 11, 2016 and \$1,000 cash prize.

b) Queen Elizabeth II Graduate Scholarships in Science and Technology (QEII-GSST)

The 2016-17 QEII-GSST competition deadline for student applications is March 31, 2016.

c) JJ Berry Smith PhD Supervision Award

The JJ Berry Smith Doctoral Supervision Award recognizes outstanding performance in the multiple roles associated with doctoral (PhD) supervision. Two awards are offered annually: one in the Humanities and Social Sciences and one in the Physical and Life Sciences. The awards are presented at the Governor General's Medal reception ceremony in the spring. Recipients receive a JJ Berry Smith Doctoral Supervision Award certificate, an SGS Travel or Conference Award to grant a current doctoral student to support conference participation or research travel, and have their name inscribed on a plaque housed at the School of Graduate Studies. The Faculty of Medicine nominations to the School of Graduate Studies were due on April 1, 2016.

d) Weston Brain Institute International Fellowships in Neuroscience

The second round of the Weston Brain Institute International Fellowships in Neuroscience has now been announced under the auspices of GLSE. The fellowship is worth \$30,000 - \$60,000 (depending on the length, 6-12 months) and will be awarded to Canadian graduate students from the University of Toronto conducting research in neurodegenerative diseases of aging. This award enables outstanding students to travel to and work in world-renowned labs to further their research. The goal is to build international collaborations, foster influential neuroscience research and bring enhanced research capabilities back to Canada.

4. New Program Initiatives

a) Health Innovation Hub (H2i) Campus Linked Accelerator Program at the Faculty of Medicine

Since May 1, 2015, the Graduate and Life Sciences Office (GLSE) has overseen the finances for the Health Innovation Hub (H2i) program. This program is part of the University's Campus Linked Accelerator initiative funded by the Ontario Government. Professors Paul Santerre and Joseph Ferenbok are appointed as Co-Directors of H2i. The mission of the program is to enable, collaborate, educate and facilitate student-initiated translation of health matters. The initiatives that have been launched during Fall 2015 include:

- **MaRS Get Your Bot On!** (Sept 11- 13th, 2015) – H2i Sponsor
- **Lean Startups & financing**--MaRS Seminar Series (Oct – Nov, 2015);
- **IP Confidential** (Early Oct, 2015) – Workshop on BioTech IP
- **Techna Symposium** - Big Machine: Healthcare Built to Learn (Oct 30, 2015)
- **Hacking Food** – student focused initiative to end hunger in GTA (three seminars 2015/2016)
- **Hacking Healthcare 4 Innovation** (H24i) – ‘problem’ to ‘proof’; subsets of three
 - Identify Problems (Sept – Oct)
 - Ideation Hackathon (Nov 20, 2015)
 - Proof-of-Concept (Jan-Apr 2016)

Five hospital partners have been confirmed (UHN – Toronto, Western and Princess Margaret; Toronto Rehabilitation Institute, and Rouge Valley Hospital) with another 3 are pending (Sunnybrook, SickKids, and CAMH).

b) Integrity in Graduate Student Research – Focus on Statistics

The Integrity in Graduate Student Research was established as a means to expose students to ethical issues in regards to conducting their own research. Based on previous student evaluations, the use of statistics has now been included among the topics to be covered but as a separate workshop.

In Collaboration with the Dalla Lana School of Public Health, the Integrity in Graduate Student Research – Focus on Statistics was designed to expose graduate students in Medicine and Public Health to basic concepts in statistics and how data can be manipulated to produce incorrect or different results. This workshop is not meant to teach students how and when to use specific statistical techniques. Rather, it was designed to provide students with adequate knowledge to critically think about statistical data presented in peer-review journals and other formats, inform them about the dos and don'ts in collecting and preparing data for their research and use real-life examples to demonstrate how data can be manipulated to produce incorrect results.

5. Graduate Faculty Development

Stemming from monthly meetings with the Graduate Chairs, GLSE will be hosting its first Graduate Education Retreat for Graduate Chairs and Graduate Coordinators to share best practices and address graduate education issues such as time to completion and student mental health and wellness. The retreat will be held on Thursday June 2 and include guest speakers such as Dean Trevor Young, Dean Locke Rowe and Professor Markus Bussman, Vice-Dean of Graduate Studies at the Faculty of Applied Sciences and Engineering.

University of Toronto

Major Modification Proposal: Significant Modifications to Existing Graduate and Undergraduate Programs

This template should be used to bring forward all proposals for major modifications to existing graduate and undergraduate programs for governance approval under the University of Toronto's Quality Assurance Process.

Program being modified: <i>(Please specify exactly what program and which components of that are being modified, E.g., BA ... Specialist, Major, and Minor components.)</i>	Master of Health Science (MHSc) in Medical Radiation Sciences
Proposed Major Modification:	Change to admission and program requirements
Department / Unit (if applicable):	Institute of Medical Science
Faculty / Academic Division:	Medicine
Dean's Office contact:	Allan Kaplan, Vice-Dean Rachel Zulla, Graduate Affairs Officer, GLSE 416-946-0412 rachel.zulla@utoronto.ca
Proponent:	Nicole Harnett, Program Director
Version Date: <i>(please change as you edit proposal)</i>	March 14, 2016

1 Summary

- *Please provide a brief summary of the change(s) being proposed as it relates to the current structure of the program*

The long-term goal of the MHScMRS program is to be the gold standard for professional graduate education for radiation therapists in Canada and beyond. The program is delivered through the Department of Radiation Oncology, a clinical department within the Faculty of Medicine and housed in the Institute for Medicine Science, a graduate extra-departmental unit in the Faculty of Medicine. This proposal is to implement several modifications to the program to further support this goal. The changes proposed are:

- Allow students to emphasize one of the three key program goals (clinical expertise, research, or leadership) in alignment with their personal professional goals
- Establish a faculty supervisory committee to approve, guide, and assess students' trajectory through the program in their selected "pathway"
- Modify the minimum admission requirement for clinical experience (at time of application) from 5000 to 900 hours
- Modify the program requirements and add new courses (2) to support the curricular pathways

All pathways will be offered through both the existing full-time program length of six continuous sessions and nine continuous sessions for the extended fulltime option. The program is not offered part-time. The Master of Health Science in Medical Radiation Sciences (MHScMRS) program was developed and implemented to align with the Department of Radiation Oncology's (UTDRO) vision for the future of radiation therapy practice in Canada. The vision included a firm belief that the profession was at a turning point and with the right support, the future leaders of this rapidly evolving profession could be nurtured from within the existing pool of exceptional professionals. Historically, radiation therapy, as a distinct profession, had relied on other professions to guide its evolution and response to changes in the radiation medicine domain.

With experience garnered since 2009, and a robust internal review undertaken in 2015, the program now believes it must consider an expansion of its curriculum to allow its students to personalize their experiences in the program by choosing one of three "pathways" – Clinical Practice, Research & Academia, or Professional Leadership. Each pathway will be built atop a mandatory core curriculum that both broadens and deepens radiation medicine knowledge (oncology, radiobiology, physics, clinical decision making). Until now, the clinical expertise focus was the only pathway available. This proposed program modification will result in 3 pathway options that align with the areas of the radiation therapy profession.

1. The **Clinical Practice Pathway** remains in its existing state – a pathway that provides the student with theoretical, practical and experiential opportunities that will build advanced professional competence.
2. The **Research Pathway** will provide the student with an opportunity to complete a more in-depth research project, going beyond the "process" of conducting research, and into designs with sufficient rigor to generate meaningful and interpretable results. It is expected that students in this pathway will produce at least 2 written papers that are equivalent to publishable manuscripts. They would also have exposure to different research environments that would serve to facilitate building relevant inter, and transdisciplinary research collaborations.
3. The **Professional Leadership Pathway** will emphasize the development of skills and perspectives that need to be integrated into an influential leadership vision. Students will gain understanding of the broader health care system, of the qualities and characteristics of a good leader and of the strategies and approaches that can be tapped to be a successful leader with a focus on Radiation Medicine and interprofessional collaboration. While these students are expected to complete a small research project, they will also complete several projects that could lead to practice, organizational or professional changes of some consequence.

More detail about the different practical semesters can be found in Appendix E – Course Descriptions. The MHScMRS program recognizes the uniqueness of practice at a local level and the importance of ensuring students complete learning experiences that will be relevant to their future practice. As is the case in the

clinical pathway, the research and leadership students will be expected to identify a local supervisor and suitable project topics for their practical experiences. The student and the local supervisor will work with the faculty supervisory committee to shape and execute a set of experiences that align with the program's goals and requirements. Routine meetings will take place between local supervisor(s) and program faculty to monitor progress and achievements and to troubleshoot issues that arise in a timely manner.

Faculty within the Program and the broader Department of Radiation Oncology have vast experience in all three pathways, and have confirmed their willingness to engage with our students. The proposed modifications to the program have been developed to capitalize on existing expertise within the Department and U of T at large while maximizing opportunities for our students. Where feasible, existing courses and mechanisms will be harnessed. In addition, for selected MHS cMRS courses, we plan to open enrolment to suitable students from other professional and graduate programs. This approach will ensure moderate class sizes will be achieved, as well as add richness to the discussions as interdisciplinary perspectives are brought to bear on the relevant content. It is expected that, in particular, courses on leadership and global health will be of interest to the wider IMS and SGS community, as well as students and trainees from across the UT-DRO programs (Radiation Oncology Residents, Medical Physics Residents, Clinical and Research Fellows, EIRR21 program etc). Class size will be capped at 10 to ensure that the experiences gained through the interactive element will not be diluted.

2 Effective Date

The proposed program modifications including new pathways would be introduced for the cohort gaining admission in September 2016.

3 Academic Rationale

- *What are the academic reasons for the change proposed and how do they fit with the unit's and Division's academic plans*

Since 2009, the Program has experienced lower than expected enrollment despite the articulated need for Canadian-built opportunities for graduate education identified during and since the original needs assessment for the program. Radiation therapists wishing to pursue higher education are doing so for many reasons. While advancing clinical practice remains a strong motivation, there is a growing need in the community for clinical and administrative leaders who are connected, engaged, and fluent in the context of radiation oncology practice. Similarly, as the professional scope of practice for radiation therapists expands, a unique research space is emerging. There is an increasing demand for therapists with advanced knowledge in key areas such as radiobiology and advanced radiation physics. While these domains are part of existing courses and research projects in the current program, opportunities to explore these other pathways in depth is limited due to the "clinical" focus of the practicum courses required by the program in

the final year. An internal review (see below), identified our mandatory “clinical” experience is seen as a deterrent to therapists whose interests lie outside front-line clinical practice to identify us as the program of choice.

While 3 themed pathways will now be offered, they will share a core program (year 1), continuing to emphasize the three key goals of the program: Clinical Practice, Research & Academia, and Professional Leadership. Curricular customization for the pathways will be achieved through changes to the mandatory, optional and elective courses (Appendix F). Students in the two new pathways will engage in a practicum built around their chosen pathway. For example, students in the leadership pathway will be required to complete experiential learning but with a focus on professional and/or organization leadership activities as opposed to front line patient care experiences (as is required for the clinical pathway). The same applies to the research pathway where the student will develop and execute a more in-depth research project, with multiple endpoints and increased expectations with a focus on an area of radiation medicine.

The addition of these specific pathways is consistent with trends: in other graduate radiation therapy programs worldwide, demonstrated professional demand, and expressed desire of potential candidates.

Graduate education for radiation therapists continues to be an emerging but niche market. An understanding of the radiation therapy landscape in Canada suggests that while advanced clinical practice remains a key area of demand, research and professional and organizational leadership are gaining importance, and radiation therapists are seeking continuing education opportunities elsewhere.

The changes proposed here have been informed by a review conducted by the Department of Radiation Oncology – including a series of needs assessments within the radiation therapy community.

1. In the winter of 2015, an environmental scan looked at 8 graduate programs (4 in the United Kingdom, 4 in Australia), comparing eligibility criteria, curriculum, format, duration, cost, and marketing. Most domains were fairly comparable, with differences found in format (modular vs semester), ‘distance learning’ as opposed to ‘online delivery’, and the absence or vague focus on clinical experiences.
2. Interviews were conducted with GTA-based radiation therapists who were either pursuing graduate degrees outside of UT or were currently known to be contemplating graduate education. The focus of the interviews was desirable/undesirable characteristics in a graduate program. Main themes that emerged from these interviews were:
 - a) Reluctance to change to part-time work to complete clinical internship requirements (financial, employment status concerns)
 - b) Confusion regarding ‘blended delivery’ format of the MHScMRS program
 - c) Confusion regarding ‘full time studies’ in an academic setting for a profession program
 - d) Discounting of the MHScMRS program due to the perceived sole focus on clinical expertise
 - e) Less word of mouth support for the MHScMRS program due to its shorter history
3. A survey of Canadian radiation therapy managers, educators, and key radiation oncologists was conducted in April 2015 (n=18). Most noted a high level of support for radiation therapists (RTT) graduate education, but fewer were aware of the specifics of the MHScMRS program. Questions arose about the relationship between advanced clinical practice and graduate education, which highlighted the need to expand the scope of the program allowing emphasis of the other 2 foci of

the program.

4. On June 15, 2015, the MHScMRS Advisory Committee recommended several possible modifications to the program. The executive met with IMS graduate coordinators and director and advice was sought from the School of Graduate Studies and the Vice-Dean of Graduate and Academic Affairs for the Faculty of Medicine. The following key strategies were identified:
 - a) Provide additional “pathways” in the program to allow students to customize their program to align with one of the three goals of the program (research, leadership, clinical skill advancement)
 - b) Reduce the number of hours of clinical experience expected of eligible applicants from 5000 hours in the last 5 years to 900 hours acquired within the last 2 years
 - c) Seek approval to offer selected existing and new courses to practicing radiation therapists and other non-radiation therapy health care professionals as professional development/continuing education opportunities
 - d) Develop and communicate a mechanism for talented but “pre-eligible” candidates to engage with the program (e.g. ‘bridging’ or ‘mentorship’ program)
 - e) More effectively communicate the contact hour expectations of the program through the use of visual aids and modified marketing messages

4 Description of the Proposed Major Modification(s)

- *Please describe in detail what changes are being proposed. Major modifications include changes to the program requirements that will significantly change what students will know and be able to do when they complete the program.*
- *Please be explicit about how the learning outcomes have changed and include either the both previous and proposed learning outcomes or one version of the current LOs with the new LO in track changes. You may wish to use Appendices A and B.*
- *Please provide Calendar copy either in track changes or as two separate documents in appendices C and D as applicable.¹*

Admission Requirement Changes

Changes to the admission requirements are being proposed for the program.

Our existing minimum admission requirements include a minimum of 5000 hours of clinical experience in the 5 years prior to being admitted to the program. While it is desirable to have potential students be acclimatized to working conditions as a responsible and licensed professional – especially around being accountable for autonomous practice, decision-making and problem solving – experience has shown that success in our program is less correlated to length of time in practice than originally thought. The internal review undertaken by the program in 2015, highlighted a significant proportion of enquiries about the program came from recent RTT graduates who are eager and high achievers, but are ineligible

¹ Other major modifications that may be included are significant changes to admissions requirements, significant changes to faculty engaged in program and; a change to mode of delivery, change to the language of the program and offering the program at another location or institution.

to apply due to our substantial work experience requirements. In addition, as the program began re-envisioning a more flexible program that would allow students to customize their curriculum and goals to some extent the requirement for 5000 hours is acting as a deterrent for potential suitable candidates. After consultation with the community and the advisory committee, it was decided that a reduction to 900 hours of work experience at the time of application (to have been accumulated within two years prior to program admission) could represent an optimal balance to attract the best candidates into our program and continue to ensure they are adequately prepared for the clinical components of the program.

Program Requirement Changes (See Appendix F for program layout for each pathway). The introduction of the three pathways will require changes in the program trajectory per pathway and course offerings, the latter of which was addressed through Minor Modification submission for new/modified courses. Students in the program will be required to confirm their pathway upon acceptance of offer of admission to the program. Opportunities to change pathway will be considered on an individual basis until the end of Session 2, Year 1, recognizing that students may need to pick up pathway specific courses. All three pathways will continue to be offered in a blended delivery format as previously implemented by the program. The new pathways have had no impact on the delivery format of the program.

A description of what will remain the same and what has changed in the program is described below and depicted in Figure 1 on page 7:

1. The majority of the existing core curriculum will remain the foundation for all pathways (7 x 0.5 FCE), establishing a foundation in advanced and emerging topics in radiation medicine (clinical and systems) and gaining the methodological foundations for developing research competence (see Appendices E & F).
2. Two additional courses (2 x 0.5 FCE) remain common between the clinical and research pathways, providing greater depth of exploration of scientific principles fundamental to the use of radiation as a cancer therapy.
3. All pathways will share the existing research project course. While the course expectations and assessment will be the same for all pathways, the scope of the project will be expected to be more in-depth for the research pathway, where students are concurrently engaged in a research-based practicum (see #5). For the clinical and leadership pathways, the goal is to have the student experience the process of undertaking a research project. This work may not lead to publishable results, nor is it required (though encouraged). For the students in the research stream, the research project will also be embedded through their personalized learning plan, where enhanced rigour is expected, including the collection of unequivocal results and the production of two manuscripts of a publishable quality.
4. Further focus in the leadership pathway will be realized through development of 1 new didactic course and 1 seminar series (approved as MSC1514H (Professional & Clinical Leadership II: Influencing the System) and MSC1513H (Seminars in Cancer Care Leadership) respectively) further exploring clinical leadership/management and governance within the context of cancer care (Fall and Winter, Year 1)
5. The final year practical experience will be tailored for each pathway. The clinical pathway will continue as per the current program format, in a hospital-affiliated clinical radiation treatment department. The leadership and research pathways will select 2 additional experience-based

rotations that address their interests – for leadership this may be a professional organization, provincial cancer agency, or advocacy group; for research this may be a hospital or university research laboratory or clinical site. Individualized learning plans and goals will be tailored accordingly with the chosen host site. The approved scope and format of this course will not change (see Appendix E).

Figure 1: Outline of program elements remaining the same and changing with this proposal.

Existing Curriculum	Clinical Pathway	Research Pathway	Leadership Pathway	Other Comments
Core Curriculum: 1501, 1503/04, 1506, 1507, 1508, 1510, 1511, 1512 (5.5 FCE)	No Change	No Change	No Change	1510 and 1511 will be guided and supervised by Faculty Supervisory Committee
Advanced radiation medicine principles: 1500, 1502 (1 FTE)	No Change	No Change	Removed	Replaced with proposed leadership courses 1513 and 1514.
Research Project: 1509 (0.5 FTE)	No Change	Increased output expectations	No Change	Research pathway students will be required to produce the equivalent of 2 publishable manuscripts based on their work.
New Leadership Courses: 1513, 1514 (1.0 FTE)	No Change	No Change	Added	For leadership pathway students only
Electives (1.0 FTE)	No Change	One 0.5 FCE Elective Removed	No change	Replaced with an Independent Study course.
6000 (Independent Study) (0.5 FTE)	No Change	Added	No Change	Added for research pathway only to permit the research pathway students to develop their project methodology, address ethics issues/application before start of research project course (1509)

Faculty Supervisory Committee

One important addition to program will be the creation of a faculty supervisory committee to approve the students’ proposed program of study, and to guide and assess their progress as they move through their program. Significant opportunities exist for students to select electives to customize their learning and the supervisory committee will provide guidance as to how the student will shape their practical experiences to meet their program goals. The committee will also monitor and facilitate the student’s progress and achievements in their selected pathway.

Appendices A and B outline the current and proposed Learning Outcomes of the Medical Radiation Sciences Program. The table illustrates how the learning outcomes are supported through the different pathways.

5 Impact of the Change on Students

- *Outline the expected impact on continuing students, if any, and how they will be accommodated*
- *Please detail any consultation with students*

No impact. No students will be in the program at that time.

6 Consultation

- *Describe the impact of the major modification on other programs and any consultation undertaken with the Dean and Chair/Director of relevant academic units*

Wide consultation has been sought to inform these proposed program modifications in the spring and summer of 2015. The internal review conducted by the UT-DRO included current graduate students in radiation therapy and students considering graduate education. Canadian-based managers, educators and key radiation oncologists were surveyed. The MHScMRS Advisory Committee was consulted iteratively on the proposed program modifications (details in section 3 “Academic Rationale”). Consultation has also occurred with the MHScMRS Faculty, UT-DRO Leadership and existing “status-only” faculty, Office of the Vice-Dean, Graduate and Life Sciences Education, as well as the Vice-Provost, Academic Change. Consultation with IHPME has been sought such that students in the Leadership pathway will be permitted access to several of their course offerings to fulfill elective requirements.

7 Resources

- *Describe any resource implications of the change(s) including but not limited to faculty complement, space, libraries, and enrolment/admissions.*
- *Please be specific where this may impact significant enrolment agreements with the Faculty/Provost’s Office.*
- *Indicate if the major modification will affect any existing agreements with other institutions, or will require the creation of a new agreement to facilitate the major modification (eg. Memorandum of Understanding, Memorandum of Agreement, etc). Please consult with the Provost’s Office (vp.academicprograms@utoronto.ca) regarding any implications to existing or new agreements.*

The Program is supported primarily by faculty within the Department of Radiation Oncology, namely radiation therapists, medical physicists, and radiation oncologists. It is expected that the complement of engaged faculty will expand with the development of the novel pathways, but the required expertise is available within the large cadre of existing status-only faculty of the department. Faculty currently teaching within the program are aware and supportive of the proposed changes and will be engaged in the development of the proposed novel courses. A faculty supervisory committee will be struck to supervise/advise students and supervisors on:

- Appropriate course selection
- Appropriate setting of objectives
- Monitor student progress through program
- Adequate completion of goals/objectives/assignments

Content expertise

UTDRO faculty have a strong history of supporting graduate-level education. Given the modest numbers of students expected in the program, we expect this to be readily accommodated within our department's educational mandate. Faculty are required to engage in a target amount of education and supervisory activities for the maintenance of the status-only faculty appointment and serving on a student's supervisory committee would be classified in this way. As part of their roles in UTDRO, the Vice-Chair of Education and the MHScMRS Program Director will sit on all committees for the first intake of students to ensure consistency on the level of academic expectations across students and pathways of study.

Faculty in this department include many world leaders across a diverse spectrum of research domains, often leading ground-breaking clinical trials and collaborative research groups. Many have also held high level leadership roles in radiation oncology-related professional associations, government task forces, and clinical departments. Connections with world experts in external departments and institutions are also expected to be of value in engaging guest lecturers to support and inform course content with increased diversity.

In addition, the proposed strategy of harnessing elective courses will allow the Program to capitalize on expertise within the broader university community. For example, students in the Professional Leadership pathway may wish to take advantage of courses in the Institute of Health Policy, Management and Evaluation. Discussions to formalize an agreement is underway

Space and infrastructure

The new pathways are not expected to require any further space or infrastructure.

Number of faculty

Our curriculum change is expected to require an increased commitment from up to 5 faculty in the Program. The additional faculty will be required to design and teach in the new courses (outlined in Section 4 and described in Appendix E) to support the new pathways; the need for a supervisory committee to oversee the composition of the pathway for students and to support an expected increase in enrolment.

While the program is offered in a primarily distributed learning format, to ensure a smooth transition to our

modified program, it is proposed that a cap for student numbers be instituted for the first 2 intakes while the program is operationalized. This cap will be set at 6 students per intake (2016 and 2017), and a maximum of 10 students annually in years beyond 2017. While it is anticipated that the number of MHScmRS students will remain small following the initial launch of our modified curriculum, UT-DRO plans to ensure our educational offerings will achieve its intended impact and attract an effective class size by open enrolment in selected courses, and strategic alignment of our courses with the learner needs from other educational programs (e.g. Radiation Oncology Residents, Medical Physics Residents, Clinical and Research Fellows, EIRR21, the UT IMS & SGS community).

8 UTQAP Process

Steps	Approvals
Development/consultation within Unit	
Consultation with Dean's Office (& VP, AP)	
	Unit level approval as appropriate
	Faculty/ Divisional Council
Submission to Provost's Office	
AP&P – reported annually	
Ontario Quality Council – reported annually	

Appendix A: Existing Learning Outcomes, and Degree Level Expectations

**This document has been prepared as a reflection of the document submitted in 2007 for the initial Program proposal. The format differed at that time and all efforts were made to transpose the intended outcomes and expectations in the current format.*

MASTER’S DEGREE LEVEL EXPECTATIONS (based on the Ontario Council of Academic Vice Presidents (OCAV) DLEs]	MASTER’S PROGRAM LEARNING OBJECTIVES AND OUTCOMES	HOW THE PROGRAM DESIGN AND REQUIREMENT ELEMENTS SUPPORT THE ATTAINMENT OF STUDENT LEARNING OUTCOMES
EXPECTATIONS: This Master of Health Science in Medical Radiation Sciences is awarded to students who have demonstrated:		
<p>1. Depth and Breadth of Knowledge</p> <p>A systematic understanding of knowledge, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of the academic discipline, field of study, or area of professional practice.</p>	<p>Graduates will demonstrate a deep and tacit understanding of the current state of knowledge in radiation medicine through the study of:</p> <ul style="list-style-type: none"> • Frontiers of radiation oncology • Applied contemporary medical physics • Advanced radiation biology <p>They will be able to make clinical decisions based on the key factors influencing decision making in radiation medicine including:</p> <ul style="list-style-type: none"> • Patient factors • Disease factors • Biological factors • Technological factors <p>They will use their knowledge to:</p> <ul style="list-style-type: none"> • identify and describe areas for investigation for improving patient care • conduct research that will uncover answers to those questions • apply advanced knowledge to clinical decision making and judgment in the clinical setting • accelerate the pace of innovation in radiation therapy • serve as leaders and role models within the discipline 	<p>The program design and requirements that ensure these student outcomes for depth and breadth of knowledge are the series of foundational, core courses that form the majority of the curriculum. These emphasize emerging considerations and frontiers in key aspects of radiation medicine, building knowledge across the spectrum of evidence-based practice, reviewing and contributing to research, and serving as a role model and mentor within an interdisciplinary team.</p> <p>As well as the core curriculum, there are opportunities to explore individual areas of clinical interest (through directed reading courses, electives, and a experience-based immersive practicum).The practicum will support development of practical clinical skills through direct exposure, application and consolidation of knowledge.</p>

MASTER’S DEGREE LEVEL EXPECTATIONS (based on the Ontario Council of Academic Vice Presidents (OCAV) DLEs]	MASTER’S PROGRAM LEARNING OBJECTIVES AND OUTCOMES	HOW THE PROGRAM DESIGN AND REQUIREMENT ELEMENTS SUPPORT THE ATTAINMENT OF STUDENT LEARNING OUTCOMES
<p>2. Research and Scholarship</p> <p>A conceptual understanding and methodological competence that i) Enables a working comprehension of how established techniques of research and inquiry are used to create and interpret knowledge in the discipline; ii) Enables a critical evaluation of current research and advanced research and scholarship in the clinical area of interest; and iii) Enables a treatment of complex issues and judgments based on established principles and techniques; and, on the basis of that competence, has shown at least one of the following: i) The development and support of a sustained argument in written form; or ii) Originality in the application of knowledge.</p>	<p>The development of competence in research and scholarship is a key goal of the Master of Health Science in Medical Radiation Sciences. Graduates of the program will be expected to</p> <ul style="list-style-type: none"> • Interpret, implement, and apply evidence-based practice based on evaluation of current and emerging research • Design and conduct research studies that advance clinical practice in areas where a question or knowledge gap is identified • Employ ethical and methodologically-sound approaches to development and implementation of new knowledge • articulate a sound argument and business case, based on evidence, to create opportunities for advancement of radiation therapy practice and care • develop and lead informed quality improvement and needs assessment activities 	<p>The program design and requirements that ensure these student outcomes are the broad integration of the value and principles of knowledge translation and dissemination of research across all courses.</p> <p>Grant writing, business case development, and the building and implementation of a research proposal will comprise the major assessments in several core curriculum courses, honing skills in the argument for and design of research. Learners will also engage in a research methodology course and undertake a formal clinical research project over the final two semesters, immersing them in the nuances of producing original research.</p> <p>Emphasis on literature review, critical appraisal, and academic writing and presentation skills will be consistent throughout all program courses.</p>
<p>3. Level of Application of Knowledge</p> <p>Competence in the research process by applying an existing body of knowledge in the critical analysis of a new question or of a specific problem or issue in a new setting.</p>	<p>Application of Knowledge is a constant expectation of students in the Master of Health Science in Medical Radiation Sciences. Graduates of the program will be able to:</p> <ul style="list-style-type: none"> • engage in informed decision-making by analyzing all aspects of the situation or problem • translate new knowledge into local practice using 	<p>The program design and requirements that ensure these student outcomes for level and application of knowledge are the overall focus on practical applicability of new knowledge in the clinical setting.</p> <p>The importance of evidence-based practice will be a focus of the foundational clinical decision-making courses, and basic change</p>

MASTER’S DEGREE LEVEL EXPECTATIONS (based on the Ontario Council of Academic Vice Presidents (OCAV) DLEs]	MASTER’S PROGRAM LEARNING OBJECTIVES AND OUTCOMES	HOW THE PROGRAM DESIGN AND REQUIREMENT ELEMENTS SUPPORT THE ATTAINMENT OF STUDENT LEARNING OUTCOMES
	<p>implementation science</p> <ul style="list-style-type: none"> • Interpret, implement, and apply evidence-based practice based on evaluation of current and emerging research • Engage in change management activities to generate evidence-informed efficiencies and improvements in quality of operations, practice, and care 	<p>management principles will be addressed through a leadership course. Course assignments and exercises will focus on application of knowledge in the clinical context, with opportunities for students to explore relevance to their own area of interest.</p> <p>Application of knowledge will culminate in a tailored clinical practicum. Guidance in development of individual learning objectives will prioritize active learning and engagement as a change agent to implement evidence-based practice.</p>
<p>4. Professional Capacity/Autonomy</p> <p>The qualities and transferable skills necessary for employment requiring i) The exercise of initiative and of personal responsibility and accountability; and ii) Decision-making in complex situations; b. The intellectual independence required for continuing professional development; c. The ethical behavior consistent with academic integrity and the use of appropriate guidelines and procedures for responsible conduct of research; and d. The ability to appreciate the broader implications of applying knowledge to particular contexts.</p>	<p>Students in the Master of Health Science in Medical Radiation Sciences program are certified healthcare professionals with experience in professional practice before entering the program. As such, they have already acquired the qualities and skills necessary for employment and use those same qualities to address and complete the practical assignments required of this program.</p> <p>Graduates of this program will</p> <ul style="list-style-type: none"> • Engage in and be accountable for clinical decision-making that prioritizes safe, ethical, and high quality care • Appreciate population-level considerations in care while offering personalized approaches where feasible and appropriate • Engage in and be accountable for the ethical conduct of research 	<p>The program design and requirements that ensure these existing qualities of professional capacity/autonomy are augmented through both the foundational courses in leadership and decision-making and the requirement of the student to define their own learning experience through specialization through electives and during their clinical practicum.</p> <p>Engagement in the research project and selection of practicum experiences will further support development of the student’s abilities in these areas.</p>

MASTER’S DEGREE LEVEL EXPECTATIONS (based on the Ontario Council of Academic Vice Presidents (OCAV) DLEs]	MASTER’S PROGRAM LEARNING OBJECTIVES AND OUTCOMES	HOW THE PROGRAM DESIGN AND REQUIREMENT ELEMENTS SUPPORT THE ATTAINMENT OF STUDENT LEARNING OUTCOMES
	<ul style="list-style-type: none"> • Appreciate broader contexts in considering the applicability of research findings or implications • Engage in and be accountable for systems level decisions while appreciating the impact at an individual level and in unique contexts • Reflect on personal and professional abilities and seek out opportunities for professional development to improve knowledge, skills and judgment in radiation therapy practice. 	
<p>5. Level of Communications Skills</p> <p>The ability to communicate ideas, issues and conclusions clearly.</p>	<p>Communications Skills is defined in Master of Health Science in Medical Radiation Sciences as the ability to engage in effective written and oral communication with patients, academic and clinical peers, and with people of various professional groups at various levels of the organization.</p> <p>Graduates of this program will</p> <ul style="list-style-type: none"> • Communicate in a patient-centred manner with patients and family members • Work and communicate effectively as a member of an interprofessional clinical team • Engage in effective dissemination of research findings in written and oral formats • Work and communicate effectively as a member of an interprofessional research team • Engage in effective written and oral business case presentation and reporting • Work and communicate 	<p>The program design and requirement elements that ensure these student outcomes for level of communication skills are the inclusion of written and oral presentation requirements in all relevant core curriculum courses, emphasizing the value of effective and organized communication. Formal attention to these concepts will be given in foundational research methods and leadership courses. Nuances of different types of writing and presentation, such as business cases, grant applications, and resource proposals, will be addressed in relevant courses within the core curriculum.</p>

MASTER'S DEGREE LEVEL EXPECTATIONS (based on the Ontario Council of Academic Vice Presidents (OCAV) DLEs)	MASTER'S PROGRAM LEARNING OBJECTIVES AND OUTCOMES	HOW THE PROGRAM DESIGN AND REQUIREMENT ELEMENTS SUPPORT THE ATTAINMENT OF STUDENT LEARNING OUTCOMES
	<p>effectively and collaboratively as a leader</p> <ul style="list-style-type: none"> • Chair effective and inclusive meetings 	

Appendix B: Proposed Learning Outcomes, and Degree Level Expectations

MASTER’S DEGREE LEVEL EXPECTATIONS (based on the Ontario Council of Academic Vice Presidents (OCAV) DLEs]	MASTER’S PROGRAM LEARNING OBJECTIVES AND OUTCOMES	HOW THE PROGRAM DESIGN AND REQUIREMENT ELEMENTS SUPPORT THE ATTAINMENT OF STUDENT LEARNING OUTCOMES
<p>EXPECTATIONS:</p> <p>This Master of Health Science in Medical Radiation Sciences is awarded to students who have demonstrated:</p>		
<p>1. Depth and Breadth of Knowledge</p> <p>A systematic understanding of knowledge, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of the academic discipline, field of study, or area of professional practice.</p>	<p>Graduates will demonstrate a deep and tacit understanding of the current state of knowledge in radiation medicine through the study of:</p> <ul style="list-style-type: none"> • Frontiers of radiation oncology • Applied contemporary medical physics • Advanced radiation biology <p>They will be able to make clinical decisions based on the key factors influencing decision making in radiation medicine including:</p> <ul style="list-style-type: none"> • Patient factors • Disease factors • Biological factors • Technological factors <p>They will use their knowledge to:</p> <ul style="list-style-type: none"> • identify and describe areas for investigation for improving patient care • conduct research that will uncover answers to those questions • apply advanced knowledge to clinical decision making and judgment in the clinical setting • accelerate the pace of innovation in radiation therapy • serve as leaders and role models within the discipline 	<p>The program design and requirements that ensure these student outcomes for depth and breadth of knowledge are the series of foundational, core courses that emphasize emerging considerations and frontiers in key aspects of radiation medicine (MSC1501, MSC1503, MSC1504, MSC1512), introduction to related concepts aligning with the pathways (MSC1506, MSC1507, MSC1508), as well as opportunities for indepth analysis within each of the highlighted pathways.</p> <p>Tailored courses in each of the three pathways (MSC1500, MSC1502MSC1513, MSC1514), as well as opportunities to explore individual areas of interest (through directed reading courses, electives, a research project (MSC1509) and a clinical practicum (MSC1510/11) will require application to the professional domain. The practicum will support development of practical skills through direct exposure, application and consolidation of knowledge.</p> <p>Engagement of a faculty advisory committee will further ensure that overall curriculum is appropriate for attaining the desired outcomes.</p>

MASTER’S DEGREE LEVEL EXPECTATIONS (based on the Ontario Council of Academic Vice Presidents (OCAV) DLEs]	MASTER’S PROGRAM LEARNING OBJECTIVES AND OUTCOMES	HOW THE PROGRAM DESIGN AND REQUIREMENT ELEMENTS SUPPORT THE ATTAINMENT OF STUDENT LEARNING OUTCOMES
<p>2. Research and Scholarship</p> <p>A conceptual understanding and methodological competence that i) Enables a working comprehension of how established techniques of research and inquiry are used to create and interpret knowledge in the discipline; ii) Enables a critical evaluation of current research and advanced research and scholarship in the discipline or area of professional competence; and iii) Enables a treatment of complex issues and judgments based on established principles and techniques; and, on the basis of that competence, has shown at least one of the following: i) The development and support of a sustained argument in written form; or ii) Originality in the application of knowledge.</p>	<p>The development of competence in research and scholarship is a key goal of the Master of Health Science in Medical Radiation Sciences. Graduates of the program will be expected to</p> <ul style="list-style-type: none"> • Interpret, implement, and apply evidence-based practice based on evaluation of current and emerging research • Design and conduct research studies that advance clinical practice in areas where a question or knowledge gap is identified • Employ ethical and methodologically-sound approaches to development and implementation of new knowledge • articulate a sound argument and business case, based on evidence, to create opportunities for advancement of radiation therapy practice and care • develop and lead informed quality improvement and needs assessment activities 	<p>The program design and requirements that ensure these student outcomes are the broad integration of the value and principles of knowledge translation and dissemination of research across all courses.</p> <p>Grant writing, business case development, and the building and implementation of a research proposal will comprise the major assessments in several core and pathway-specific curriculum courses (MSC1501, MSC1502, MSC1514), honing skills in the argument for and design of research. All pathways will also engage in a research methodology course (MSC1508) and undertake a formal research project over the final two semesters (MSC1509 for all pathways, and MSC1510/11 in greater depth for the research pathway), immersing them in the nuances of producing original research. The scope of the research project and emphasis on dissemination and implementation of results is present in all pathways, but will be augmented in the Research pathway.</p> <p>Emphasis on literature review, critical appraisal, and academic writing and presentation skills will be consistent throughout all program courses.</p>
<p>3. Level of Application of Knowledge</p> <p>Competence in the research process by applying an existing body of knowledge in the critical analysis of a</p>	<p>Application of Knowledge is a constant expectation of students in the Master of Health Science in Medical Radiation Sciences. Graduates of the program will be able to:</p>	<p>The program design and requirements that ensure these student outcomes for level and application of knowledge are the overall focus on practical applicability of new knowledge in</p>

MASTER’S DEGREE LEVEL EXPECTATIONS (based on the Ontario Council of Academic Vice Presidents (OCAV) DLEs]	MASTER’S PROGRAM LEARNING OBJECTIVES AND OUTCOMES	HOW THE PROGRAM DESIGN AND REQUIREMENT ELEMENTS SUPPORT THE ATTAINMENT OF STUDENT LEARNING OUTCOMES
<p>new question or of a specific problem or issue in a new setting.</p>	<ul style="list-style-type: none"> • engage in informed decision-making by analyzing all aspects of the situation or problem • translate new knowledge into local practice using implementation science • Interpret, implement, and apply evidence-based practice based on evaluation of current and emerging research • Engage in change management activities to generate evidence-informed efficiencies and improvements in quality of operations, practice, and care • Apply knowledge of proven leadership strategies and models to the local professional culture 	<p>the real world setting.</p> <p>The importance of evidence-based practice will be a focus of the foundational clinical decision-making courses (MSC1503, MSC1504, MSC1512), and basic change management principles will be addressed in the introductory leadership course (MSC1506). Course assignments and exercises will focus on application of knowledge in the clinical context, with opportunities for students to explore relevance to their own area of interest.</p> <p>Application of knowledge will culminate in a tailored practicum experience (MSC1510/11). Guidance in development of individual learning objectives will prioritize active learning and engagement as a change agent to implement evidence-based practice.</p>
<p>4. Professional Capacity/Autonomy</p> <p>a. The qualities and transferable skills necessary for employment requiring i) The exercise of initiative and of personal responsibility and accountability; and ii) Decision-making in complex situations; b. The intellectual independence required for continuing professional development; c. The ethical behavior consistent with academic integrity and the use of appropriate guidelines and procedures for responsible conduct of research; and d. The ability to appreciate the broader implications of applying knowledge to particular</p>	<p>Students in the Master of Health Science in Medical Radiation Sciences program are certified health care professionals with experience in professional practice before entering the program. As such, they have already acquired the qualities and skills necessary for employment and use those same qualities to address and complete the practical assignments required of this program.</p> <p>Graduates of this program will</p> <ul style="list-style-type: none"> • Engage in and be accountable for clinical decision-making that prioritizes safe, ethical, 	<p>The program design and requirements that ensure these existing qualities of professional capacity/autonomy are augmented through both the foundational courses in leadership (MSC1506) and decision-making (MSC1503, MSC1504, MSC1512) and the requirement of the student to define their own learning experience through specialization within their chosen pathway.</p> <p>Engagement in the research project (MSC1509) and selection of practicum experiences (MSC1510/11) will further support development of the student’s abilities in these areas.</p>

MASTER’S DEGREE LEVEL EXPECTATIONS (based on the Ontario Council of Academic Vice Presidents (OCAV) DLEs]	MASTER’S PROGRAM LEARNING OBJECTIVES AND OUTCOMES	HOW THE PROGRAM DESIGN AND REQUIREMENT ELEMENTS SUPPORT THE ATTAINMENT OF STUDENT LEARNING OUTCOMES
contexts.	<p>and high quality care</p> <ul style="list-style-type: none"> • Appreciate population-level considerations in care while offering personalized approaches where feasible and appropriate • Engage in and be accountable for the ethical conduct of research • Appreciate broader contexts in considering the applicability of research findings or implications • Engage in and be accountable for systems level decisions while appreciating the impact at an individual level and in unique contexts • Identify areas for practice improvement and lead the identification and implementation of new ways of working/thinking • Contribute to the evolution of radiation therapy practice through strategic thinking, planning and action • Reflect on personal and professional abilities and seek out opportunities for professional development to improve knowledge, skills and judgment in radiation therapy practice. 	
<p>5. Level of Communications Skills</p> <p>The ability to communicate ideas, issues and conclusions clearly.</p>	<p>Communications Skills is defined in Master of Health Science in Medical Radiation Sciences as the ability to engage in effective written and oral communication with patients, academic and clinical peers, and with people of various professional groups at various levels of the organization.</p> <p>Graduates of this program will</p>	<p>The program design and requirement elements that ensure these student outcomes for level of communication skills are the inclusion of written and oral presentation requirements in all relevant core curriculum courses, emphasizing the value of effective and organized communication. Formal attention to these concepts will be given in foundational</p>

MASTER’S DEGREE LEVEL EXPECTATIONS (based on the Ontario Council of Academic Vice Presidents (OCAV) DLEs)	MASTER’S PROGRAM LEARNING OBJECTIVES AND OUTCOMES	HOW THE PROGRAM DESIGN AND REQUIREMENT ELEMENTS SUPPORT THE ATTAINMENT OF STUDENT LEARNING OUTCOMES
	<ul style="list-style-type: none"> • Communicate in a patient-centred manner with patients and family members • Work and communicate effectively as a member of an interprofessional clinical team • Engage in effective dissemination of research findings in written and oral formats • Work and communicate effectively as a member of an interprofessional research team • Engage in effective written and oral business case presentation and reporting • Work and communicate effectively and collaboratively as a leader • Conduct meetings and other decision-making activities in a fair, transparent and equitable manner 	<p>research methods and leadership courses (MSC1506, MSC1508). Nuances of different types of writing and presentation, such as business cases, grant applications, and resource proposals, will be addressed in relevant courses within the core curriculum (1501) and pathway specific courses (MSC1502, MSC1514),.</p>

Appendices C & D: Proposed Calendar Copy with Tracked Changes

20165-176 SGS Calendar

Medical Science

Faculty Affiliation

Medicine

Degree Programs

Biomedical Communications

MScBMC

Medical Radiation Sciences

MHSc

Medical Science

MSc

PhD

Translational Research in the Health Sciences

MHSc

Combined Degree Programs

MD / PhD

Collaborative Programs

The following collaborative programs are available to students in participating degree programs as listed below:

1. **Aboriginal Health**
Medical Science, MSc, PhD
2. **Addiction Studies**
Medical Science, MSc, PhD
3. **Aging, Palliative and Supportive Care Across the Life Course**
Medical Science, MSc, PhD
4. **Bioethics**
Medical Science, MSc, PhD
5. **Biomedical Engineering**
Medical Science, MSc, PhD
6. **Biomedical Toxicology**
Medical Science, MSc, PhD
7. **Cardiovascular Sciences**
Medical Science, MSc, PhD
8. **Developmental Biology**
Medical Science, MSc, PhD
9. **Environment and Health**
Medical Science, MSc, PhD
10. **Genome Biology and Bioinformatics**

- Medical Science, PhD
- 11. **Global Health**
Medical Science, PhD
- 12. **Health Care, Technology, and Place**
Medical Science, PhD
- 13. **Health Services and Policy Research**
Medical Science, MSc, PhD
- 14. **Human Development**
Medical Science, PhD
- 15. **Knowledge Media Design**
Medical Science, MSc, PhD
- 16. **Musculoskeletal Sciences**
Medical Science, MSc, PhD
- 17. **Neuroscience**
Medical Science, MSc, PhD
- 18. **Resuscitation Sciences**
Medical Science, MSc, PhD
- 19. **Women's Health**
Medical Science, MSc, PhD

Overview

The **Master of Science in Biomedical Communications** is a two-year course-based professional graduate program that prepares students for careers in the visual communication of science, medicine, and health. Students in this interdisciplinary program explore the use of images, interactive technologies, and animation/simulation to effectively communicate complex science and health topics to a range of audiences. The program offers two fields: Biomedical Media Design and Biomedical Visualization Design.

The **Master of Health Science in Medical Radiation Sciences** is designed for expert radiation therapy clinicians who wish to expand their academic competence and contributions and advance their clinical, professional, and research skills. The program is delivered in either a two-year full-time or three-year extended full-time (EFT) curriculum. The Program offers three pathways for specialization: a clinical pathway, a leadership pathway, and a research pathway. The program each comprising coursework (required and elective), clinical practice experience-based immersive practice, and a master's research project. These elements are t—all designed to provide foundational radiation medicine content, expand clinical and reasoning skills, and further develop the skills of inquiry, innovation, knowledge translation, and evidence-based practice. Courses will run primarily online and outside of adjacent to regular working hours—mornings, and early evenings, and weekends—with the exception of the clinical practica in the final year that require 16 to 25 hours of clinical practice per week (depending on program selected) at an affiliated teaching site may require more dedicated time within the regular work week, depending on the learner's chosen pathway.

The **Master of Science and Doctor of Philosophy programs in Medical Science** are available in a wide range of basic sciences, clinical sciences, and population health research. Under the mentorship of a faculty member, a student receives specialized training and exposure to Toronto's finest multidisciplinary research. Students conduct research in one of six fields:

- Biomedical Science
- Clinical Science
- Population Health/Health Services
- Bioethics
- Health Professions Education
- Radiation Oncology

The full-time MSc and PhD programs emphasize hands-on research, rather than coursework. Faculty conduct research in the following areas: cardiovascular sciences, bioethics, neuroscience, membrane biology, respiratory medicine, and psychosomatic medicine. The Institute of Medical Science (IMS) is the graduate unit of choice for MDs seeking training as clinician investigators, and graduates may seek positions as academics and health care professionals in universities, government, and industry. The IMS participates in the Royal College of Physicians and Surgeons Clinical Investigator Program (CIP).

The two-year course-based **Master of Health Science in Translational Research in the Health Sciences** program is designed for students from diverse backgrounds (e.g., medicine, life sciences, social sciences, engineering, design, and communications) who are strongly motivated to advance problem-solving designs in medical and health science contexts. The program combines flexible coursework; team-based, real-world translational challenges; and extensive mentorship

and networking. Students gain experience, expertise, and practical insights into the design process, regulatory frameworks, and translational networks and strategies.

Contact and Address

Biomedical Communications Program

Web: www.bmc.med.utoronto.ca

Email: bmc.info@utoronto.ca

Telephone: (905) 569-4849

Fax: (905) 569-4847

Biomedical Communications
University of Toronto Mississauga
HSC 308, 3359 Mississauga Road
Toronto, Ontario L5L 1C6
Canada

Medical Radiation Sciences Program

Web: www.radonc.utoronto.ca www.ThinkBigRT.com

Email: nicole.harnett@utoronto.ca

Telephone: (416) 946-4501, ext 5756

Fax: (416) 946-4442

Medical Radiation Sciences Graduate Program
Department of Radiation Oncology
University of Toronto
149 College Street, 5th Floor
Toronto, Ontario M5S 3E2
Canada

Medical Science Program

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Telephone: (416) 946-8286

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Institute of Medical Science
University of Toronto
Medical Sciences Building
Room 2374, 1 King's College Circle
Toronto, Ontario M5S 1A8
Canada

Translational Research in the Health Sciences Program

Web: trp.utoronto.ca

Email: trp.medscience@utoronto.ca

Telephone: (416) 978-4474

Fax: (416) 971-2253

Institute of Medical Science
University of Toronto
Medical Sciences Building
Room 2374, 1 King's College Circle
Toronto, Ontario M5S 1A8
Canada

Degree Programs

Biomedical Communications

Master of Science in Biomedical Communications

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Institute of Medical Science's additional admission requirements stated below.
- Graduation from a recognized university with an appropriate four-year bachelor's degree that includes a variety of courses in the arts, sciences, and humanities.
- Minimum mid-B standing in the final two years of undergraduate study.
- A high-quality portfolio of visual material; consult the MScBMC website for guidance.

Program Requirements

- 8.5 full-course equivalents (FCEs); students have the option to select either 1.0 elective FCE and a master's research project and paper, or 2.0 elective FCEs and a master's research project.
- In Year 2 of the graduate program, students enter their chosen field.

Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

Course List

Consult the Faculty of Medicine each session regarding course offerings.

Required Courses

MSC 1001Y	Human Anatomy (Including Embryology)
MSC 2001Y	Visual Representation of Medical Knowledge
MSC 2002H	Sequential Medical Communication
MSC 2003Y	Biomedical Communications Technologies
MSC 2004H	Research Methods
MSC 2005H	Evolution of Medical Illustration
MSC 2009H	Ethics and Professionalism in Biomedical Communications
MSC 2012Y	Neuroanatomy for Visual Communication
MSC 2013Y	Master's Research Project and Paper
MSC 2018H ⁺	Visual Representation of Processes in Human Pathology

⁺ *Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.*

Elective Courses

Students are encouraged to take at least one of their electives in a graduate program other than Biomedical Communications.

MSC 2006H	Advanced Media Design Technologies
MSC 2007H	Visual Synthesis of Medical/Scientific Process
MSC 2008H	Community-Centred Design Research
MSC 2011H	Special Topics in Biomedical Communications
MSC 2015H	Interpretive Visualization: Cinematic Design and Preproduction
MSC 2016H	Visualization Methods
MSC 2017H	Visualization Technology
MSC 2019H	Information and Data Visualization in Science and Medicine

Medical Radiation Sciences

Master of Health Science

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the graduate unit's additional admission requirements stated below. The admission requirements for the two-year program and three-year program options are the same.
- Hold certification in your relevant jurisdiction and provide evidence of eligibility for professional registration in Ontario where necessary.
- Have completed a recognized bachelor's degree in medical radiation sciences or in an equivalent field.
- Have obtained a minimum average grade of B+ over the final two years of full-time undergraduate studies.
- Have performed a minimum of ~~three~~one years (~~5,000~~900 hours) of professional practice within ~~five~~two years of application.
- Supporting documentation:
 - Three referee letters (as per process outlined on the application web page).
 - A letter of intent the will outline the applicant's intended pathway (which can be confirmed or changed at time of acceptance into the program) (three-year option applicants should indicate why they wish to pursue this option).
 - An updated curriculum vitae (CV).
 - Original university academic transcripts.
 - For applicants planning to complete their program ~~at a~~ department or institution that is not an affiliated teaching hospital of the University of Toronto: documentation providing evidence of departmental support is necessary to attest to the ~~clinical site's~~organization's ability and willingness to provide the necessary internal support for the ~~clinical practice~~practicum and master's research project (including time, expertise, and resources). Applicants are to submit the Evidence of Departmental Support for Non-Affiliated Clinical Sites Organizations form.
- English-language proficiency. Applicants whose primary language is not English and who graduated from a university where the language of instruction was not English must demonstrate proficiency in the **English language** through the successful completion of one of the following English language proficiency tests:
 - **Test of English as a Foreign Language (TOEFL):** a minimum score of 580 on the paper-based test and 5 on the Test of Written English (TWE); a minimum of 93 on the Internet-based test and 22 on the writing/speaking sections.
 - **Michigan English Language Assessment Battery (MELAB):** minimum score of 85.
 - **International English Language Testing System (IELTS):** minimum score of 7.0.
 - **Certificate of Proficiency in English (COPE):** minimum score of 76.
 - Academic Preparation Course, International ESL Program, School of Graduate Studies: minimum final grade of B in Level 60.

Program Requirements

Two-Year Full-Time Program

- The program option is for applicants who wish to complete the program in a two-year, six-session format.
- Within this two-year, six-session program, students must:
 - Complete a mandatory set of 4.5 full-course equivalents (FCEs) over the first four sessions. Each course has a weighting of 0.5 FCE.
 - Complete 1.0 elective FCE, in a subject area related to your chosen pathway, within the first four sessions. In all cases, courses selected are subject to the approval of the Program Director.
 - Complete the two final-year practicum courses MSC 1510Y and MSC 1511Y (2.0 FCEs) and the major research project (0.5 FCE) in the final two sessions of the program. The objectives of the practica and the research project will be dictated by the chosen pathway and guided and monitored by the faculty supervisory committee for each student (additional details of how these courses are customized per pathway can be found in the course descriptions).

Three-Year Extended Full-Time Option

- This program option, designed for working professionals who wish to complete the degree over an extended period, covers the equivalent of the two-year, six-session program, but over a three-year or nine-session period.
- Within this program option, students must:
 - Complete a mandatory set of 4.5 full-course equivalents (FCEs) over the first six sessions. Each course has a weighting of 0.5 FCE.
 - Complete 1.0 elective FCE, in a subject area related to your chosen pathway, within the first six sessions. In all cases, courses selected are subject to the approval of the Program Director.
 - Complete the two final-year practicum courses MSC 1510Y and MSC 1511Y (2.0 FCEs) and the major research project (0.5 FCE) over a maximum of the final four sessions of the program option. The objectives of the practica and the research project will be dictated by the chosen pathway and guided and monitored by the faculty supervisory committee for each student (additional details of how these courses are customized per pathway can be found in the course descriptions).

Program Length

6 sessions (2-year full-time program) (typical registration sequence: F/W/S/F/W/S);

9 sessions (3-year extended full-time option) (typical registration sequence: F/W/S/F/W/S/F/W/S)

Time Limit

3 years for the full-time program

4 years for the extended full-time program full-time

Course List

MSC 1500H	Advanced Radiotherapy and Medical Physics
MSC 1501H	Frontiers in Radiation Medicine Research
MSC 1502H	Translational Radiobiology Applied to Radiation Science
MSC 1503H	Clinical Reasoning and Decision Making in Radiotherapy Part I
MSC 1504H	Clinical Reasoning and Decision Making in Radiotherapy Part II
MSC 1506H	Professional and Clinical Leadership <u>I: Making the Leader</u>
MSC 1507H	Clinical Competence and Continuous Learning
MSC 1508H	Medical Radiation Sciences Research Development
MSC 1509H	Master's Research Project
<u>MSC1512H</u>	<u>Improving Cancer Outcomes with Survivorship Research</u>
<u>MSC1513H</u>	<u>Seminars in Cancer Care Leadership</u>
<u>MSC1514H</u>	<u>Professional and Clinical Leadership II: Influencing the System</u>

InternshipPracticum Courses

MSC 1510Y	Clinical -Practicum I
MSC 1511Y	Clinical -Practicum II

Appendix E: Course Descriptions



Medical Radiation Sciences Curriculum ReDesign **Existing & Proposed Course Descriptions**

MSC1500H: Advanced Radiotherapy & Medical Physics

Info: 0.5 FCE (Fall Y1*)

Course Hours: 35 contact hours

Online/In-Class: > 90% online (including both synchronous and asynchronous activities)

Pathways: all

Director: Harry Keller

This course will provide learners with a conceptual framework with which to evaluate current advances in the design, delivery, and assessment of modern radiation treatment. Fundamental principles driving development and research in: the optimization of dose delivery; the constantly evolving role of imaging for radiotherapy; the recent advances in radiobiology; and the implications of these advances for radioprotection, will be addressed. This course will offer a multidisciplinary approach at the intersection of clinical, physics, biological, and technical expertise. The course is organized as a seminar series, where groups of experts will focus on gaps in knowledge as well as on the present and future directions in various aspects of radiation medicine. Basic physics will be taught in a pragmatic way, with equations and fundamental principles described alongside practical radiation medicine application. By its conclusion, this course will have provided the learner a vision of where radiation medicine is going, as well as a strong physics foundation allowing them to play an active role in optimizing the application of radiation therapy and in innovating for the future use of radiation in treating disease.

MSC1501H: Frontiers of Radiation Medicine Research

Info: 0.5 FCE (Winter/Summer Y1*)

Course Hours: 30 contact hours

Online/In-class: >90% online (including both synchronous and asynchronous activities)

Pathways: all

Directors: Anne Koch, Patricia Lindsay, Tony Fyles

This course introduces the learner to the principles and conduct of radiation medicine research in the clinical environment, through exposure to current research projects being carried out within the University of Toronto and the radiation medicine community at large. Application of fundamental research methods, including the value of knowledge translation and research dissemination, will be highlighted and encouraged across the complete spectrum of radiation medicine research including: basic biologic research and experimental therapeutics, basic and applied medical physics research, translational biological and clinical research including quality of life studies, and health outcomes epidemiological research. Relating closely to the concurrently offered MSC1508 (Principles of Radiation Medicine Research), concepts in this course will be put into action through development of a research grant proposal in a topic of interest to the student.

MSC1502H: Translational Radiobiology Applied to Radiation Science

Info: 0.5 FCE (Winter/Summer Y1*)

Course Hours: 40 contact hours

Online/In-Class: 50% oncampus/50% online (including both synchronous and asynchronous activities)

Pathways: Clinical & Research

Director: Bradly Wouters

In an era where dramatic improvements in the quality and sophistication of radiotherapy are being achieved, the course is designed to highlight state-of-the-art knowledge regarding biological responses to ionizing radiation at the molecular, cellular and clinical level. Special emphasis will be placed on the learner's ability to synthesize information from different pre-clinical and clinical studies to explain tumour response, acute and late effects of radiotherapy and second malignancies following treatment. Learners will identify a gap in current knowledge and through independent enquiry and group work, devise a testable hypothesis addressing this gap. After establishing realistic goals and aims, the learner will build upon knowledge gleaned from the 1-week didactic course and work with a mentor to refine the overall plan, finally developing the framework for a project to be presented as a final course assignment.

MSC1503/4H: Clinical Reasoning & Decision-Making I & II

Info: 0.5 credits each (Fall/Winter Y1*)

Course Hours: 32 hours

Online / In-Class: >90% online (including both synchronous and asynchronous activities)

Pathways: all

Directors: Rebecca Wong, Robert Dinniwell, Nicole Harnett, Grace Lee

In this course, systematic approaches to clinical decision-making will be explored, as they apply to radiation therapy for cancer, from the perspective of the complex interplay of factors in three key domains: tumour biology, technical radiotherapy, and the individual patient. Each course will highlight gaps in current clinical science literature relating to a variety of primary cancer sites. Learners will engage in decision-making exercises based on these issues. Learners will integrate existing clinical, theoretical, and scientific knowledge to debate, justify and deconstruct the rationale for current clinical practice.

MSC1506H: Professional & Clinical Leadership I: Making the Leader

Info: 0.5 credits (Fall Y1*)

Course Hours: 30 contact hours

Online/ In-Class: 80% online (including both synchronous and asynchronous activities)

Pathways: all

Director: Cate Palmer

This course will introduce the principles of leadership in healthcare, and the characteristics that contribute to a strong clinical and professional radiation therapy leader in the 21st century. Individual leadership styles and characteristics will be highlighted and contrasted, and learners will be engaged in reflective exercises to appreciate and build their own attributes and cognitive styles as leaders. The concepts of communication, team dynamics, and mentorship will be explored as they relate to strong leadership, using the National Health Service's Healthcare Leadership Model as a framework. This interdisciplinary course will draw on guest lecturers in the various content areas to expose learners to the multiple facets of leadership in the health care environment.

MSC1507H: Clinical Competence & Continuous Learning

Info: 0.5 credits (Summer Y1*)

Course Hours: 39 hours

Online / In-Class: >90% online (including both synchronous and asynchronous activities)

Pathways: all

Directors: Lisa DiProspero & Kieng Tan

Attaining and maintaining clinical competence is a life-long undertaking for health care professionals. Assessing needs and gaps and establishing professional goals is fundamental to developing appropriate strategies for achieving competence. Proving and attesting to competence is also critical in education and in practice for regulated health professionals. In this course, learners will be introduced to the concepts and theories that form the cornerstone of teaching, learning and evaluation in the workplace. It will include exposure to the tools that can be used to monitor and evaluate their own competence, as well as for mentoring and guiding others in the world of competency-based education. Course activities will allow learners to apply the theories and tools to the educational and practice environments.

MSC1508H Principles of Radiation Medicine Research

Info: 0.5 credits (Winter/Summer Y1*)

Course Hours: 30 hours

Online / In-Class: > 90% online (including both synchronous and asynchronous activities)

Pathways: all

Directors: Caitlin Gillan, Mike Velec

This course will provide the learner with the knowledge and support to prepare for the conduct of practice-related research. It focuses on the theoretical underpinnings and practical issues involved in the design of novel research as a principal investigator, from framing a research question based on comprehensive literature review to the intricacies of quantitative and qualitative methodological approaches, data collection, and analysis. This will help the learner to conceive, design and operationalize a research proposal for a master level project in radiation medicine practice. This course will be delivered via regular seminars, which will identify and explore the skills and topics relevant to critical stages of the research process. Students will receive reading material for each step of the research process and then apply that knowledge through the development of their own research proposal.

MSC1509H: Master's Research Project

Info: 0.5 credit (Winter/Summer Y2*)

Course Hours: 36 hours

Online/ In-Class: > 90% online (including both synchronous and asynchronous activities)

Pathways: [All Clinical & Leadership](#)

Directors: Caitlin Gillan & Meredith Giuliani

In this course, learners will conduct the major research project (MRP) proposed during MSC1508H, likely (but not necessarily) within the environment and practice-related context selected for their Internship.

Following approval from all relevant research ethics bodies, the learner will complete all the activities necessary to implement a live research project. Learners will collect and analyze data to answer the research question then effectively present findings to their peer group, and prepare them appropriately for broader dissemination.

MSC1510H: Practicum I

Info: 1.0 credit (Winter Y2*)

Course Hours: ~200 hours

Pathways: All

Directors: Nicole Harnett, Rebecca Wong

This is the first of two, 1.0 credit experience-based courses designed as the competency development segment of the program. The overall goal of this first experience-based immersive practicum is to allow the student to consolidate the theory and principles of the didactic portion of their program with the chosen professional environment, according to their individual pathway (clinical, leadership, or research). The final year practical experience will be tailored for each pathway.

- The clinical pathway will continue as per the current program format, in a hospital-affiliated clinical radiation treatment department.
- Students in the leadership pathway will select internship hosts that address their interests. This may be a professional organization, provincial cancer agency, or advocacy group
- Students in the research pathway will select hosts that address their specific interest in conducting research. This may be a hospital or university research laboratory or clinical site.

Individualized learning plans and goals will be tailored accordingly with the chosen internship host site. They will have an approved plan outlining their individual learning goals as well as for the portfolio of evidence they will compile based on those learning needs, established with the guidance of the Faculty Supervisory Committee. During this course, the learner will address the identified basic competencies for the area of specialization under direct supervision of the Local Practicum Supervisor at the local site. The learners will meet with course directors bi-weekly to review progress against learning objectives. The Local Practicum Supervisor will be responsible for supervising the student and assisting him/her in the achievement of their course goals and collaborating with the Faculty Supervisory Committee to monitor student progress.

MSC1511H: Practicum II

Info: 1.0 FCE (Summer Y2*)

Course Hours: ~200 hours

Pathways: All

Directors: Nicole Harnett, Rebecca Wong

This second internship course is designed to allow the student to build on basic competency in the area of specialization by progressing to the higher order activities pertinent to becoming a leader in their chosen pathway. Students will use their existing Learning Plan and revise if necessary in consultation with the Local Practicum Supervisor and Course Director, under the guidance of the Faculty Supervisory Committee. The learners will meet with course directors bi-weekly to review progress against learning objectives. Basic competency activity will be undertaken with minimal or indirect supervision while higher-level activities will continue to be supervised directly by the Local Practicum Supervisor.

MSC1512H: Improving Cancer Outcomes with Survivorship Research

Info: 0.5 FCE (Summer Y1*)

Course Hours: 40 hours

Online / In-Class: > 90% online (including both synchronous and asynchronous activities)

Pathways: all

Directors: Lori Bernstein, Kitty Chan

Cancer Survivorship has been a neglected field of study in cancer research, and in keeping with national recommendations, health professionals should be equipped to address the health care and quality of life issues facing cancer survivors. The Canadian Institute for Health Research has endorsed five areas of study: evaluating models of care, identifying mechanisms underlying long term effects, describing the needs and characteristics of unique populations, measurement and effective tool development and development of effective interventions. These areas will frame the content of this course, which will run as a seminar series delivered by guest survivorship researchers (scientists, clinicians and educators). Each will be invited to present current research issues they are addressing in their research programs, discuss the methodological challenges, and present the findings of the studies they have chosen to highlight.

MSC1513H: Seminars in Cancer Care Leadership

Info: 0.5 FCE (Fall/Winter Y1*)

Course Hours: 33 hours

Online / In-Class: > 90% online (including both synchronous and asynchronous activities)

Pathways: Leadership

Director:: Charles Catton

The course will be offered across two sessions and will complement Professional and Clinical Leadership I&II (MSC1506 and 1514). Key thought leaders in the cancer care system will be selected to engage students in discussion on current and pressing challenges in health care, specifically in cancer care in Ontario (ie access to care, the role of industry in healthcare, health economics, privatization of healthcare etc). Topics addressed in MSC1506 and MSC1514 will be considered from the perspective of leaders at various relevant clinical cancer care institutions, professional and government organizations, and advocacy groups.

MSC1514H: Professional & Clinical Leadership II: Influencing the System

Info: 0.5 FCE (Fall Y1*)

Pathways: Leadership

Online/ In-Class: > 90% online (including both synchronous and asynchronous activities)

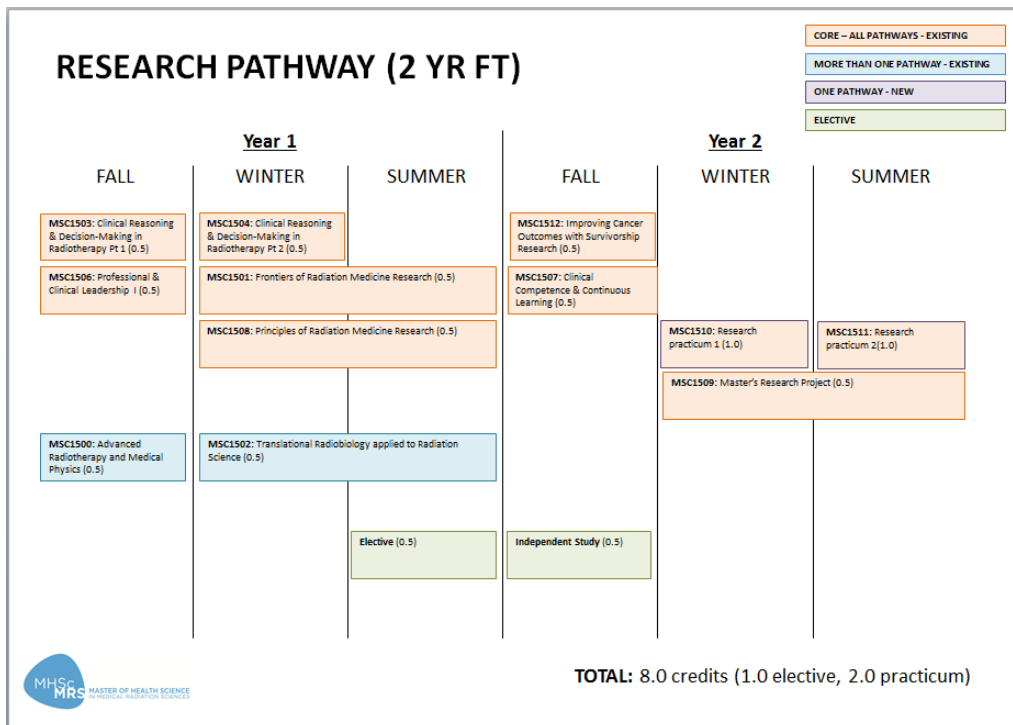
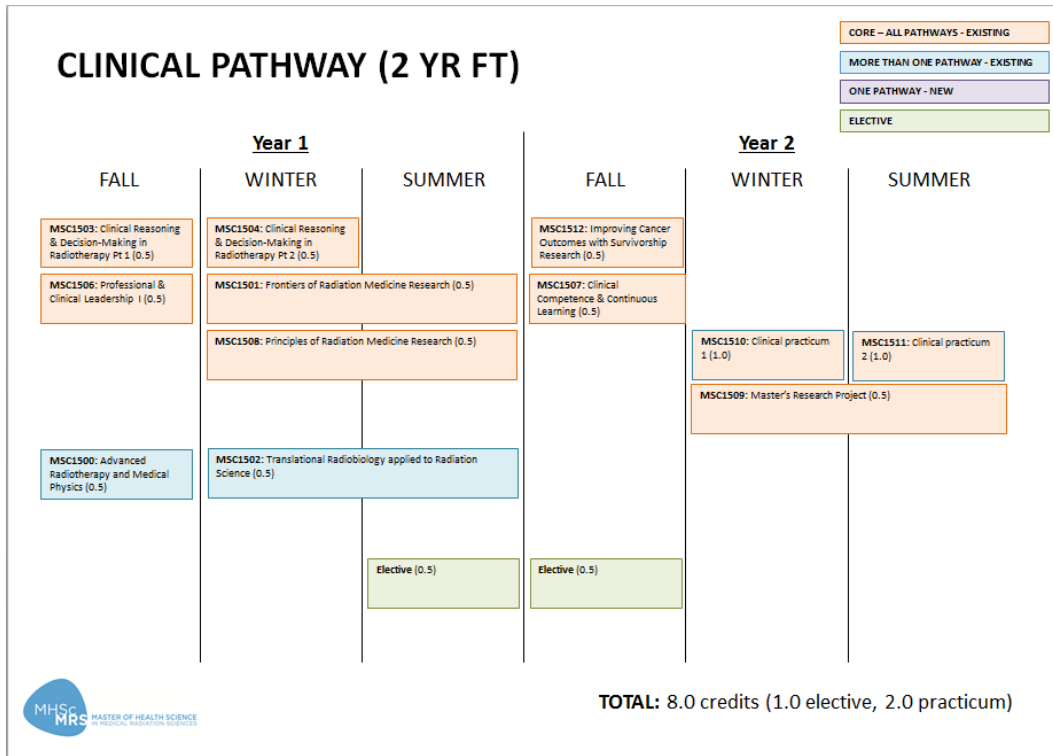
Director: Padraig Warde

This course will follow Professional & Clinical Leadership I, and continue to use the National Health Service Healthcare Leadership Model to introduce the learner to systems considerations in healthcare leadership. Radiation therapy, as an integral element of cancer care, will serve as a context to explore such theoretical principles as professionalization, self-regulation, strategic leadership, organizational governance and accountability, and advocacy - taking into account local, national and international health care trends. Other

allied health perspectives may also be considered throughout the course, as applicable. This interdisciplinary course will draw on guest lecturers in the various content areas to expose learners to the multiple facets of leadership in the healthcare environment.

** This course position reflects the two-year full-time program. For course location in the three-year extended full-time program, see Appendix G.*

Appendix F: Proposed Pathways – 2 YR FT



PROFESSIONAL LEADERSHIP PATHWAY (2 YR FT)

- CORE – ALL PATHWAYS - EXISTING
- MORE THAN ONE PATHWAY - EXISTING
- ONE PATHWAY - NEW
- ELECTIVE

Year 1			Year 2		
FALL	WINTER	SUMMER	FALL	WINTER	SUMMER
MSC1503: Clinical Reasoning & Decision-Making in Radiotherapy Pt 1 (0.5)	MSC1504: Clinical Reasoning & Decision-Making in Radiotherapy Pt 2 (0.5)		MSC1512: Improving Cancer Outcomes with Survivorship Research (0.5)		
MSC1506: Professional & Clinical Leadership I (0.5)	MSC1501: Frontiers of Radiation Medicine Research (0.5)		MSC1507: Clinical Competence & Continuous Learning (0.5)		
	MSC1508: Principles of Radiation Medicine Research (0.5)			MSC1510: Leadership practicum 1 (1.0)	MSC1511: Leadership practicum 1 (1.0)
				MSC1509: Master's Research Project (0.5)	
MSC1513: Professional & Clinical Leadership II (0.5)					
MSC1514: Leadership Seminar Series (0.5)					
		Elective (0.5)	Elective (0.5)		

TOTAL: 8.0 credits (1.0 elective, 2.0 practicum)



Appendix G: Proposed Pathways – 3 YR EFT

PROPOSED CLINICAL PATHWAY (3Y EFT)

- CORE – ALL PATHWAYS - EXISTING
- MORE THAN ONE PATHWAY - EXISTING
- ONE PATHWAY - NEW
- ELECTIVE

Year 1			Year 2			Year 3	
FALL	WINTER	SUMMER	FALL	WINTER	SUMMER	FALL	WINTER/SUMMER (2 semesters)
MSC1503: Clinical Reasoning & Decision-Making in Radiotherapy (0.5)	MSC1504: Clinical Reasoning & Decision-Making in Radiotherapy Pt 2 (0.5)	MSC1512: Improving Cancer Outcomes with Survivorship Research (0.5)		MSC1501: Frontiers of Radiation Medicine Research (0.5)			
MSC1506: Professional & Clinical Leadership I (0.5)		MSC1507: Clinical Competence & Continuous Learning (0.5)		MSC1508: Principles of Radiation Medicine Research (0.5)			
					MSC1510: Clinical practicum 1 (1.0)		MSC1511: Clinical practicum 2 (1.0)
	MSC1502: Translational Radiobiology applied to Radiation Science (0.5)		MSC1500: Advanced Radiotherapy and Medical Physics (0.5)				MSC1509: Master's Research Project (0.5)
			Elective (0.5)	Elective (0.5)			

TOTAL: 8.0 credits (1.0 elective, 2.0 practicum)

PROPOSED RESEARCH PATHWAY (3Y EFT)

- CORE – ALL PATHWAYS - EXISTING
- MORE THAN ONE PATHWAY - EXISTING
- ONE PATHWAY - NEW
- ELECTIVE

Year 1			Year 2			Year 3	
FALL	WINTER	SUMMER	FALL	WINTER	SUMMER	FALL	WINTER/SUMMER (2 semesters)
MSC1503: Clinical Reasoning & Decision-Making in Radiotherapy (0.5)	MSC1504: Clinical Reasoning & Decision-Making in Radiotherapy Pt 2 (0.5)	MSC1512: Improving Cancer Outcomes with Survivorship Research (0.5)		MSC1501: Frontiers of Radiation Medicine Research (0.5)			
MSC1506: Professional & Clinical Leadership I (0.5)		MSC1507: Clinical Competence & Continuous Learning (0.5)		MSC1508: Principles of Radiation Medicine Research (0.5)			
					MSC1510: Research practicum 1 (1.0)		MSC1511: Research practicum 2 (1.0)
	MSC1502: Translational Radiobiology applied to Radiation Science (0.5)		MSC1500: Advanced Radiotherapy and Medical Physics (0.5)				MSC1509: Master's Research Project (0.5)
			Elective (0.5)	Independent Study (0.5)		Elective (0.5)	

TOTAL: 8.0 credits (1.0 elective, 2.0 practicum)

PROPOSED LEADERSHIP PATHWAY (3Y EFT)

CORE - ALL PATHWAYS - EXISTING
MORE THAN ONE PATHWAY - EXISTING
ONE PATHWAY - NEW
ELECTIVE

Year 1			Year 2			Year 3	
FALL	WINTER	SUMMER	FALL	WINTER	SUMMER	FALL	WINTER/SUMMER (2 semesters)
MSC1503: Clinical Reasoning & Decision-Making in Radiotherapy (0.5)	MSC1504: Clinical Reasoning & Decision-Making in Radiotherapy Pt 2 (0.5)	MSC1512: Improving Cancer Outcomes with Survivorship Research (0.5)		MSC1501: Frontiers of Radiation Medicine Research (0.5)			
MSC1506: Professional & Clinical Leadership I (0.5)		MSC1507: Clinical Competence & Continuous Learning (0.5)		MSC1508: Principles of Radiation Medicine Research (0.5)			
					MSC1510: Leadership practicum 1 (1.0)		MSC1511: Leadership practicum 2 (1.0)
	MSC1514: Professional & Clinical Leadership II (0.5)					MSC1509: Master's Research Project (0.5)	
MSC1513: Seminars in Cancer Care Leadership (0.5)							
			Elective (0.5)	Elective (0.5)			

TOTAL: 8.0 credits (1.0 elective, 2.0 practicum)

University of Toronto

Major Modification Proposal: Significant Modifications to Existing Graduate and Undergraduate Programs

This template should be used to bring forward all proposals for major modifications to existing graduate and undergraduate programs for governance approval under the University of Toronto's Quality Assurance Process.

Program being modified:	<i>Master of Science in Occupational Therapy (MScOT)</i>
Proposed Major Modification:	The proposed modification is to add a one year part-time Advanced Standing Option for admission into the MScOT program with a combination of in-person and online learning. The Advanced Standing Option will allow eligible occupational therapists with a BScOT to acquire the MScOT degree. The 12-month part-time program includes a one-week residency followed by online courses. Occupational therapists entering the program must be eligible for licensure for independent practice with a provincial regulatory body. As such they have completed the majority of the academic and all of the fieldwork requirements of students enrolled for 24 months in the MScOT program. Thus, the Advanced Standing Option is reduced from 6 sessions to 3 sessions and a reduced requirement for FCEs from 18 to 3.5
Department / Unit (if applicable):	Department of Occupational Science and Occupational Therapy
Faculty / Academic Division:	Faculty of Medicine
Dean's Office contact:	Dr. Allan Kaplan, Vice-Dean, Graduate and Academic Affairs Rachel Zulla, Graduate Affairs Officer, GLSE
Proponent:	Dept. of Occupational Sciences and Occupational Therapy Susan Rappolt, Chair Andrea Duncan, Lecturer Deirdre Dawson, Associate Professor
Version Date:	March 15, 2016

1 Summary

Please provide a brief summary of the change(s) being proposed as it relates to the current structure of the program

The proposal is to create a part-time Advanced Standing Option to the existing 24-month program that leads to the professional graduate degree, MScOT. The Advanced Standing admissions option will allow eligible occupational therapists with a BScOT to acquire the MScOT degree. It differs from the existing 24-month MScOT program in 3 ways:
1 – Applicants must have a BScOT and be eligible for licensure for independent practice with a provincial regulatory body.

2 – In recognition of the qualifications of the applicants, the program length is substantially reduced from 6 sessions to 3 sessions and has a reduced number of FCEs from 18 to 3.5. The 3.5 FCEs in the Advanced Standing option represent the coursework not offered in a BScOT curriculum. It is coursework that is critical for a Masters’ degree in occupational therapy (MScOT) in Canada. This course work includes a 1.5 FCE Graduate Research Project.

3 – To maximize accessibility to potential candidates, the delivery method is through a blended face to face / online approach, more specifically a one-week residency followed by online course delivery.

Advanced Standing Option students will be enrolled as part-time students.

2 Effective Date

The part-time Advanced Standing MScOT Option will start in September 2016 (pending approvals).

3 Academic Rationale

What are the academic reasons for the change proposed and how do they fit with the unit’s and Division’s academic plans

The MScOT program is currently offered as a 24-month program consistent with the requirements for national accreditation as entry-level occupational therapy program. Prior to 2001, the entry-level degree for occupational therapists in Canada was a BScOT (this is still the entry level degree in some countries). There are many occupational therapists in Canada, including graduates of the University of Toronto, practicing with a BScOT and wishing to upgrade their knowledge and credentials. Thus, the document proposes a part-time Advanced Standing MScOT Option to meet the academic needs of these individuals. Individuals and employers are interested in advancing the credentials of the BScOT graduates. It is believed that this new program will build professional capacity and increase research activity.

The knowledge base that Advanced Standing Option students will bring to the MScOT program is markedly different than that of students who have not completed a BScOT degree and are enrolled for 24 months in the MScOT program. Students without a BScOT enrolled in the MScOT program for 24 months require a transformative learning orientation (see Appendix A for the MScOT Educational Conceptual Framework, 2012) in order to support their development of a professional identity, an occupational perspective, and skills in occupational therapy assessments and interventions. Students entering the MScOT program through the Advanced Standing Option will already have acquired these attributes through their BScOT degree and clinical practice. Advanced Standing Option students require a learning approach that is grounded in social constructivism, that is, building on their existing knowledge and experiences (see Educational Conceptual Framework, Appendix D).

Thus, the focus of the course work in the Advanced Standing Option will be on the theoretical foundations of occupational science, relevant research methodologies and experience in conducting an independent research project. These requirements are consistent with the current Vision and Mission of the Department to graduate leaders in occupational therapy practice, education and research, and critical for the MScOT degree. The Advanced Standing Option of the MScOT program does not include courses involving fieldwork components. Applicants who are eligible for the Advanced Standing Option who are registered or eligible for registration with a Canadian provincial occupational therapy regulatory body and therefore have successfully completed the requisite fieldwork requirements for entry to practice. Please see below and Appendix E for details.

The hybrid online/face-to-face delivery method is provided to maximize accessibility to potential candidates who may have work and/or have family responsibilities and need the flexibility of this

delivery plan in order to successfully complete the part-time Advanced Standing Option.

4 Description of the Proposed Major Modification(s)

Please describe in detail what changes are being proposed. Major modifications include changes to the program requirements that will significantly change what students will know and be able to do when they complete the program. Please be explicit about how the learning outcomes have changed and include either the both previous and proposed learning outcomes or one version of the current LOs with the new LO in track changes. You may wish to use Appendices A and B. Please provide Calendar copy either in track changes or as two separate documents in appendices C and D as applicable.

1. Content

The academic program requirements for the part-time Advanced Standing MScOT admissions option are compared to the requirements for students enrolled for 24 months in the MScOT program in Appendix E. Prospective candidates with a BScOT who are eligible for licensure with a provincial regulatory body will have already met those requirements noted as 'waived' for the Advanced Standing Option.

In brief, the academic requirements for the MScOT Advanced Standing admissions option will be 3.5 FCEs as follows:

- OCT1111Y: Occupational Science: Foundations for Occupational Therapy (1.0 FCE)
- OCT1121H: Research Issues and Approaches (0.5 FCE)
- OCT1122H: Methods in Practice Based Research (0.5 FCE)
- OCT1220Y: Graduate Research Project (1.5 FCE)

2. Delivery

The MScOT program's part-time Advanced Standing Option has a delivery method designed to provide maximal accessibility to clinicians and informed by a needs survey conducted in May-June 2016. Of 78 clinicians from the GTA who reported they were considering enrolling in the MScOT program's Advanced Standing Option, 83.3% indicated they would like to be able to do it online and 83.2% indicated they would like to be able to complete the program within a year.

Students enrolled through the Advanced Standing MScOT admissions option will attend a one-week residency at the beginning of Session/Term 1. During this week, components of OCT1111Y and OCT1121H will be taught. The students will then participate in weekly learning activities including but not limited to online lectures, web based group discussions, and/or meetings with the course instructors or research supervisors. For OCT 1220Y, meetings with the research project supervisor will take place face-to-face and/or online depending on the location of the student and supervisor.

3. Admission Requirements - Students

The MScOT program will admit a minimum of 8 and a maximum of 20 students through the part-time Advanced Standing Option in the first year.

The minimum admission requirement are as follows:

- Undergraduate occupational therapy degree, from a World Federation of Occupational Therapists' recognized university, with a minimum mid-B standing in the final year of the undergraduate courses;
- Registered, or qualified to be registered, as an occupational therapist in Canada with a provincial regulating body;
- English facility requirements must be demonstrated by all applicants educated outside Canada whose primary language is not English and who graduated from a university where the language of instruction and examination was not English. Applicants must

demonstrate facility in the English language through the successful completion of the Test of English as a Foreign Language (TOEFL), with minimum scores of: Paper-based test: 600 with 5 on the TWE and 50 on the TSE. Internet-based test: 100/120 overall and 22/30 on the writing and speaking sections.

To apply students will have to provide:

1. Transcripts and Degree Assessment
2. 3 page Letter of Intent
3. Resume or Curriculum Vitae
4. 2 Letters of Reference
5. Proof of Licensure or Eligibility for Licensure for independent practice as an Occupational Therapist with a Canadian provincial regulatory body.

4. Admission Process

The existing MScOT program uses the ORPAS system to collect admissions. This process is not appropriate or relevant to the Advanced Standing MScOT admissions option since the ORPAS application materials have been developed for students who do not have a BScOT degree. Applicants will use the School of Graduate Studies (SGS) on-line system for the application process and uploading of application materials. This is the same process used for the Advanced Standing MScPT Option.

5 Impact of the Change on Students

Outline the expected impact on continuing students, if any, and how they will be accommodated. Please detail any consultation with students

The part-time Advanced Standing Option will have no impact on students enrolled for 24 months in the MScOT program:

1. Teaching workloads in the Department of Occupational Science and Occupational Therapy will be adjusted to allow the students in the Advanced Standing MScOT Option required courses to receive instruction from the experienced instructors who teach the same courses in the 24-month MScOT program. Adjustments (reductions) in the other teaching and service workloads of these faculty members will be made to ensure that there will be no negative impact on students enrolled for 24 months in the MScOT program.
2. The majority of the Advanced Standing Option coursework will be delivered online. The one residency week will be organized such that classroom space for current students is not compromised. Thus, there will be no impact on the space requirements of the students enrolled for 24 months in the MScOT program.

The faculty members who teach the required courses for the students enrolled in the part-time Advanced Standing Option will be the same faculty members teaching these courses to the students enrolled for 24 months in the MScOT program. Classrooms at 500 University are outfitted with the latest technology to record lectures. The output is a professional video, voice and screen capture that will be accessible to students in the Advanced Standing option through the My Media site. Lectures recorded by faculty will be posted for Advanced Standing Option students.

Students enrolled for 24 months in the MScOT program are expected to attend live classes at 500 University Avenue and participate in intensive group work in assigned study and mentor groups that continue throughout the entire 24 months. Group work for students enrolled for 24 months is designed to build professional skills and promote clinical reasoning required for occupational therapy practice. Students enrolled for 24 months in the MScOT program also have access to recorded video, voice and screen capture lectures.

Students in the Advanced Standing Option will participate in group work with other students in the

Advanced Standing Option, as these students have already achieved competencies in professional skills and clinical reasoning through their BScOT degrees and professional practices. We have been advised by Laurie Harrison, Director, Online Learning Strategies, University of Toronto and others involved in online learning that it promotes success if students in an online program have opportunities to develop a group identity with colleagues going through the same program.

6 Consultation

Describe the impact of the major modification on other programs and any consultation undertaken with the Dean and Chair/Director of relevant academic units

We have conducted a survey of practicing occupational therapists with BScOT degrees who would be potential students to the Advanced Standing MScOT Option. There were over 150 responses to the survey within 48 hours, and over 40% of respondents said that they would enrol in an Advanced Standing MScOT Option if one were available at the University of Toronto.

Susan Rappolt, Chair, Department of Occupational Science and Occupational Therapy, has consulted with Dr. Trevor Young, Dean, Faculty of Medicine, and Allan Kaplan, Vice-Dean, Graduate and Academic Affairs. All parties are in support of establishing the Advanced Standing MScOT Option as it will further develop OS&OT's reputation and provides an important service to our clinical community. We have previously been approached by institutions seeking an advanced standing option for many of their BScOT trained employees.

We do not anticipate an impact on enrolment in the MSc program in the Rehabilitation Sciences Institute as the students enrolling in this program typically come with undergraduate degrees in other areas (e.g., psychology, health sciences etc.) and are interested in a thesis-based program.

To ensure excellence in the online delivery of the academic requirements for the Advanced Standing MScOT Option, we have consulted with Laurie Harrison, Director, Online Learning Strategies, University of Toronto who has agreed to work with us in the course adaptation process.

7 Resources

Describe any resource implications of the change(s) including but not limited to faculty complement, space, libraries, and enrolment/admissions. Please be specific where this may impact significant enrolment agreements with the Faculty/Provost's Office. Indicate if the major modification will affect any existing agreements with other institutions, or will require the creation of a new agreement to facilitate the major modification (e.g. Memorandum of Understanding, Memorandum of Agreement, etc). Please consult with the Provost's Office (vp.academicprograms@utoronto.ca) regarding any implications to existing or new agreements.

The resources required for the proposed modification are primarily absorbed within the Department's workload policy and other structures in place in the Department. Specifics follow.

1. Coordination of the Advanced Standing MScOT Option is being shared by Dr. Deirdre Dawson, Chair of Curriculum for the Department and Andrea Duncan. This work is part of their assigned teaching workload.
2. Faculty teaching the required courses in the Advanced Standing MScOT Option will also teach these courses to students enrolled for 24 months in the MScOT program. The teaching and service workloads of these faculty members will be adjusted to accommodate their teaching of students in the Advanced Standing Option.
3. Administrative work for admissions, scheduling etc. are being undertaken by existing Department staff, as some staff responsibilities have recently been automated reducing workload, thereby increasing staff workload capacity.
4. All classrooms at 500 University are outfitted with the latest technology to record lectures. The output is a professional video, voice and screen capture that will be accessible to students in the

Advanced Standing option through the My Media site. Faculty will use these resources to record key lectures and these will be posted for the Advanced Students viewing. Blackboard is used for all courses and will also be used for the Advanced Standing Option students.

5. More TA hours will be required to address the increase of students in existing courses. Payment for these hours will be offset by the revenue generated by enrolment.

8 UTQAP Process

Steps	Approvals
Development/consultation within Unit	
Consultation with Dean's Office (& VPAP)	
	Unit level approval as appropriate
	Faculty/ Divisional Council
Submission to Provost's Office	
AP&P – reported annually	
Ontario Quality Council – reported annually	

Appendix A: Proposed Learning Outcomes, and Degree Level Expectations

Address how the design, structure, requirements and delivery of the program support the program learning outcomes and degree level expectations

The learning objectives and outcomes for the MScOT program are consistent with the requirements for national accreditation as entry-level occupational therapy program and with the competencies described in the Profile of Practice of Occupational Therapists in Canada 2012. Table 2 in this document delineates the “*Performance Expectations for competent practice of Occupational Therapists*” and is attached as Appendix F. The 24-month MScOT addresses all of these performance expectations. The Advanced Standing Option addresses select performance expectations, as the students enrolled in this option will have already achieved the competencies related to professional skills and clinical reasoning through their BScOT degrees and professional practices. The areas of focus are highlighted in Appendix F and detailed below.

Table 1: Master's DLEs

MASTER'S DEGREE LEVEL EXPECTATIONS (based on the Ontario Council of Academic Vice Presidents (OCAV) DLEs]	MASTER'S PROGRAM LEARNING OBJECTIVES AND OUTCOMES	HOW THE PROGRAM DESIGN AND REQUIREMENT ELEMENTS SUPPORT THE ATTAINMENT OF STUDENT LEARNING OUTCOMES
<p>1. Depth and Breadth of Knowledge A systematic understanding of knowledge, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of the academic discipline, field of study, or area of professional practice.</p>	<ul style="list-style-type: none"> • Demonstrate expertise in occupations, occupational engagement and occupational engagement in practice • Incorporate the client's perspective on meaning and relevance of needs and plans • Recognize the limits of personal expertise • Maintain and enhance personal competence through ongoing learning. • Identify the determinants of health of the clients served, including barriers to access services and resources. • Display awareness of diversity and the power issues involved in a professional relationship. 	<ul style="list-style-type: none"> • OCT1111Y: Occupational Science: Foundations for Occupational Therapy • OCT1121H: Research Issues and Approaches • OCT1122H: Methods in Practice Based Research

MASTER'S DEGREE LEVEL EXPECTATIONS (based on the Ontario Council of Academic Vice Presidents (OCAV) DLEs]	MASTER'S PROGRAM LEARNING OBJECTIVES AND OUTCOMES	HOW THE PROGRAM DESIGN AND REQUIREMENT ELEMENTS SUPPORT THE ATTAINMENT OF STUDENT LEARNING OUTCOMES
<p>2. Research and Scholarship</p> <p>A conceptual understanding and methodological competence that i) Enables a working comprehension of how established techniques of research and inquiry are used to create and interpret knowledge in the discipline; ii) Enables a critical evaluation of current research and advanced research and scholarship in the discipline or area of professional competence; and iii) Enables a treatment of complex issues and judgments based on established principles and techniques; and, on the basis of that competence, has shown at least one of the following: a) The development and support of a sustained argument in written form; or b) Originality in the application of knowledge.</p>	<ul style="list-style-type: none"> • Critically evaluate information to support client, service and practice decisions. • Demonstrate ethical practice. • Demonstrate commitment to competent practice. • Contribute to the occupational therapy profession. 	<ul style="list-style-type: none"> • OCT1111Y: Occupational Science: Foundations for Occupational Therapy • OCT1121H: Research Issues and Approaches • OCT1122H: Methods in Practice Based Research
<p>3. Level of Application of Knowledge</p> <p>Competence in the research process by applying an existing body of knowledge in the critical analysis of a new question or of a specific problem or issue in a new setting.</p>	<ul style="list-style-type: none"> • Apply core expertise and professional reasoning. • Synthesize assessment findings and reasoning to develop a targeted action plan. 	<ul style="list-style-type: none"> • OCT1121H: Research Issues and Approaches • OCT1122H: Methods in Practice Based Research • OCT1220Y: Graduate Research Project
<p>4. Professional Capacity/Autonomy</p> <p>The qualities and transferable skills necessary for advanced professional capacity and autonomy requiring i) The exercise of initiative and of personal responsibility and accountability; and ii) Decision-making in complex situations; b. The intellectual independence required for continuing professional development; c. The ethical behavior consistent with academic integrity and</p>	<ul style="list-style-type: none"> • Work effectively in inter-professional and intra-professional teams. • Effectively work with teams to manage and resolve conflict. • Manage-day-to-day professional practice and career. • Participate in activities that 	<ul style="list-style-type: none"> • OCT1220Y: Graduate Research Project

MASTER'S DEGREE LEVEL EXPECTATIONS (based on the Ontario Council of Academic Vice Presidents (OCAV) DLEs]	MASTER'S PROGRAM LEARNING OBJECTIVES AND OUTCOMES	HOW THE PROGRAM DESIGN AND REQUIREMENT ELEMENTS SUPPORT THE ATTAINMENT OF STUDENT LEARNING OUTCOMES
the use of appropriate guidelines and procedures for responsible conduct of research; and d. The ability to appreciate the broader implications of applying knowledge to particular contexts.	contribute to the effectiveness of organizations and systems.	
5. Level of Communications Skills The ability to communicate ideas, issues and conclusions clearly.	<ul style="list-style-type: none"> • Communicate the roles and benefits of occupational therapy. • Engage in effective dialogue. • Convey effective written and electronic documentation. • Support diversity in communication. 	<ul style="list-style-type: none"> • OCT1111Y: Occupational Science: Foundations for Occupational Therapy • OCT1121H: Research Issues and Approaches • OCT1122H: Methods in Practice Based Research • OCT1220Y: Graduate Research Project

Appendix B: Current Calendar Copy with Changes Tracked

2015-16 SGS Calendar

Occupational Science and Occupational Therapy

Faculty Affiliation

Medicine

Degree Programs

Occupational Therapy

MScOT

Collaborative Programs

The following collaborative program is available to students in the participating degree program as listed below:

1. **Women's Health**
Occupational Therapy, MScOT

Overview

The **Master of Science in Occupational Therapy** (MScOT) program prepares students in advanced academic and professional knowledge and applied research skills for leadership in occupational therapy practice. The program emphasizes the application of theory and research evidence to clinical practice through rigorous studies in occupational therapy and research production and utilization. Graduates are eligible to write the certification examination of the Canadian Association of Occupational Therapists, a requirement for registration with the College of Occupational Therapists of Ontario and most other professional regulatory colleges in Canada. Practice in another country generally requires the graduate to pass the licensing requirement specific to that country. Graduates are eligible to:

1. practice independently in a variety of roles, such as consultants and case managers, and in a range of settings, such as acute care, interdisciplinary programs, private practice, and primary health care;
2. supervise rehabilitation assistants, OT aides, or other support workers;
3. use principles of research-based practice to guide and evaluate service delivery;
4. contribute to research that will advance the knowledge base of the discipline;
5. assume management roles;
6. take leadership roles in the profession;
7. take leadership roles in health care and other sectors including social services, education, and labour;
8. fill academic-practitioner positions; and
9. pursue doctoral studies and careers in academia or clinical research.

Contact and Address

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Room 160, 500 University Avenue

Toronto, Ontario M5G 1V7

Canada

Degree Programs

Occupational Therapy

Master of Science in Occupational Therapy

Minimum Admission Requirements

1. Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Occupational Science and Occupational Therapy's additional admission requirements stated below.
1. An appropriate bachelor's degree from a recognized university with high academic standing and a mid-B average or better in the final year of study.
1. To determine initial ranking only, the department will review the last 10.0 full-course equivalents (FCEs) completed at the undergraduate level by the application deadline.
1. Apply online using the Ontario Rehabilitation Sciences Programs Application Service (ORPAS). Applications are accepted approximately mid-October each year, with a deadline approximately the first week of January. Exact deadlines are posted on the ORPAS website and in the *ORPAS Instruction Booklet*.
1. Applicants whose primary language is not English and who graduated from a university where the language of instruction is not English must provide proof of English proficiency by March 1 of the year of application. See General Regulations, sections 4.1.10 English-Language Proficiency and 5.0 Admission Regulations in this calendar for general information and acceptable tests. The department strongly prefers the Test of English as a Foreign Language (TOEFL) and requires a minimum score of:
 1. 600 on the paper-based test, accompanied by a minimum score of 5 on the Test of Written English (TWE)
 1. 100/120 on the Internet-based test with 22/30 on the speaking section and 22/30 on the writing section.
 TOEFL candidates should request that results be sent to institution code 0982.
1. Visit the Occupational Therapy and ORPAS websites for additional information regarding application document submissions (e.g., confidential assessment forms, resumé, personal statement submission).

Master of Science in Occupational Therapy

12-Month Advanced-Standing Option

Minimum Admission Requirements

1. Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Occupational Science and Occupational Therapy's additional admission requirements stated below.
2. A bachelor's degree in occupational therapy from a recognized university with high academic standing and a mid-B average or better in the final year of study.
3. Applicants must be registered, or eligible for registration, for independent practice as an occupational therapist in Canada with a provincial regulating body;
4. Apply online using the SGS online application system. Applications are accepted approximately mid-April each year, with a deadline approximately the first week of June.
5. Applicants whose primary language is not English and who graduated from a university where the language of instruction is not English must provide proof of English proficiency by March 1 of the year of application. See General Regulations, sections [4.1.10 English-Language Proficiency](#) and [5.0 Admission Regulations](#) in this calendar for general information and acceptable tests. The department strongly prefers the Test of English as a Foreign Language (TOEFL) and requires a minimum score of:
 1. 600 on the paper-based test, accompanied by a minimum score of 5 on the Test of Written English (TWE)
 2. 100/120 on the Internet-based test with 22/30 on the speaking section and 22/30 on the writing section.
 TOEFL candidates should request that results be sent to institution code 0982.
6. Visit the [Occupational Therapy](#) for additional information regarding application document submissions (e.g., confidential assessment forms, resumé, personal statement submission).

Program Requirements

1. The MScOT is a two-year, 24-course (18.0-FCE) program of continuous, full-time study.
1. Students begin their studies in September and complete six consecutive sessions, with a range of four to six concurrent courses in each session.
1. There are four full-time block fieldwork components within the program of study.

12-Month Advanced-Standing Option Program Requirements

1. The advanced standing option is a one-year 4-course (3.5-FCE) part-time program of study.
2. Students begin their studies in September and complete three consecutive sessions.
3. Complete the program option in an online environment with a one-week mandatory on-campus residency.
4. For information on units of instruction, please visit the website.

Required Courses

1. OCT 1111Y Occupational Science: Foundations for Occupational Therapy
2. OCT 1121H Research Issues and Approaches in Occupational Therapy
3. OCT 1122H Methods in Practice-Based Research
4. OCT 1220Y Graduate Research Project

MScOT Advanced Standing Option Program Length

1. 3 sessions part-time advanced-standing (typical registration sequence: F/W/S)

Time Limit

2. 3 years

MScOT Program Length

6 sessions full-time (typical registration sequence: F/W/S/F/W/S)

Time Limit

3 years full-time

Course List

OCT 1100H ⁰	Applied Skills and Technology: Human Factors and Design in Occupational Therapy
OCT 1111Y	Occupational Science: Foundations for Occupational Therapy
OCT 1121H	Research Issues and Approaches in Occupational Therapy
OCT 1122H	Methods in Practice-Based Research
OCT 1123H	Framing Practice-Based Research
OCT 1131H	Occupational Therapy Practice I
OCT 1132H	Occupational Therapy Practice II
OCT 1133H	Occupational Therapy Practice III
OCT 1141H	Assessment in Occupational Therapy
OCT 1152Y	Musculoskeletal Structure and Function
OCT 1162Y	Psychosocial Perspectives in Occupational Therapy
OCT 1172Y ⁺	Neuro-motor/Neuro-cognitive Perspectives in Occupational Therapy
OCT 1183Y	Occupational Therapy Fieldwork I
OCT 1190Y ⁰	Building Practice Through Mentorship
OCT 1220Y ⁰	Graduate Research Project (1.5 FCEs)
OCT 1251H	Enabling Occupation with Children: Part I
OCT 1252H	Enabling Occupation with Children: Part II
OCT 1261H	Enabling Occupation with Adults: Part I
OCT 1262Y	Enabling Occupation with Adults: Part II
OCT 1271H	Enabling Occupation with Older Adults: Part I
OCT 1272H	Enabling Occupation with Older Adults: Part II
OCT 1281Y	Occupational Therapy Fieldwork II

OCT 1282Y	Occupational Therapy Fieldwork III
OCT 1283Y	Occupational Therapy Fieldwork IV

⁰ *Course that may continue over a program. The course is graded when completed.*

⁺ *Extended course. For academic reasons, coursework is extended into session following academic session in which course is offered.*

Appendix C: Proposed Calendar Copy

Master of Science in Occupational Therapy

| 12-Month [Part-time](#) [Advanced-Standing Option](#)

Minimum Admission Requirements

- Applicants are admitted under the General Regulations of the School of Graduate Studies. Applicants must also satisfy the Department of Occupational Science and Occupational Therapy's additional admission requirements stated below.
 - A bachelor's degree in occupational therapy from a recognized university with high academic standing and a mid-B average or better in the final year of study.
 - Applicants must be registered, or eligible for registration, for independent practice as an occupational therapist in Canada with a provincial regulating body;
 - Apply online using the SGS online application system. Applications are accepted approximately mid-April each year, with a deadline approximately the first week of June.
 - Applicants whose primary language is not English and who graduated from a university where the language of instruction is not English must provide proof of English proficiency by March 1 of the year of application. See General Regulations, sections [4.1.10 English-Language Proficiency](#) and [5.0 Admission Regulations](#) in this calendar for general information and acceptable tests. The department strongly prefers the Test of English as a Foreign Language (TOEFL) and requires a minimum score of:
 - 600 on the paper-based test, accompanied by a minimum score of 5 on the Test of Written English (TWE)
 - 100/120 on the Internet-based test with 22/30 on the speaking section and 22/30 on the writing section.
- TOEFL candidates should request that results be sent to institution code 0982.
- Visit [Occupational Therapy](#) for additional information regarding application document submissions (e.g., confidential assessment forms, resumé, personal statement submission).

12-Month [Advanced-Standing Option Program Requirements](#)

- The advanced standing option is a one-year 4-course (3.5-FCE) [part-time](#) program of study.
- Students begin their studies in September and complete three consecutive sessions.
- Complete the program option in an online environment with a one-week mandatory on-campus residency.
- For information on units of instruction, please visit the website.

Required Courses

- OCT 1111Y Occupational Science: Foundations for Occupational Therapy
- OCT 1121H Research Issues and Approaches in Occupational Therapy
- OCT 1122H Methods in Practice-Based Research
- OCT 1220Y Graduate Research Project

Program Length

- 3 sessions ~~part~~full-time advanced-standing (typical registration sequence: F/W/S)

Time Limit

- 3 years

Appendix D: Educational Conceptual Framework.

MScOT Educational Conceptual Framework, 2012

Preamble:

In response to the CAOT Accreditation Report (March 2011) of the Department of Occupational Science & Occupational Therapy (Department), and in conjunction with the development of a new Strategic Plan for the Department (October 2011), an ad-hoc sub-committee¹ of the Professional Curriculum Committee was struck in September 2011 to articulate the Department's educational conceptual framework. This document was prepared by the ad hoc sub-committee, in consultation with all core faculty members and with students and community faculty representatives on the Professional Curriculum Committee.

The University of Toronto's *MScOT Educational Conceptual Framework* addresses the **why** and **how** of the curriculum we use to educate students to become occupational therapists. In addition to providing a framework for teaching and learning, the document provides a guide for the renewal of both academic and fieldwork course content and teaching processes. The framework will evolve with new evidence on educational theory and instructional design and with the insights gained by faculty and students. As educators who aim to model reflective practice, instructors are encouraged to discuss their implementation of theory in their course contents and teaching processes with their students.

Our educational conceptual framework builds on the Structure and Flow White Papers (Hall et al., 2001; Cockburn et al., 2007; Dawson, Cockburn & Davies, 2010), and the mission of our Department (2011):

Create knowledge of occupation and its enablement, and prepare leaders in practice, research and scholarship to improve the health and well-being of individuals and communities, locally and globally.

In addition to the resources referenced in this document, we also drew on the results of "Curriculum Conversations" held throughout May-June 2011 with core and status faculty to elicit a broad spectrum of views regarding the curriculum, and on open-ended conversations with key informants, including Professor Sylvia Rodger, Head of Occupational Therapy, University of Queensland and author of *Good practice guides and cases to support curriculum development and renewal in occupational therapy* (2011). The University of Toronto's MScOT Educational Conceptual Framework was ratified by the faculty at the May 2012 Curriculum Retreat.

¹ Committee members and authors: Deirdre Dawson (Chair), Barry Trentham, Lynn Cockburn, & Gail Teachman.

Overview:

The University of Toronto's MScOT Educational Conceptual Framework consists of a definition, a philosophy and values statement, a description of the key learning theories that provide the foundation to our curriculum, and examples of how this framework guides the curriculum as a whole, as well as decision-making regarding prerequisites, course content, instructional methods, and the evaluation of student learning.

Definition:

The MScOT Educational Conceptual Framework is an explicit representation of our educational philosophy, including the concepts, constructs, principles, values, beliefs, and theories that inform our approaches to teaching, learning, curriculum development, curriculum renewal, and the relationships between these.

Philosophy & Values:

We believe that:

- Learning is a life-long, interactive and transformative process.
- Flexible, student-centred pedagogies are critical for developing and fostering leaders.

And that the role of an educator is to:

- inspire
- inform
- challenge
- support
- model
- stimulate problem solving, reflexivity, and critical thinking
- collaboratively discover new knowledge with students

In educating occupational therapists we value:

- excellence, innovation, leadership, collaboration, partnership, occupation, justice, equity, diversity, inclusion, client and family-centredness, integrity, accountability, transparency, life-long learning, critical inquiry, and professionalism

Our purpose is to:

- prepare leaders in occupational therapy practice, research and scholarship to improve the health and well-being of individuals and communities, locally and globally
- ensure that occupational therapy graduates have the knowledge, attitudes, and skills necessary to enable the occupational engagement of all citizens

We expect University of Toronto MScOT students to:

- engage in and be transformed by the learning process
- actively contribute to the educational process by teaching and learning from each other
- mobilize their professional education as change agents at the micro, meso and macro levels of society through practice, research and scholarship in occupational science and occupational therapy

We acknowledge tensions inherent between some of the values and beliefs we hold, and we actively study these tensions to stimulate learning and creativity among faculty and students. Tensions also arise from competing philosophies on the purpose of education. For example, an essentialist² educational approach emphasizes educating competent therapists by means of transmitting expert knowledge, which conflicts with the premises of constructivist and transformative learning theories. These latter theories embody philosophical perspectives that value learning as a transformative experience. In these theoretical perspectives the role of educators is to enable learners to be independent problem solvers who appreciate and address the social issues that support or limit the occupational performance and engagement of individuals, communities and populations. We recognize and respect that students come from different academic and cultural backgrounds, are at different stages of learning, have different goals, and will vary in their ability to learn, integrate and reflect on the content within the MScOT curriculum.

Theories on Learning:

Mezirow's transformative learning theory (1991) is foundational to our MScOT educational conceptual framework, and within this overarching approach we draw on Merriam and Caffarella's social constructivism (1999), Giroux's (2010) and Shor's (1996) critical pedagogy, Kolb's theory of experiential learning (1984), Mergel's cognitive neuroscience theory (1998), and Bloom's taxonomy of learning (Bloom et al., 1956). As learning may be understood as an occupation (or a process that incorporates many occupations), we view the learning process as being influenced by person level performance components (cognitive, affective, physical and spiritual in both educators and students), environmental level performance components (physical, institutional, cultural and social) and by the characteristics of the specific learning activity. Some theories explain person level processes (e.g., cognitive neuroscience theories), while others emphasize the environmental aspects of learning (e.g., social constructivism). Bloom's taxonomy characterizes learning activities. We recognize that these theories have overlapping principles (e.g., the need for reflecting on experience) and span several aspects of learning. While our courses incorporate strategies from several of these theories, we frame our curriculum on the overarching principles of transformative learning theory.

² Essentialist education philosophy assumes that people learn through the transmission of expert knowledge by a more knowledgeable instructor where there is a focus on techniques and products. Teachers following this approach would provide presentations, demonstrations and modeling (McNay, 2009). A commonly used analogy for this type of teaching is the image of the student as an empty vessel, which the teacher fills with her/his knowledge.

TRANSFORMATIVE LEARNING THEORY.....

Brief Overview:

Transformative learning theory focuses on ‘deep learning’, that is, learning that occurs with a significant shift in meaning perspectives or in the system of shared beliefs that individuals use to make sense of lived experience (Mezirow, 1991). Transformative learning theory is based on adult learning theory and is grounded by similar theoretical principles and hypotheses (Knowles, 1984):

1. Self-Concept: As individuals mature, they move from dependency to self-directedness.
2. Experience: Adults draw upon their experiences to aid their learning.
3. Readiness: Motivation to learn is influenced by the adoption of new social roles where new learning is required.
4. Orientation: As new knowledge is gained, the adult learner is motivated to apply it in relevant situations where problem solving or new skills are required.
5. Motivation: As a person matures, she or he is motivated to learn from internal factors.

The transformative learning lens we have adopted as a faculty means that we understand that our students enter the MScOT program with knowledge that stems from their particular cultural, religious, educational and social experiences and their individual personal attributes. Our curriculum is designed to move our students to a broader understanding of how the world works, to understanding the value of occupation in that world, and to seeing themselves as occupational therapists. This is achieved by actively engaging the students in queries regarding how we know what we know, and explicit questioning of accepted views of power and authority. Fundamental shifts in their consciousness may occur resulting in new views of family, work, society and the world at large. Theorists of transformative learning suggest that the learner’s capacity for compassion, understanding, tolerance and acceptance is greatly expanded using this approach, leading to new ways of interacting with family, work and society (Mezirow, 2000). We strive to ensure our curriculum is truly transformative, and that these changes in consciousness lead to significant changes in our graduating students’ actions.

Transformative experiences are more likely to occur when learners gain experiences that are beyond their usual social location. Our fieldwork, in particular, provides opportunities in which students can be immersed in other cultures. We devote substantial resources to providing our students with cross-cultural learning opportunities both within and outside of Canada. Other examples of how transformative learning theory is implemented in our curriculum are given below. In addition, we provide examples of how educators reflect this theory in their teaching and assessments.

An educator in the classroom or in fieldwork using Transformative Learning Theory will:

- engage learners in the examination of diverse sources of information that may influence their worldview and belief system
- establish an environment that builds trust and care and facilitates development of sensitive relationships among learners (Taylor 1998)
- create a “community of knowers”, individuals who are “united in a shared experience of trying to make meaning of their life experience” (Loughlin, 1993, pp. 320-321)

- model willingness to learn and change by expanding and deepening her/his own understanding of, and perspectives about, subject matter and teaching approaches (Cranton, 1994)
- model critical self-reflection regarding the belief systems that inform her or his own actions
- promote and enable dialogue on diverse student perspectives to elicit critical reflection
- problematize commonly accepted terms or conventions, e.g., medical versus social models of disability, and the assumptions behind strategies such as chronic disease self-management
- implement varied approaches in the classroom to convey the lived experience of potential users of occupational therapy, e.g., arts-informed methods such as narrative, drama, video, documentary and photographic images that lead to an expanded frame of reference for students
- model the critical examination of evidence, e.g., evidence on neurodevelopmental treatment, or factors that predict return to work outcomes following traumatic brain injury
- discuss how the social determinants of health challenge assumptions about disease causality
- acknowledge that the experiences of learners relate to real life situations

Specific examples of the influence of Transformative Learning Theory in our curriculum include:

- students identifying changes in their clinical reasoning during case-based discussions, as well as documenting changes in their clinical reasoning across the program in their portfolios
- students gaining different perspectives through panels of individuals with diverse abilities, ethno-cultural backgrounds and other characteristics
- students' development of guidelines for transcultural dialogue, completed at the beginning of Term One and revised throughout the curriculum, with the aim to develop a transculturally safe and challenging learning environment
- distant and international health fieldwork opportunities that expose students to role merging practice areas or underserved populations with follow-up reflective sessions
- use of role-playing, guided imagery, simulated patients and patient partners to engage students in learning about the perspectives of others
- experiential skills labs (e.g., wheelchair mobility lab)
- students' immersion in research where problems are analyzed from different theoretical and methodological stances

Assessments in our curriculum derived from Transformative Learning Theory include:

- the use of reflective papers and portfolios completed within the mentorship course where mentors facilitate an emerging awareness of a professional identity among their mentees
- assignments focused on occupational therapists as change agents, which challenge students to consider their role in bringing about social or organizational change that goes beyond the individual client (e.g. OT Practice 1 policy and OT Practice 3 entrepreneur assignments)
- group projects in which students develop creative solutions to common occupational issues (e.g., technology design project, older adult social issues response seminar)

While Mezirow's (1991) transformative learning theory is foundational to our curriculum, we also draw on other theories to guide our curriculum. In the educational literature, a common way to think about the relationship among the various learning theories is by using an historical frame that demonstrates how the various theories have developed over time. For example, early behaviourist theorists such as Pavlov and Skinner emphasized skill building through systems of rewards and feedback, which then informed cognitivist theorists, for example, Bandura, who sought to explain the internal cognitive learning processes (Snowman, McCown & Biehler, 2012). These theories are based on a more objectivist stance and have lost some prominence with the emergence of constructivist approaches. Constructivist approaches take a subjectivist stance to examine how learning, while constructed internally using cognitive schemas, is negotiated within diverse sociocultural perspectives on what is accepted as reality. According to Mergel (1989), behaviorism and cognitivism are both concerned with breaking down learning tasks and identifying clearly measurable, behavioural objectives. Behaviourist approaches are evident in reinforcing students' contributions during class, tests, receiving grades, and positive verbal feedback. Skill-based learning may benefit from a behaviourist approach (e.g. repetition of neuro-rehab techniques) that is reinforced by the practice partner, client, or supervising therapist. Cognitive approaches inform the breaking down of tasks and teaching from simple to more complex tasks. Constructivism fosters more divergent thinking and acknowledges that students may experience diffuse and lateral learning outcomes that are not easily quantified and measured.

SOCIAL CONSTRUCTIVISM³

Brief Overview:

Social constructivism is based on specific premises about reality, knowledge and learning: reality is invented or constructed through human activity, and knowledge is developed through the interactions of people with each other and the environments that surround them. Learning, therefore, is seen as a social process. Merriam and Caffarella (1999) distinguish between constructivism as a process of creating the meaning of experience, and social constructivism which views meaning-making as a process shaped by social interaction and discourse. Social constructivism leads to a greater focus on self-directed learning. Social constructivism challenges the notion of the learner as a passive recipient of transmitted knowledge and assumes that learners construct knowledge based on internal cognitive processes, social interactions and other experiences. The interaction of the student group and their environment in the creation of knowledge is critical, and, therefore, considerations of culture and context are fundamental in the learning process.

It follows that instructional models based in this perspective will emphasize collaboration among learners within the environments that are important to them. Educational approaches from this

³ Though social constructivism and constructionism are often used interchangeably and while they both speak to the active involvement of learners in "constructing" knowledge the former has its basis in cognitive psychology and emphasizes cognitive processes while the later emphasizes that learning is constructed based on external social processes. *"The word with the v expresses the theory that knowledge is built by the learner, not supplied by the teacher. The word with the n expresses the further idea that happens especially felicitously when the learner is engaged in the construction of something external or at least sharable"* (Papert & Harel, 1991, p.3).

perspective focus on methods that involve learning with others, including reciprocal teaching, peer collaboration, cognitive apprenticeships, and problem-based instruction (Schunk, 2000).

An educator in the classroom or in fieldwork who uses Social Constructivism will:

- appreciate that learners bring prior academic knowledge and social and cultural experiences to the learning environment
- require students to consider the social, physical and policy contexts when seeking possible solutions to individual and social problems
- facilitate a process of critical questioning to build shared understandings
- challenge the notion that there is one solution to each problem

Specific examples of Social Constructivism in our curriculum include:

- case-based discussions where students examine their own understanding of the problems and their contexts, and collaboratively (with student peers, instructors and where possible, clients, families and other informed members of the public) construct potential solutions
- collaborative project development within study and mentor groups leading to papers and seminar presentations
- fieldwork placements where learning is constructed within particular practice contexts
- student portfolios, which offer students an opportunity to construct their professional self through self-reflection and dialogue
- interprofessional educational opportunities where students learn about the profession and practice of occupational therapy and other health disciplines within the context of an interprofessional team

Assessments derived from Social Constructivism:

- emphasize the need for clinical rationales, including contextual analyses of case-based class discussions, written assignments, and examinations
- use group assignments where students build their conceptual knowledge through shared creative problem-solving
- prompt students to identify assumptions that may or may not be shared by others in both class discussions and in fieldwork

CRITICAL PEDAGOGY.....

Brief Overview:

Closely linked to transformative learning theory is critical pedagogy. Critical pedagogy is a philosophy of education that endorses and nurtures students' critical thinking (Giroux, 2010; Shor, 1996). Critical pedagogies promote students' learning through cycles of theory, application, evaluation and reflection. Students and teachers engage in questioning 'taken-for-granted' assumptions by unmasking and challenging power inequities and social injustices, and resisting the reproduction of social constraints and hierarchies. Students and teachers value alternate ways of knowing and acknowledge the perspectives of marginalized or under-represented people alongside

more dominant, authoritative scientific knowledge. The goal of critical pedagogy is social transformation. We view the adoption of a critical pedagogical approach as key to the education of future occupational therapists, who will individually and collaboratively advocate and mediate positive social change. Though closely linked to transformative learning, critical pedagogy more explicitly identifies and problematizes the social and power inequities in everyday interactions that shape the lives of the people served by occupational therapists.⁴

An educator in the classroom or in fieldwork who uses Critical Pedagogy will:

- require students to critically examine implicit assumptions, power imbalances, inequities and the social structures that maintain these
- facilitate students' identification of how social locations may further marginalize the people they aim to serve, for example, in their roles as gatekeepers to government funding for assistive devices, occupational therapists may reinforce inequitable social policies
- acknowledge that there are dominant worldviews which maintain concentrations of power and privilege through existing social structures and language
- clarify that society is not always just, and since the mechanisms that sustain power inequities may be invisible to those who are marginalized, an ongoing struggle for equity is required

Specific examples of the influence of Critical Pedagogy in our curriculum include:

- the anti-oppression frameworks workshop held in the mental health foundations course where students are led through exercises that help them to identify their own fluctuating positions of power, privilege and oppression
- student engagement in identifying and challenging professional dominance during clinical problem-solving e.g., the weighting of client self-knowledge versus scientifically derived norms in decision-making in classroom cases and in fieldwork
- educator use of narratives of exemplar change agent strategies used by occupational therapists and others to affect change beyond the individual level
- educator modeling of responsible critical analysis of power structures such as language, economic institutions and social practices that affect one's occupational engagement

Assessments derived from Critical Pedagogy:

- ask how students' understanding of power structures and mechanisms has affected their knowledge of the practice of occupational therapy
- evaluate students' knowledge of critical theory concepts, for example, social structures, social location, and disability activism

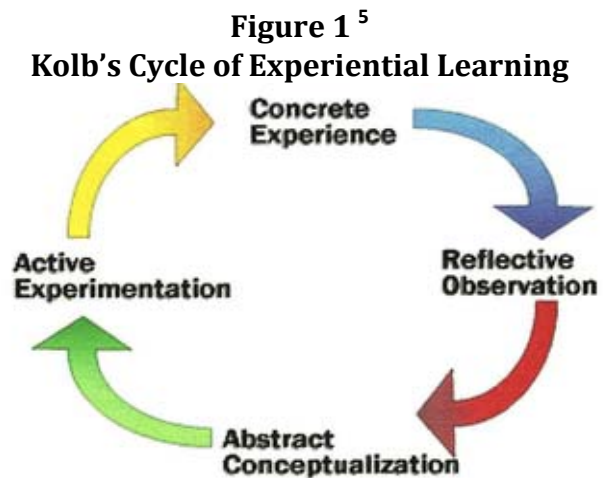
⁴ Because of their similarities, critical pedagogy influences in the curriculum also are reflected in some of the strategies outlined in the section on transformative learning.

KOLB'S THEORY OF EXPERIENTIAL LEARNING.....

Brief Overview:

Experiential learning can be understood as a “direct encounter with the phenomena being studied rather than merely thinking about the encounter, or only considering the possibility of doing something about it” (Borzak 1981:9). Although there are a number of theorists whose work is based on experiential learning, Kolb’s theory of experiential learning (1984) is the most widely known and cited. Kolb focuses on understanding the processes required to make sense of concrete experiences and the associated styles of learning.

Figure 1 shows that experiential learning theory is based on four key elements: (1) concrete experience, (2) observation and reflection, (3) the formation of abstract concepts, and (4) testing in new situations (Kolb, 1984). While Kolb hypothesized that his learning cycle can be entered at any point, he suggested the optimal point of entry is the concrete experience that forms the base for reflection.



Through the cycle of doing and observing the consequences, the learner analyzes patterns and hypothesizes general principles (abstract conceptualizations), and then tests these in context (active experimentation). Kolb’s theory is particularly useful in guiding educators on how and when to introduce theory in the learning cycle. Kolb (1984) believed that individuals are stronger in some aspects of learning than others, and posits the four types of learners that are described in Table 1.

Table 1: Kolb’s Types and Characteristics of Learners

Learning Style & Characteristics	Description
<p><u>Convergence</u>: Abstract conceptualizations and active experimentation</p>	<ul style="list-style-type: none"> • strong in practical applications of ideas • can focus on hypo-deductive reasoning on specific problems • can be unemotional, has narrow interests

⁵ Image by Karin Kirk, Professional Studies, Regis University. Retrieved June 27, 2012 from <http://academic.regis.edu/ed202/subsequent/kolb2.htm>.

<u>Diverger</u> : Concrete experience and reflective observation	<ul style="list-style-type: none">● strong in imaginative ability● good at generating ideas and seeing things from other perspectives● interested in people and has broad cultural interests
<u>Assimilator</u> : Abstract conceptualization and reflective observation	<ul style="list-style-type: none">● strong ability to create theoretical models● excels in deductive reasoning● concerned with abstract concepts rather than people
<u>Accommodator</u> : Concrete experience and active experimentation	<ul style="list-style-type: none">● greatest strength is doing● more a risk taker; solves problems intuitively● performs well when required to react to immediate circumstances

An educator in the classroom or in fieldwork who uses Kolb's Cycle of Experiential Learning approach will:

- explicitly ask students to reflect, conceptualize, and experiment with new experiences, ideas and skills
- continually add new variables or contingencies into case discussions to assist students in their efforts to generalize or theorize new ideas

Specific examples of the influence of Kolb's Cycle of Experiential Learning in our curriculum include:

- case-based learning
- modeling by lab facilitators to promote students' reflections and conceptualizations while on employing, for example, adult learning principles during ADL training tasks to enable clients' desired skills
- fieldwork (inherently an experiential activity)
- mentorship groups offering students opportunities to experience and receive feedback on essential therapeutic skills such as giving and receiving feedback, group facilitation and mediation
- reflecting on students' fieldwork experiences in the classroom and theorizing applications to future placements and contexts of practice
- using various forms of simulation where students have the opportunity to practice competencies

Assessments derived from Kolb's Cycle of Experiential Learning will:

- use observation of skill development to evaluate student performance
- use simulated clients to assess student performance
- ask students to generalize newly acquired knowledge to novel and variable situations

COGNITIVE NEUROSCIENCE THEORY.....

Brief Overview:

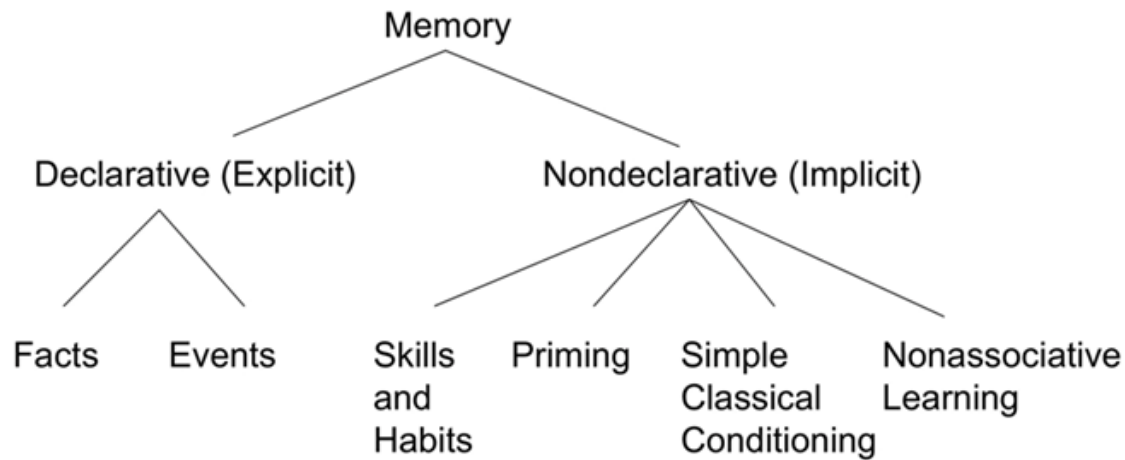
Cognitive learning theories emerged in the 1920's in response to behaviourism, which according to early critics was not able to explain all learning (Mergel, 1998). There is evidence that the learning process occurs within the networks and neurons of the brain and that learning process makes permanent changes in the neural architecture of the brain. Discoveries about learning from the cognitive neuroscience field have critical implications for the educational process.

Memory: The manner in which learners attend to, encode, organize, transform, rehearse, store and retrieve information is understood to be critical for learning (Ertmer & Newby, 1993):

1. Memory has several components and systems (Squire & Zola Morgan, 1998), as depicted in Figure 2 below.
2. Memory formation and retrieval involve encoding, storage or retention, and retrieval (free recall, cued recall, recognition).
3. How information is encoded affects retention (e.g. verbal vs. visual; shallow vs. deep processing).
4. Prior learning can interfere with new learning.
5. Our brains learn and process both non-conscious, automated knowledge (implicit memory) and conscious, controllable knowledge (explicit).
6. Working memory, that is, manipulating information while holding it 'on-line', has a very limited capacity and duration.

Cognitive Load Theory (CLT): Cognitive load theory is derived from the neuroscience of memory, particularly the limited capacity of working memory and the unlimited capacity of long-term memory. CLT asserts that learning by being asked to construct or discover how to solve problems or perform complex tasks overloads working memory and inhibits learning for students who have basic to intermediate levels of relevant prior knowledge (Clark & Clark, 2010). Van Merriënboer & Sweller (2009) have recently described how CLT should inform instructional design in medical education, noting that working memory load is affected by the intrinsic nature of the learning task (intrinsic load) and by the manner in which the tasks are presented (extraneous load). Thus, one approach to enhancing learning may be through reducing the extraneous load by, for example, replacing conventional problem solving tasks with worked examples which have full solutions that students can critique. Another way to manage the intrinsic load by is by building examples or cases from simple to complex.

Figure 2: Components of Memory (Squire & Zola-Morgan, 1998)



An educator in the classroom or in fieldwork who uses Cognitive Neuroscience Theory will:

- reduce the working memory load associated with having to mentally integrate several sources of information by physically integrating those sources of information
- increase working memory capacity by using auditory as well as visual information under conditions where both sources of information are essential (i.e., non-redundant) to understanding
- introduce experiences to allow students to encode information more deeply, e.g., read what is written on slides, encourage students to take notes
- provide students with worked examples of, e.g., treatment plans for them to critique prior to expecting them to develop a treatment plan (Sweller, 1988)

Specific examples of the influence of Cognitive Neuroscience Theory in our curriculum include:

- the use of reflection to deepen encoding and to link present learning to past experiences in order to maximize learning opportunities
- consistent use of complementing audio with visual materials

Assessments derived from Cognitive Neuroscience Theory will:

- be graded from simple to more complex to match development of students' knowledge, attitudes and skills across the curriculum
- consider the amount of information included in each question to prevent overtaxing working memory systems in an exam situation

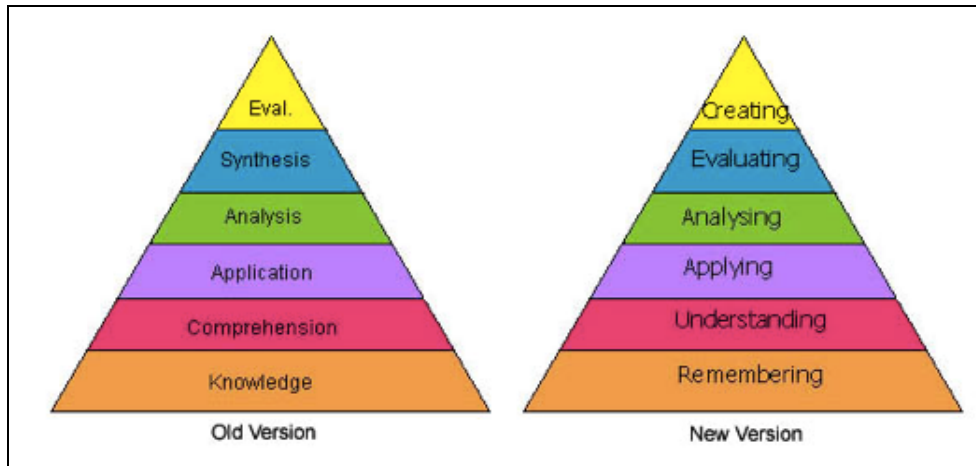
BLOOM'S TAXONOMY OF LEARNING.....

Brief Overview:

Bloom's taxonomy of learning (Bloom et al., 1956) is not a theory that explains how people learn, but rather a comprehensive categorization of the developmental aspects of knowledge types and

learning processes. It is a foundational tool in the MScOT curriculum and is used by our faculty to move from theory to practice. Bloom's taxonomy of learning was developed in the 1950s, and it has been used widely since to develop educational goals and objectives. The original taxonomy and the revised version by Anderson and Krathwohl (2001) are shown in Figure 3.

Figure 3: Bloom's Taxonomy: Original & Revised Versions⁶

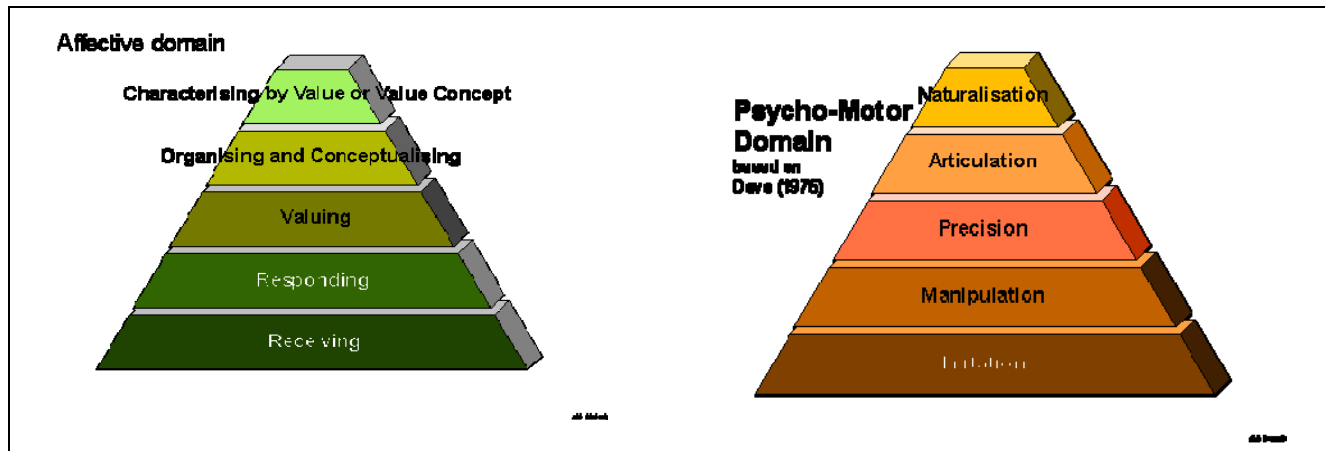


In addition to changing the nouns to verbs, Anderson and Krathwohl's (2001) revised version also incorporates different types of knowledge (factual, conceptual, procedural, meta-cognitive) at each level of learning. Heer (2009) has designed an interactive model of learning objectives that highlights the intersection between the 'knowledge' dimension and the original 'cognitive-process' dimension and provides examples of learning objective verbs at each level. For example, the verb 'list' is at the intersection of 'factual knowledge' on the knowledge dimension and 'remember' on the cognitive dimension, while the verb 'create' is at the intersection of 'meta-cognitive' on the knowledge dimension and 'create' on the cognitive-process dimension.

Later developments have incorporated affective and psychomotor domains, thereby providing a more holistic approach to education (Figure 4). The affective domain is used to characterize student values and attitudes and includes: (1) *Receiving*: being aware or conscious of an event; (2) *Responding*: reacting to an event; (3) *Valuing*: internalizing a belief; (4) *Organization*: commitment to a set of values; and (5) *Characterization*: a change in character or an internalization of a revised value system. The psychomotor domain is concerned primarily with motor skill development necessary for complex motor or technical tasks and includes: imitation, manipulation, precision, articulation and finally, naturalization.

⁶ Figure 3 is adapted from R. C. Overbaugh and L. Schulz's "Bloom's Taxonomy" (2009). Retrieved June 27th 2012 from http://www.medschool.vcu.edu/graduate/pgmdir_res/documents/bloomtaxonomy.pdf

Figure 4: Atherton’s (2011) Versions of Bloom’s Taxonomy: Affective & Psycho-Motor Domains



Bloom’s taxonomy’s influences in the MScOT curriculum:

The use of Bloom’s taxonomy is reflected in the developmental flow of our curriculum and courses as outlined here:

Basic	↔	Complex
Generic	↔	Specific
Teacher-directed	↔	Student-directed
Novice	↔	Expert
Foundation	↔	Occupational Enablement

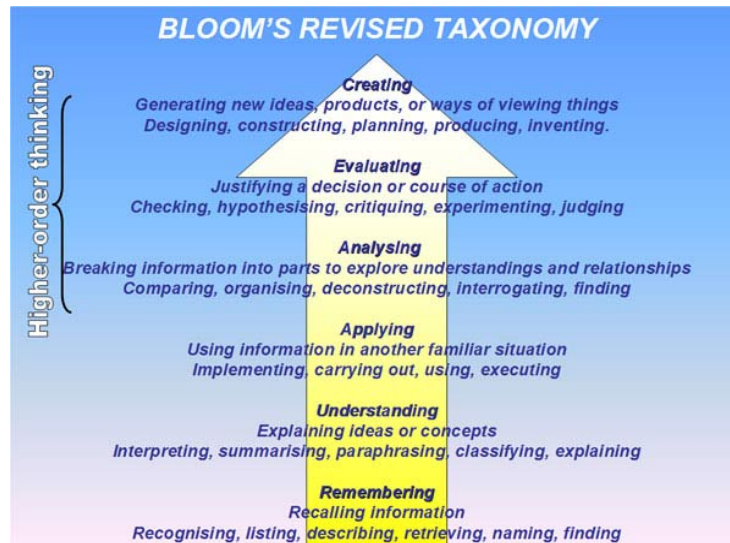
Specific examples of the influence of Bloom’s Taxonomy in our curriculum include:

- using the categories and key words of the domains in writing learning objectives for classes and courses
- planning and evaluating how a class, an assessment process or a course incorporates a range of cognitive, affective, and psychomotor learning objectives and competencies
- planning and evaluating whether courses, terms and the program move students’ learning from simpler to more complex concepts and reasoning, behaviours and professional behaviours
- provide a “just right challenge” in learning tasks and environments
- the developmental flow of the divergent case method process (Cockburn & Polatajko, 2004)

Assessment derived from Bloom’s Taxonomy will:

- use various levels of the cognitive domain of Bloom’s taxonomy to develop assessment tools and test questions by identifying behaviours associated with increasing levels of complexity (Figure 5)

Figure 5: Alcorn’s Bloom’s Revised Taxonomy for Assessment ⁷



Summary:

The **University of Toronto MScOT Educational Conceptual Framework, 2012** describes the concepts, constructs, principles, values, beliefs, and theories that inform our overall approach to teaching, learning, and curriculum development and renewal. This document is intended for use by faculty and students to explicitly identify the theoretical assumptions that influence both teaching and learning. Faculty members draw upon specific educational theories and taxonomies to address particular learning objectives for building students’ competencies in knowledge, skills and professionalism for entry to occupational therapy practice. Social constructivism, critical pedagogy, Kolb’s theory of experiential learning and cognitive neuroscience theory are utilized within the overall principles of transformational learning theory.

Diverse educational theories within the curriculum allow the program to accommodate students’ varied learning styles. Our educational conceptual framework explicitly acknowledges the diversity of individuals’ learning needs and the breadth of the practice of occupational therapy, and provides a resource for the evolution of curricular content and educational processes. Our educational conceptual framework is dynamic and will evolve with emerging educational scholarship, changes in professional practices, feedback from students and graduates, faculty members’ continuous reflection on their educational practices, and ongoing course and curriculum evaluation.

⁷ Margaret Alcorn (nd). Essential Skills Teachers for Excellence, CPD Scotland Retrieved June 27 2012 from: <http://www.cpdscotland.org.uk/what/lead/tfe/skillsfortfe.asp>

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APPENDIX E: Course requirements for Existing MScOT Program and Advanced Standing Option

Course	Existing MScOT Requirement	Advanced Standing Option Requirement
Theoretical Foundations of Occupational Science OCT1111Y: Occupational Science: Foundations of Occupational Therapy	✓	✓
Clinical Foundations of Occupational Therapy OCT1152Y: Musculoskeletal Structure & Function Perspectives in OT OCT1162Y: Psychosocial Perspectives in Occupational Therapy OCT1172Y: Neuromotor and Neurocognitive Perspectives in Occupational Therapy OCT1141H: Assessment in Occupational Therapy	✓	Waived as these topics are addressed in BScOT programs
Foundations of Occupational Therapy Practice OCT1131H: Occupational Therapy Practice I OCT1132: Occupational Therapy Practice II OCT1133: Occupational Therapy Practice III OCT1190Y: Building Reflective Practice through Mentorship	✓	Waived as these topics are addressed in BScOT programs
Methods, Approaches and Evidence for Occupational Therapy Practice OCT1251H: Occupational Therapy with Children: Part I OCT1252H: Occupational Therapy with Children: Part II OCT1261H: Enabling Occupational with Adults OCT1262Y: Enabling Occupational with Adults: Part II OCT1271: Enabling Occupation with Older Adults: Part I OCT1272: Enabling Occupation with Older Adults: Part II OCT1100H: Applied Skills and Technology: Human factors and Design in Occupational Therapy	✓	Waived as these topics are addressed in BScOT programs
Clinical Practicum Courses OCT1183Y: Fieldwork I OCT1281Y: Fieldwork II OCT1282Y: Fieldwork III OCT1283Y: Fieldwork IV Inter-professional Education	✓	Waived as fieldwork hours in BScOT programs are the same or more than those required in the MScOT program
Research Issues, Methods, Approaches and Experience OCT1121H: Research Issues and Approaches in Occupational Therapy OCT1122H: Methods in Research –Based Occupational Therapy Practice OCT1123H: Framing Practice-Based Research OCT1220Y: Graduate Research Project NB: OCT1123H is waived for the Advanced Standing MScOT as students in this program will be undertaking individual Graduate Research Projects (OCT1220Y) rather than doing these in pairs, an arrangement that will provide them with similar learning opportunities and experiences to those attained in OCT1123H.	✓	✓

Appendix F: Performance Expectations / Learning Objectives / Learning Outcomes

The part-time Advanced Standing Option addresses select performance expectations, as the students enrolled in this option will have already achieved the competencies related to professional skills and clinical reasoning through their BScOT degrees and professional practices. The areas of focus are highlighted and detailed below.

Table 2 Performance Expectations for “Competent” Practice of Occupational Therapists.

Key Competencies	Enabling Competencies
1. Expert in Enabling Occupation	
1.1 Function effectively as a client-centred expert in occupation, occupational performance, and occupational engagement.	1.1.1 Demonstrate expertise in occupations, occupational engagement, and occupational engagement in practice with clients. 1.1.2 Advocate for the client and occupational therapy to create positive first point of contact with client based on a referral, contract request, or the occupational therapists’ recognition of the real or potential occupational challenges. 1.1.3 Incorporate the client’s perspective on meaning and relevance of needs and plans. 1.1.4 Establish positive therapeutic relationships with clients that are characterized by understanding, trust, respect, honesty, and empathy. 1.1.5 Demonstrate skills in client-centred practice including mediation, negotiation, awareness, and respect for client.
1.2 Recognize the limits of personal expertise.	1.2.1 Demonstrate insight into personal limitations and expertise. 1.2.2 Recognize situations where occupation, occupational engagement, and related processes should be limited or discontinued. 1.2.3 Demonstrate effective, appropriate, and timely consultation with other health professionals as needed for optimal client service. 1.2.4 Arrange follow-up services for a client within their specific circumstances.
1.3 Perform a complete and appropriate assessment of occupational engagement.	1.3.1 Establish a shared understanding of occupation and occupational engagement issues with the client. 1.3.2 Engage clients to clarify values, beliefs, assumptions, expectations, and desires. 1.3.3 Assess occupational engagement in relevant areas, including self-care, productivity, and leisure; and within the context of roles, demands, expectations, goals and settings, and spiritual values of the client. 1.3.4 Identify the client’s strengths and resources. 1.3.5 Identify the strengths and resources of the occupational therapist in relation to the client’s needs. 1.3.6 Assess cognitive, affective, conative (e.g. meaning, values), and physical components related to occupation and occupational engagement issues identified. 1.3.7 Seek out and synthesize relevant information from other sources, such as family, caregivers, and other professionals. 1.3.8 Use appropriate investigative methods in an effective and ethical manner throughout the assessment process.

Table 2 Performance Expectations for “Competent” Practice of Occupational Therapists, continued.

Key Competencies	Enabling Competencies
1. Expert in Enabling Occupation	
1.4 Apply core expertise and professional reasoning.	1.4.1 Apply relevant and current knowledge of the physical, social, psychosocial, environmental, and fundamental biomedical and social sciences to practice. 1.4.2 Demonstrate sound use of relevant models, frameworks, and theories of occupational therapy. 1.4.3 Demonstrate effective problem solving and judgment to address client needs. 1.4.4 Mediate or negotiate common ground or agree not to continue practice process.
1.5 Synthesize assessment findings and reasoning to develop a targeted action plan.	1.5.1 Analyze tasks and activities relevant to occupational engagement issues. 1.5.2 Determine resources required for service delivery while identifying any limits or constraints on the various service delivery methods. 1.5.3 Identify priority occupational issues and possible occupational goals. 1.5.4 Analyze physical, cultural, social, and institution environmental impact on occupational engagement issues. 1.5.5 Analyze and propose physical design options to increase inclusion and accessibility in the built environment. 1.5.6 Formulate and document possible recommendations based on best explanations. 1.5.7 With client participation and power sharing as much as possible, develop the desired realistic, measurable, understandable, and targeted outcomes consistent with client values and life goals.
1.6 Demonstrate skilled and selective use of occupation and interventions to enable occupation.	1.6.1 Consult, advocate, educate, and engage the client through occupation to implement the process. 1.6.2 Implement targeted action plans relevant to the person, occupation, and environment. 1.6.3 Propose physical design options to increase inclusion. 1.6.4 Incorporate cultural, social, physical, and institutional options to increase inclusion. 1.6.5 Implement interventions in an effective and ethical manner. 1.6.6 Adapt or redesign the plan as needed in monitoring progress regularly. 1.6.7 Document conclusion/exit and disseminate information and recommendations for next steps (e.g., discharge, coordinated transfer, or re-entry).
2. Communicator	
2.1 Engage in effective dialogue.	2.1.1 Demonstrate active listening. 2.1.2 Deliver information in a respectful, thoughtful manner. 2.1.3 Use plain language that is understandable. 2.1.4 Respond to non-verbal cues. 2.1.5 Employ approaches which encourage participation in decision-making. 2.1.6 Communicate appropriately information related to the client’s occupational engagement and occupational engagement. 2.1.7 Adapt communication approach to ensure that barriers to communication (e.g., language, hearing loss, vision loss, inability to communicate verbally, cognitive loss) do not impact the client’s ability to direct their own care process. 2.1.8 Employ teaching aids, written materials, and other resources that support effective communication.
	2.2.1 Use an occupation-based framework for documentation.

Table 2 Performance Expectations for “Competent” Practice of Occupational Therapists, continued.

Key Competencies	Enabling Competencies
2. Communicator	
2.2 Convey effective written and electronic documentation.	2.2.2 Maintain clear, accurate, and appropriate records (e.g., written or electronic) of client encounters and action plans. 2.2.3 Comply with applicable provincial regulatory and organizational document standards.
2.3 Support diversity in communication.	2.3.1 Demonstrate sensitivity to client issues related to diversity and difference. 2.3.2 Enable parties to communicate openly and consider other opinions.
3. Collaborator	
3.1 Work effectively in inter-professional and intra-professional teams.	3.1.1 Demonstrate an understanding of the roles and responsibilities of team members. 3.1.2 Demonstrate a respectful attitude towards team members. 3.1.3 Include the client as active team member whenever possible. 3.1.4 Support positive team dynamics. 3.1.5 Work with team members using shared decision-making to meet the needs of the client. 3.1.6 Work with team members to assess, plan, and provide an integrated approach to services for clients. 3.1.7 Respect team ethics, including confidentiality, resource allocation, and professionalism. 3.1.8 Lead the team when appropriate, working collaboratively with team members to deliver client-centred services.
3.2 Effectively work with a team to manage and resolve conflict.	3.2.1 Respect differences, misunderstandings, and limitations among team members. 3.2.2 Recognize own differences, misunderstandings, and limitations that may contribute to team tensions. 3.2.3 Manage differences and conflicts to ensure an ongoing team focus on the client’s values, goals, and objectives. 3.2.4 Negotiate to resolve conflicts among team members. 3.2.5 Demonstrate support for interprofessional team function. 3.2.6 Chair or participate effectively in team meetings.
4. Practice Manager	
4.1 Manage day-to-day professional practice and career.	4.1.1 Effectively and appropriately prioritize professional duties, including when faced with multiple clients and competing needs. 4.1.2 Allocate therapy services while balancing client needs and available resources. 4.1.3 Balance work priorities and manage time with respect to client services and practice requirements. 4.1.4 Balance work activities, outside activities, and personal priorities.
4.2 Participate in activities that contribute to the effectiveness of the organizations and systems.	4.2.1 Participate in systemic quality process evaluation and improvement such as client safety initiatives. 4.2.2 Participate in established organizational processes such as workload measurement. 4.2.3 Participate in established human resources activities such as annual performance reviews. 4.2.4 Participate in established financial and physical resource planning activities. 4.2.5 Chair or participate effectively in committees and meetings.
4.3 Supervise support personnel in occupational therapy.	4.3.1 Orient support personnel to their role, duties, and responsibilities. 4.3.2 Enable the effectiveness of support personnel through mentoring, coaching, and training.

Table 2 Performance Expectations for “Competent” Practice of Occupational Therapists, continued.

Key Competencies	Enabling Competencies
4. Practice Manager	
4.4 Support fieldwork education.	4.3.3 Develop a detailed understanding of the competencies of support personnel on the intraprofessional team. 4.3.4 Assign appropriate work activities to support personnel working on the team. 4.3.5 Comply with provincial regulatory and organizational document standards that apply to working with support personnel in occupational therapy. 4.4.1 Develop educational activities appropriate to learning objectives and learner needs. 4.4.2 Supervise learners in fieldwork education. 4.4.3 Provide regular, constructive feedback of the learner’s performance. 4.4.4 Evaluate learners using required evaluation forms. 4.4.5 Document learner fieldwork and assessment. 4.4.6 Comply with provincial regulatory and organizational document standards that apply to fieldwork education.
5.1 Advocate for the occupational potential, occupational performance, and occupational engagement of clients.	5.1.1 Assist the client in obtaining funding and services, as necessary and appropriate, so as to achieve outcomes identified in the action plan. 5.1.2 Advocate for occupation and/or occupational engagement opportunities for clients. 5.1.3 Balance the ethical and professional issues inherent in client advocacy, including altruism, autonomy, integrity, social justice, and idealism. 5.1.4 Manage the conflict inherent between the advocacy role for a client and the manager of finite services and resources. 5.1.5 Act on identified opportunities for occupation and occupational engagement including advocacy, promotion, and prevention with individuals for whom occupational therapy services are provided.
5.2 Advocate for occupational needs related to the determinants of health, well-being, and equity for clients served.	5.2.1 Identify the determinants of health of the clients served, including barriers to access services and resources. 5.2.2 Identify vulnerable or marginalized clients among those served. 5.2.3 Advocate appropriately for the vulnerable or marginalized clients to enable participation through occupation.
5.3 Communicate the role and benefits of occupational therapy.	5.3.1 Advocate appropriately for the role of occupational therapy to clients and the interprofessional team. 5.3.2 Act on identified opportunities to communicate the role and benefits of occupational therapy in occupational performance and occupational engagement.
6. Scholarly Practitioner	
6.1 Maintain and enhance personal competence through ongoing learning.	6.1.1 Conduct a regular assessment of personal learning needs. 6.1.2 Demonstrate lifelong learning skills and document a personal program to keep up-to-date and enhance areas of professional competence. 6.1.3 Regularly review new knowledge and determine applicability to practice. 6.1.4 Integrate new learning and evidence into practice. 6.1.5 Evaluate the impact of any change in practice.

Table 2 Performance Expectations for “Competent” Practice of Occupational Therapists, continued.

Key Competencies	Enabling Competencies
6. Scholarly Practitioner	
6.2 Critically evaluate information to support client, service, and practice decisions.	6.2.1 Critically appraise best evidence in order to address client, service, or practice questions. 6.2.2 Integrate critical appraisal conclusions into daily practice.
6.3 Facilitate the learning of clients, the team, and others.	6.3.1 Identify the learning needs and desired learning outcomes of learners. 6.3.2 Educate about the holistic occupational therapy approach, which incorporates occupational demands, and personal and environmental factors. 6.3.3 Demonstrate effective teaching and assessment approaches.
7. Professional	
7.1 Demonstrate ethical practice.	7.1.1 Demonstrate appropriate professional behaviours, including honesty, integrity, commitment, compassion, respect, and altruism. 7.1.2 Communicate title and credentials accurately. 7.1.3 Comply with codes of ethics. 7.1.4 Recognize and appropriately respond to ethical issues encountered in practice. 7.1.5 Comply with client confidentiality, privacy practice standards, and legal requirements. 7.1.6 Maintain appropriate relationships and boundaries with clients. 7.1.7 Recognize and respond appropriately to others’ unprofessional behaviours in practice.
7.2 Demonstrate commitment to competent practice.	7.2.1 Participate actively in profession-led regulation. 7.2.2 Comply with professional and regulatory practice standards. 7.2.3 Demonstrate a commitment to competent occupational therapy practice. 7.2.4 Maintain personal competence.
7.3 Display awareness of diversity and the power issues involved in a professional relationship.	7.3.1 Demonstrate awareness of professional privilege and sensitivity to client issues related to professional privilege and client power. 7.3.2 Respect diversity, including but not limited to, the impact of age, gender, religion, sexual orientation, ethnicity, cultural beliefs, and ability on participation and shared decision-making. 7.3.3 Attend to diversity in providing services with respect to client’s needs, values, and goals.
7.4 Contribute to the occupational therapy profession.	7.4.1 Demonstrate behaviours which contribute to the profession, including participation in professional organizations.

1.1. Board of Examiners – Undergraduate Medical Program

1.1.1. Membership

Council shall approve the membership of the Board of Examiners – Undergraduate Medical Program Committee composed of the following:

Chair: elected by Faculty Council

Vice-Chair: elected by and from the members.

Nine Teaching Staff elected by Council

Two undergraduate medical students (normally the President and past-President of the Medical Society)

Ex officio:

Vice Dean, MD Program

Faculty Affairs Officer (non-voting)

1.1.2. Function

In relation to the **Undergraduate Medical Program**, and on behalf of Council:

- a) At the request of the Vice Dean (or her/his designate), to review the cases of students in academic difficulty and to determine or give advice (as requested) concerning the course(s) of action.
- b) After receiving and considering recommendations from the Vice Dean (or her/his designate) for the progression of students through the Program, to determine in relation to each student, the appropriate course of action, which may include promotion, remediation, failure, suspension, and dismissal; and
- c) To review the marks/grades of all students in all courses of each year of the Program as recommended by the Vice Dean (or designate), adjust and approve as appropriate.
- d) To oversee the general consistency of grading procedures.
- e) To review and approve grades and non-grade course reports.
- f) To report to Council its deliberations, recommendations and decisions.

N.B. The assessment of a student's performance includes not only the evaluation of performance in the courses of the Program but also the evaluation of the student's behavioural, ethical and professional performance in the Program.

1.1.3. Procedures

A student whose performance is being considered by the Board may make a written submission to the Board through the Faculty Affairs Officer.

1.1.3.1. Quorum:

Chair (Vice-Chair) and 50% of the members of the Board of whom one must be a student except as noted below.

Student members

Student members shall be voting members of the Board, but will be excluded from such deliberations upon request of any student whose case is being considered or if their own case is being considered.

Non-Member Attendees

The Vice Dean (or designate), with the agreement of the BOE Chair, will invite those academic and administrative staff who are not members of the Board to attend each meeting only as necessary for the full presentation of information concerning each case. Such visitors may be asked to leave after the presentation of their material.

1.1.3.2. Conflict of Interest

A Board of Examiners member must declare a potential conflict of interest with any case presented to the Board of Examiners. The concern will be disclosed by the member to the Chair, who will decide on the appropriate course of action.

1.1.3.3. Appeal of Decisions

Decisions of the Board are final and binding on the Faculty but students may appeal the decision of the Board to the Faculty of Medicine Appeals Committee.

1.1.3.4. Confidentiality

The Board shall meet *in camera*. The documents provided to the Board at meetings shall be retained by the Faculty Affairs Officer. All deliberations of the Board and all information received by the Board shall be confidential except for such disclosure as is necessary for the Board's Report.

1.1. Board of Examiners – Physician Assistant Professional Degree Program

1.1.1. Membership

Council shall approve the membership of the Board of Examiners – Physician Assistant Professional Degree Program composed of the following:

Chair: elected by Faculty Council

Vice-Chair: elected by and from among the members of the Board

Eight Teaching Staff: elected by Council, at least one member must be from the Department of Family and Community Medicine, and no more than two members shall be associated with the Physician Assistant Professional Degree Program (BScPA) program

Representative from the Michener Institute named by its President

Representative from the Northern Ontario School of Medicine named by its Dean

One student member of the BScPA Program

Ex officio:

Vice Dean, MD Program

Chair, Department of Family and Community Medicine (DFCM)

Medical Director for the BScPA Program (non-voting)

Program Director for the BScPA Program (non-voting)

Faculty Affairs Officer (non-voting)

1.1.2. Function

In relation to the **Physician Assistant Professional Degree Program**, and on behalf of Faculty Council:

- a) At the request of the Medical Director for the BScPA Program or designate to review the cases of students in academic difficulty and to determine or give advice (as requested) concerning the course(s) of action.
- b) After receiving and considering recommendations from the Medical Director for the BScPA Program or designate for the progression of students through the Program, to determine in relation to each student, the appropriate course of action, which may include promotion, remediation, failure, suspension, and dismissal.
- c) To review the marks/grades of all students in all courses of each year of the Program as recommended by the Medical Director for the BScPA Program or designate and, review, adjust and approve as appropriate.
- d) To oversee the general consistency of grading procedures.
- e) To review and approve grades and non-grade course reports.
- f) To report to Council its deliberations, recommendations and decisions.

N.B. The assessment of a student's performance includes not only the evaluation of performance in the courses of the Program but also the evaluation of the student's behavioural, ethical and professional performance in the Program.

1.1.3. Procedures

A student whose performance is being considered by the Board may make a written submission to the Board through the Faculty Affairs Officer.

1.1.3.1. Quorum

Chair (or Vice-Chair) and 50% of the members of the Board of whom one must be a student except as noted below.

Student members

Student members shall be voting members of the Board, but will be excluded from such deliberations upon request of any student whose case is being considered or if their own case is being considered.

Non-Member Attendees

The Vice Dean and/or the DFCM Chair, with the agreement of the BOE Chair, will invite those academic and administrative staff who are not members of the Board to attend each meeting only as necessary for the full presentation of information concerning each case. Such visitors may be asked to leave after the presentation of their material.

1.1.3.2. Conflict of Interest

A Board of Examiners member must declare a potential conflict of interest with any case presented to the Board of Examiners. The concern will be disclosed by the member to the Chair, who will decide on the appropriate course of action.

1.1.3.3. Appeal of Decisions

Decisions of the Board are final and binding on the Faculty but students may appeal the decision of the Board to the Faculty of Medicine Appeals Committee.

1.1.3.4. Confidentiality

The Board shall meet *in camera*. The documents provided to the Board at meetings shall be retained by the Faculty Affairs Officer. All deliberations of the Board and all information received by the Board shall be confidential except for such disclosure as is necessary for the Board's Report.

1.1. Board of Examiners – Undergraduate Medical Program

1.1.1. Membership

Council shall approve the membership of the Board of Examiners – Undergraduate Medical and Physician Assistant Professional Degree Programs composed of the following:

Chair: elected by Faculty Council

Vice-Chair: elected by and from the members.

Nine Teaching Staff elected by Council (at least one member must be from the Department of Family and Community Medicine)

Two undergraduate medical students (normally the President and past-President of the Medical Society)

Two student members of the BScPA Program

Ex officio:

Vice Dean, MD Program

Vice Dean, Partnerships

Faculty Affairs Officer (non-voting)

1.1.2. Function

In relation to the **Undergraduate Medical Program**, and on behalf of Council:

- a) At the request of the Vice Dean, MD Program (or her/his designate), to review the cases of students in academic difficulty and to determine or give advice (as requested) concerning the course(s) of action.
- b) After receiving and considering recommendations from the Vice Dean, MD Program (or her/his designate) for the progression of students through the Program, to determine in relation to each student, the appropriate course of action, which may include promotion, remediation, failure, suspension, and dismissal; and
- c) To review the marks/grades of all students in all courses of each year of the Program as recommended by the Vice Dean, MD Program (or designate), adjust and approve as appropriate.
- d) To oversee the general consistency of grading procedures.
- e) To review and approve grades and non-grade course reports.
- f) To report to Council its deliberations, recommendations and decisions.

N.B. The assessment of a student's performance includes not only the evaluation of performance in the courses of the Program but also the evaluation of the student's behavioural, ethical and professional performance in the Program.

1.1.3. Physician Assistant Professional Degree Program Standing Sub-Committee

1.1.3.1. Membership

All members of the UME Board of Examiners are *ex officio* members of the Physician Assistant Professional Degree Program Standing Sub-Committee

One representative from the Michener Institute named by its President

One representative from the Northern Ontario School of Medicine named by its Dean

1.1.3.2. Function

In relation to the **Physician Assistant Professional Degree Program**, and on behalf of Council:

- a) At the request of the Vice Dean, Partnerships (or her/his designate), to review the cases of students in academic difficulty and to determine or give advice (as requested) concerning the course(s) of action.
- b) After receiving and considering recommendations from the Vice Dean, Partnerships (or her/his designate) for the progression of students through the Program, to determine in relation to each student, the appropriate course of action, which may include promotion, remediation, failure, suspension, and dismissal; and
- c) To review the marks/grades of all students in all courses of each year of the Program as recommended by the Vice Dean, Partnerships (or designate), adjust and approve as appropriate.
- d) To oversee the general consistency of grading procedures.
- e) To review and approve grades and non-grade course reports.
- f) To report to Council its deliberations, recommendations and decisions.

N.B. The assessment of a student's performance includes not only the evaluation of performance in the courses of the Program but also the evaluation of the student's behavioural, ethical and professional performance in the Program.

1.1.4. Procedures

A student whose performance is being considered by the Board may make a written submission to the Board through the Faculty Affairs Officer.

1.1.4.1. Quorum

UME Board of Examiners

Chair (or Vice-Chair) and seven of the members of the Board of whom one must be a UME student except as noted below under Student Members.

Physician Assistant Professional Degree Sub Committee

Chair (Vice-Chair) and five of the members of the Board of whom one must be a Physician Assistant Professional Degree student except as noted below under Student Members.

Student members

Student members shall be voting members of the Board, but will be excluded from such deliberations upon request of any student whose case is being considered or if their own case is being considered.

Non-Member Attendees

The Vice Dean, MD Program and/or the Vice Dean, Partnerships, with the agreement of the BOE Chair, will invite those academic and administrative staff who are not members of the Board to attend each meeting only as necessary for the full presentation of information concerning each case. Such visitors may be asked to leave after the presentation of their material.

1.1.4.2. Conflict of Interest

A Board of Examiners member must declare a potential conflict of interest with any case presented to the Board of Examiners. The concern will be disclosed by the member to the Chair, who will decide on the appropriate course of action.

1.1.4.3. Appeal of Decisions

Decisions of the Board are final and binding on the Faculty but students may appeal the decision of the Board to the Faculty of Medicine Appeals Committee.

1.1.4.4. Confidentiality

The Board shall meet *in camera*. The documents provided to the Board at meetings shall be retained by the Faculty Affairs Officer. All deliberations of the Board and all information received by the Board shall be confidential except for such disclosure as is necessary for the Board's Report.