

MEETING OF FACULTY COUNCIL OF THE FACULTY OF MEDICINE

A meeting of Faculty Council will be held on **Monday, February 12, 2018**, from 4:00 p.m. to 6:00 p.m. in the **Red Room, Donnelly Centre**, University of Toronto.

AGENDA

- | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| 1 | Call to Order | Speaker |
| 2 | Minutes of the previous meeting of Faculty Council – October 16, 2017 | Speaker |
| 2.1 | Business Arising | |
| 3 | Report from the Speaker | Speaker |
| 4 | Reports from the Dean’s Office | |
| 4.1 | Report from the Dean’s Office | T. Young |
| 4.2 | Vice Dean, Research and Innovation | R. Hegele |
| 4.3 | Vice-Dean, Partnerships | L. Wilson |
| 4.3 | Vice-Deans, Education | P. Houston
S. Spadafora
A. Kaplan |
| 5 | Items for Approval | |
| 5.1 | The Education Committee of Faculty Council recommends the approval of the following motions: | |
| “THAT the proposed Major Modification to the Master of Science in Occupational Therapy Program be approved as submitted.” | | S. Rappolt |
| “THAT, as required by the Committee on the Accreditation of Continuing Medical Education Standard 1.1, the Continuing Professional Development Mission Statement be approved as submitted.” | | S. Schneeweiss |
| 5.2 | The Research Committee of Faculty Council recommends the approval of the following motions: | |
| “THAT the proposal to close the Centre for Integrative Medicine as an Extra-Departmental Unit type ‘C’ be approved as submitted.” | | T. Young |
| 5.3 | The Research and Education Committees of Faculty Council recommend the approval of the following motions: | |
| “THAT the proposal to establish a new graduate diploma in Health Research be approved as submitted.” | | N. Sweeney |

6 **Standing Committee Annual Reports**

Appeals Committee
UME Board of Examiners

D. Templeton
B. Papsin

7 **Faculty Council Forum**

Academic Strategic Planning

I. Witterick

L. Wilson

8 **Adjournment**

Speaker

NEXT MEETING: April 23, 2018



**FACULTY COUNCIL
FACULTY OF MEDICINE**

Meeting Materials – February 12, 2018

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UNIVERSITY OF TORONTO

FACULTY OF MEDICINE

Faculty Council of the Faculty of Medicine
Minutes of the October 16, 2017 meeting
4:00 p.m.
Red Room, Donnelly Centre

Members Present: L. De Nil (Speaker), T. Coomber, I. Witterick, R. Hegele, A. Kaplan, C. Evans, T. Bressman, D. Tweed, K. Hanneman, M. Farkouh, A. Levinson, J. Davis, S. Wagner, J. Barkin, L. Wilson, C. Chrystoja, R. Collins, T. Neff, D. Philpott, C. Cunningham, T. Wolever, A. Salapour, A. Fraser, Z. Zhang, R. Aviv, M. Fefergrad, A. Wasney, S. Myrehaug, K. Zabjek, J. Tang, C. Tian, R. Ponda, A. Yan, C. Testa, S. Schneeweiss, M. Connell, A. Jakubowski, N. Taylor, S. McMahon, N. Romanosky

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 – April 24, 2017

The minutes of the meeting of April 24, 2017 had been previously circulated. They were approved on a motion from A. Kaplan and seconded by L. Wilson. 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 Department of Anesthesia, Department of Medical Biophysics, Department of Medical Imaging, Department of Ophthalmology & Vision Sciences, and Department of Otolaryngology – Head & Neck Surgery.

The Speaker also noted that the Faculty Appointments Advisory Committee, a committee of the Dean, requires that changes to the committee's Operations Manual be reported to Faculty Council. This document is included in the Faculty Council meeting materials for information.

3 Reports from the Dean's Office

3.1 Vice Dean, Research & Innovation

Dr. Richard Hegele indicated that the Faculty will be updating the strategic plan in the coming year. He indicated that the update would be a refresh of the current plan with a goal of being more directive rather than implied with desired outcomes.

Dr. Hegele indicated that U of T continues to perform well in world rankings. Dr. Hegele noted that there is a rumor that U of T publishes a lot of "junk" but rankings are not based of volume alone and takes into account quality as well by looking at citations. The QS World University Rankings indicated that U of T is 1st in Canada and 15th in the world in graduate employability.

Dr. Hegele made members aware of the Connaught Global Challenge Award which will award 4 teams with \$250000 each. The awards target important issues facing society and encourage new collaborations among multiple disciplines.

Dr. Hegele indicated that the Faculty has done well in CIHR and Tri Council awards but is wary of underperforming in market share. As market share determines the number of Canada Research Chairs (CRCs) a 1% change in market share could mean 4 CRCs. Dr. Hegele also noted that there is a push for gender equality and inclusion in CRCs and the Faculty will have to adapt how it markets CRC opportunities.

3.2 Vice-Dean, Partnerships

Dr. Lynn Wilson noted that her the Office of the Vice Dean, Partnerships (OVDP) has hosted several high-level international delegations in the last several months which included a delegation from Guangzhou Medical University that has a strong partnership with St. Michaels Hospital. In September there was a successful meeting with the Helmholtz Association - Germany's largest scientific research funding agency with a \$4 billion budget who were keen to learn about U of T's research in cancer, immunology, diabetes, and neurodegenerative diseases. Dr. Wilson indicated that the most productive partnership currently is with the Zhejiang University and the department of Molecular Genetics. A high-level delegation, including Zhejiang University's President, visited U of T on October 10 to meet with President Gertler and renew the Memorandum of Understanding.

Discussion have been initiated with the Office of the VP International to include the promotion of professional programs, particularly medicine, on international recruitment missions. They are currently considering several possible recruitment missions in the Middle East in the Spring, including one through the Canadian International Health Education Association. The University of Macau has confirmed one application for the MD program for next year and the Office of the Vice Dean, Partnerships is working with the Office of the Registrar to support the student through the admission process.

The OVDP held a best-practices learning session at the All Chairs meeting to share successful models of existing international collaborations across the Faculty. Dr. Wilson has been asked to Chair the Africa Presidential International Council, which aligns with U of T's global health work in the region.

The OVDP is working with Faculty legal counsel Sara Gottlieb to establish The Conflict of Interest Committee (COI Committee) which is charged with the interpretation and implementation of the 'Relations with Industry in MD Training' Standards. Terms of Reference have been prepared and a Committee Chair is currently being sought.

Due to the ongoing opioid crisis in the province, Dr. Wilson has been working with the Ministry of Health and Long-Term Care to develop a proposal for an educational program on safe opioid prescribing and opioid addiction for Ontario physicians. The project is managed through the Ministry's Health Workforce Policy Branch that has since developed a project plan and a set up a steering committee to oversee the implementation of the training activities.

3.3 Vice-Deans, Education

Dr. Allan Kaplan and Dr. Patricia Houston presented the report attached to these minutes beginning on page 4.

4 Items for Approval

“THAT the Constitution of the Faculty of Medicine be approved as submitted.”

Moved: I. Witterick, Seconded: R. Hegele

The Speaker indicated that that most of these amendments (the change to the definition of Teaching Staff and all items relating to for-credit certificates) have already been amended at the University level and do not require approval from Faculty Council. Other than a few minor wording changes, the only notable

amendment being proposed by the Executive Committee is on the Membership of Council table. The proposed amendment removes the specified number of members when all members of a defined group are included in Council's membership. This provides the Constitution with flexibility if the number of members in that group is changed (e.g. All Vice Deans are ex officio members of Council regardless of the number of Vice Deans).

The motion passed.

“THAT the By-Laws of the Faculty of Medicine be approved as submitted.”

Moved: I Witterick, Seconded: J Barkin

The Speaker once again noted that the amendments around certificates have been implemented by Governing Council. The primary amendment to the By-Laws is the disbanding of the CPD Committee and the incorporation of its responsibilities into the Education Committee. The Speaker noted that there are rarely governance items specifically related to CPD and that the CPD Committee has, until recently, primarily been functioning as a second management committee or the Vice Dean. The transition back to strictly governance has left the CPD Committee with very limited business and, as such, the burden on the Education Committee will not be significant.

The motion passed.

5 Standing Committee Annual Reports

5.1 Education Committee

Dr. Anthony Brade sent his regrets but provided a brief written report.

The Medical Radiation Sciences 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 MRS Board of Examiners met four times in 2017. The BOE has reviewed the cases of 33 students this year. Three students were reviewed twice in 2017.

Six students were granted a supplemental evaluation by the Board. One of these students was later placed on Remediation. 17 additional students were placed on Remediation with one of these students later being placed on Remediation with Probation. One student was placed on Remediation with Probation and later placed on Probation. Finally, one student was granted a return to program following a Leave of Absence provided compliance with the recommendations of the Board of Medical Assessors.

6 Faculty Council Forum

The Speaker indicated that the proposed topic for the forum fell through and a replacement could not be secured. Dr. De Nil asked members to send him future topic ideas or to send them to Todd Coomber

7 Adjournment

The meeting was adjourned at 5:35pm

Council of Education Vice Deans Faculty Council Report

October 16, 2017

Submitted by:

Patricia Houston, Vice-Dean, MD Program

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

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

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A. Education Vice-Deans, Integrative Activities

1. External Education and Teaching Awards | Call for Nominations

Each spring and fall, the Faculty's Teaching and Education Awards Committee recognizes individuals who are making significant contributions to medical education. We are currently accepting nominations for the following awards:

- [STHLE 3M National Teaching Fellowship](#),
- [AAMC Alpha Omega Alpha Robert J. Glaser Distinguished Teacher Award](#) and the
- [AAMC Abraham Flexner Award for Distinguished Contribution to Medical Education](#)

Nominations should be made [online](#) by Monday, November 20, 2017.

It is strongly recommended that the nominee's Department Chair be in support of the nomination. For more information, contact the Office of the Education Vice-Deans at medicine.awards@utoronto.ca or at (416) 946-8067.

2. Education Development Fund

Funded Projects:

The Education Vice-Deans and the EDF Adjudication Committee Chair, Dr. Risa Freeman, are pleased to announce the recipients of the **2017 Education Development Fund competition**:

Dr. Jory Simpson Surgery	<i>Humanism Education in Surgery: Developing a Patients as Teachers Initiative In Surgery for Clerkship Students</i>
Dr. Kate Hayman Medicine	<i>Teaching undergraduate medical students to “go upstream” and advocate on social determinants of health using case-based learning</i>
Drs. Batya Grundland and Jeremy Rezmovitz Family and Community Medicine	<i>Caring, Not Just Curing: Using Digital Storytelling to Understand the Teaching and Learning of Compassionate Care in a Canadian Family Medicine Residency Program</i>
Dr. Anna Nowacki Medicine	<i>Laying the Groundwork: entitled The Addis Ababa Toxicology Curriculum Project: Educational Needs Assessment for the Toxicology Modules of an Emergency Medicine Training Program</i>
Dr. Megan Landes Family and Community Medicine	<i>Laying the Groundwork: Developing a Global Health Emergency Medicine Fellowship at the University of Toronto</i>
Dr. Elise Hall Psychiatry	<i>PsychEd: a learner-driven, educational psychiatry podcast</i>
Dr. Michael Neszt Psychiatry	<i>Better Together: A Mixed-Methods Study to Guide a Continuing Professional Development and Faculty Development Curriculum in Integrated Mental Health Care</i>
Drs. Fok-Han Leung and Milena Forte Family and Community Medicine	<i>Reflections on Remediation Through a Graduate’s Lens</i>

2018 EDF Cycle | Timeline

The Education Development Fund 2018 cycle has commenced with an initial call for applications in October. The application site is expected to open on November 1 and applications will be due on February 16, 2017 at 5 PM.

For further information, please refer to the [Education Development Fund website](#).

3. Annual Education Achievement Celebration | SAVE THE DATE

The Faculty of Medicine's **16th Annual Education Achievement Celebration**

will be held on **Wednesday, May 9th** from

5:30–7:30pm in the **Great Hall at Hart House**.

Doors will open at 5:00 pm. The event itself will get underway at approximately 5:30 PM.



B. MD Program

4. Admissions

MD Program				
	2014 Entry	2015 Entry	2016 Entry	2017 Entry
Applications	3463	3488	3121	3167
Full file review	1990	1777	1934	2107
Interviews	600	599	599	607 ¹
Offers	336	326	319	310 ²
Acceptances	259	260	259	261 ³
Acceptance of Offers Rate	77.1%	79.8%	81.2%	84.2%

In addition to the 2017 entry numbers for domestic applicants:

¹ 9 international applicants were interviewed

² Offers were made to 3 international applicants

³ Offers were accepted by 2 international applicants

MD/PhD Program				
	2014 entry	2015 Entry	2016 Entry	2017 Entry
Applications	151	193	169	178
Full file review	88	83	82	78
Interviews	46	47	43	48
Offers	10	13	10	15
Acceptances	8	13	6	14

To improve the MD/PhD applicant experience, the Ontario universities agreed on a common response date (March 15, 2017) for 2017 entry. Thanks to this harmonized response date, MD/PhD applicants were able to attend all admissions interviews and were better positioned to make informed selections.

A full report regarding admissions for 2017 entry to the MD Program and MD/PhD Program will be provided to the Faculty Council Education Committee later in the 2017-18 academic year.

5. Interim Accreditation Review

The MD Program's Interim Accreditation Review (IAR) culminated in a site visit held over March 28-29, 2017. The external reviewer was Dr. Rob Whyte, Assistant Dean, MD Program, McMaster University. Approximately 80 faculty members (including Chairs, decanal representatives and education leaders), 60 students and 12 administrative staff participated in the site visit.

The following program strengths were identified:

- Bold, value-based and innovative leadership.
- National leader in medical education, with the program's diversification efforts and Foundations curriculum being two highlights.
- The concepts behind, planning of and implementation of the Foundations curriculum, including the attentive responsiveness of the curriculum planners and leaders, was particularly notable.
- The Longitudinal Integrated Clerkship (LIc) was also seen as innovative, particularly in a large urban clinical setting, running concurrently with a traditional, block clerkship.

Of the 93 accreditation elements, approximately 35 require further analysis in order to determine next steps. Some of the areas identified as being particularly vulnerable include curriculum mapping and program evaluation as well as career advising. The internal review team and external reviewer also noted the importance of monitoring the Foundations curriculum, especially since much of the data normally used to assess curriculum outcomes (i.e. student satisfaction on the Canadian Graduate Questionnaire) will not be available in time for the program's next full accreditation survey.

The MD Program Executive Committee is responsible for oversight of the IAR process, including the assignment of individual elements to relevant faculty and staff for follow-up and monitoring steps taken to address the IAR findings. Work is underway to address the potential areas concern identified as part of the IAR process.

Patricia Houston, Vice Dean, MD Program, has taken on the role of accreditation coordinator, a role previously held by Martin Schreiber both for the MD Program's full accreditation in 2012 and the program's interim review in 2016-17. Many thanks to Dr. Schreiber for his tireless dedication to helping ensure that the MD Program remains fully accredited.

6. Curriculum

Update – Foundations Curriculum

Year 2 of the MD Program's new Foundations Curriculum, which covers the first two years of medical school, was successfully launched for the 2017-18 academic year. This follows the successful launch of the new Year 1 curriculum in 2016-17. The development of an evaluation framework is underway, which will enable the program to identify and evaluate whether the new curriculum is helping us achieve the goals and objectives that informed the development of the Foundations Curriculum.

7. Events

Announcement – 2017 Medical Psychiatry Alliance Annual Conference

Registration is now open for the [2017 Medical Psychiatry Alliance Annual Conference](#), which scheduled

to take place at the Chelsea Hotel on Friday, October 6th, 2017. This year's conference is titled *A Matter of Life: New Approaches to Care for Patients with Physical and Severe Mental Illness*. It is hosted by the Centre for Addiction and Mental Health (CAMH).

The conference is open to everyone with an interest in collaborative approaches to care for patients with physical and severe mental illness. Attendance from all health disciplines is encouraged. We also welcome participation from all students/ residents, policy makers, health administrators and others that wish to attend.

8. Governance & Leadership

- Oversight of the Standardized Patient Program (SPP) has transitioned from the portfolio of the Vice Dean, Post MD Education to that of Vice Dean, MD Program. An important part of the transition was the recruitment of a new Director for the SPP, Delon Pereira, who assumed the role June 15, 2017. The SPP has been a long standing education unit in the Faculty Medicine that provides simulated / standardized patients to support the teaching and assessment needs of the Faculty of Medicine, its hospital partners, other Faculties at the University of Toronto, and community partners. The MD Program is the largest client of the SPP, and the addition of the program to the MD Program portfolio will allow for enhanced opportunities for cross-team collaboration and curriculum development synergies. Thanks to the efforts of Salvatore Spadafora, Vice Dean, Post MD Education and Trevor Cuddy, Director of the CPD Portfolio, including their leadership of the SPP over the past several years, the transition was completed in August 2017.
- David Latter has been appointed Director, MD Admissions and Student Finances for a five year term, effective July 1. This follows Dr. Latter's success as Interim Director in 2016-17.
- Katina Tzanetos has been appointed as the Wightman-Berris Academy Director effective June 1, 2017 for a five-year term.
- Pier Bryden has been appointed as Director, MD Program Integration effective September 1, 2017. This is a new role developed to help ensure curricular, thematic and student assessment coherence and integration across all four years of the MD Program.
- Martin Schreiber has been appointed Faculty Advisor, MD Program Curriculum Map, and will work along with Pier Bryden in support to MD Program's curriculum mapping initiatives. Dr. Schreiber has also been appointed to direct our Adapted Concepts, Patients and Communities 2 (ACPC2), which was developed to facilitate reintegration of MD/PhD students who are transitioning back from full-time graduate studies to full-time MD studies.
- Glendon Tait's role as Director of Foundations Student Assessment has been reconfigured as Director of Student Assessment. In this reconfigured role, Dr. Tait is responsible for the overall strategic planning, design, implementation, and ongoing improvement of the student assessment framework across all four years of the MD Program.
- James Owen has been appointed the MD Program Lesbian, Gay, Bisexual, Transgender, Queer and 2-Spirited (LGBTQ2S) Education Theme Lead effective September 1, 2017.
- Fok-Han Leung has taken on a leadership role with respect to the MD Program's Health in Community (HC) curriculum, which covers the program's covers our community-engaged educational activities, in conjunction with his role as co-director of the Integrated Clinical Experience (ICE) component of the Foundations curriculum.

- Laurence Biro was appointed as Associate Director, Integrated Clinical Experience (ICE) – Clinical Skills effective September 1, 2017.
- Barbara (Dee) Ballyk has transitioned from co-course director of Brain and Behaviour to a new role, Faculty Lead, Anatomy Foundations.
- Sian Patterson’s role as clinical co-course director of Metabolism and Nutrition has been reconfigured as Faculty Lead, Biochemistry, Foundations, effective August 1, 2017.

C. Postgraduate Medical Education

9. Governance & Staffing

Rebecca Saunders started in June as Assistant to Dr. Susan Glover Takahashi in the Education Integration Group.

Dr. Julie Maggi was appointed on July 1st as Director of Resident Wellness.

Charlene Sturge joined in July as the Executive Assistant to Dr. Glen Bandiera, Associate Dean, PGME.

Dr. Allan Peterkin started in the role of Faculty Lead, Humanities. Providing support in arts and humanities-based programming for learners in both residency and continuing professional development programs by creating humanities-based content for elective and research opportunities, promoting physician well-being, and liaising with community partner agencies to create arts-based/medically themed programs. His email addresses are allan.peterkin@utoronto.ca and allan.peterkin@sinaihealthsystem.ca

Shannon Spencer started in September as International Relationship Manager, a newly-created position to ensure strategic alignment of recruitment and program training capacity and developing orientation, ‘on-boarding’ and mentoring programs for new international learners.

10. Competency Based Medical Education (CBME)

Competency Based Medical Education is a major, multi-year project to be rolled out for approximately 80 specialties in 7 cohorts over the next decade. This new model for medical residency education is oriented to outcomes rather than time in training.

The Education Integration Group, under the direction of Dr. Susan Glover Takahashi, meets with programs according to the cohort schedule coordinated with the RCPSC.

The estimated time frame from initial meeting with the program to launch of the new CBME model in the specialty is one year, which includes mapping the competencies and EPAs, development of the assessment tools, organizing faculty development sessions, setting up the learner and site schedules, and program evaluation.

Anesthesia and Otolaryngology – Head and Neck Surgery were launched along with their national cohorts on July 1, 2017. Many other programs have implemented elements of CBME to test concepts

and acculturate faculty and residents to upcoming changes. We are working diligently with the Royal College and our programs on identifying the next cohort for the July 2018 launch.

11. Accreditation & Internal Reviews

In the past year national changes have been implemented with regards to Residency Education Accreditation in Canada. The Royal College of Physicians and Surgeons of Canada and the College of Family Physicians of Canada have agreed to new accreditation standards for programs and institutions and the length of the accreditation cycle will be changing from 6 years to 8 years. The next external survey visit for the University of Toronto which was previously scheduled for 2019, will now be in the Fall of 2020. A new process to carry out the survey visit and conduct interim monitoring of program activities will also be implemented. Key members of the U of T PGME community have been involved in developing the new models and will be involved in external reviews leading up to the Toronto review in 2020.

The Internal Review Committee, a standing committee of the Postgraduate Medical Education Advisory Committee, has conducted internal reviews on all of its regular stream residency training programs and family medicine programs and training sites as part of our mandated quality assurance process. The next task for the accreditation unit is to do a comparison between the previous accreditation standards and the new standards, in order to identify which new standards were not focused on in the internal review process so that these can be addressed. We continue to work with programs to ensure that all of the accreditation standards are being met.

12. Conferences, Workshops, Leadership, Faculty Development

Two faculty development sessions were held in June on BOE & Remediation and Effective Teacher Evaluations. On [May 26th the All Program Directors meeting](#) provided updated information on recent trainee awards, Guidelines for the Assessment of Postgraduate Residents and Best Practices on Evaluation & Assessment (BPEA) with over 90 faculty members and staff in attendance.

On May 30th, the first [annual Physician Health & Wellness Symposium](#), was held with over 85 faculty, postgraduate and undergraduate medical trainees in attendance to share research and innovations in resident wellness.

The [Chief Resident Leadership Forum: Effective Communication Skills](#) was held on May 9th and on August 15th the [12th Annual Chief Resident Leadership Workshop](#) was held with over 90 chief residents in attendance, with a keynote from Dr. Gillian Hawker and sessions on Resident Wellness, Teaching Residents to Teach and the PARO-CAHO contract.

The annual New Residents Welcome Reception with over 350 new residents was held on June 29th and provided access to helpful information from PARO, MD Financial Management, OMA, Alumni Relations and PGME Office of Resident Wellness.

[PGME's Program Administrator Information](#) series ran sessions on: PGCorEd, Royal College credentialing, the PARO-CAHO contract, CBME implementation, Effective Communication and a year-end appreciation event.

13. CaRMS

The Pediatric Subspecialty Match took place on May 31, 2017. All 23 of our MOHLTC funded positions were filled with an additional 6 non MOHLTC positions filled.

The Medical Subspecialty Match is currently underway with a match date of November 8, 2017.

The PGME Quotas Allocation Committee met over the summer to identify a recommended distribution of positions including the 407 positions for the CaRMS R1 Match in March 2018. The recommended distribution includes a rotating schedule of reductions of 9 entry positions for Canadian Medical Graduates, first reduced in 2016. Prior to 2016, the intake quota was 416 positions.

14. Awards & Publications

Dr. Robert H. Sheppard Award for Health Equity and Social Justice

PGME established a new award in 2016 to recognize the late Dr. Robert H. Sheppard, former dean of postgraduate medicine in the Faculty from 1977 to 1988. He was also the Director of the University's Office of International Relations from 1988 to 1989 and the inaugural Chair of the Canadian Post-MD Education Registry (CAPER). Post-retirement, Dr. Sheppard worked with Horizons of Friendship, the outreach committee at Trinity United Church, as well as Amnesty International. The faculty award winner in the inaugural year of this award is Dr. Lee Ford Jones who created the Social Pediatric elective rotation in 2008, coordinating a network of faculty and community workers to mentor the education of medical students and residents on the effects of poverty and disadvantage on children's health and development. To review all of the PG award winners for 2016-17, please see <http://pg.postmd.utoronto.ca/about-pgme/awards/>

15. New Medical Humanities Education Grant Funding

Post MD Education initiated a grant to support projects in Medical Humanities Education. The grants support projects to encourage engagement in the medical humanities which will further enhance humanism, compassionate care, clinical competencies and deliverables which closely aligned with the ongoing priorities of postgraduate medical education and the CanMEDS roles.

There are two calls for grant submissions annually and the winners are notified in May and November. The inaugural grant winners for the May 2017 component were:

- Dr. Caitlin Gillan and Dr. Meredith Giuliani, Department of Radiation Oncology
- Dr. Sophie Soklaridis, Department of Psychiatry
- Dr. Catherine Yu, Department of Medicine

16. Publications & Presentations

PGME staff and faculty prepared a number of papers and posters at conferences and symposiums this year, including leading or facilitating at workshops. A complete list of the topics and authors of the 10 papers, 24 workshops and presentations and 4 posters for 2016-17 can be viewed at <http://pg.postmd.utoronto.ca/about-pgme/pgme-reports/2016-17-pgme-scholarly-activities/>

17. Global Health

Global Health at Postgraduate Medical Education led by Dr. Barry Pakes and Judy Kopelow develops and delivers coordinated education and programming via initiatives reflecting our commitment to local and global social responsibility and accountability. It also supports resident trainees interest in global health education, research and practice. (gh.postmd.utoronto.ca)

[The program supports](#) residents in GH Electives. It also administers the GH Education Initiative (GHEI); now in its 9th year; a 2-year certificate curriculum, includes 25 modules, 100+ participants, 100+ faculty, active alumni and variety of continuing global health education and leadership opportunities. The program is also responsible for the Annual GH Day held this year on June 8.

18. Projects, Initiatives, Events

Transitions Think Tank Symposium

On Friday, April 7, 2017, the Faculty of Medicine hosted a “Transitions Think Tank” with approximately 40 participants. The forum brought together learners and faculty from the MD program, Postgraduate Medical Education and Continuing Professional Development sectors to have honest conversations and share ideas about transitions within medical education, with consideration of ongoing activities at the provincial and national level.

Many long-standing concerns were discussed including the CaRMS selection process, true residency program requirements, medical school academic records, alternative careers, timing of residency program choices and system inflexibility, the importance of research, and readiness for practice. Possible action items emanating from the forum were a plan to standardize UG learner reports, limitations on elective rotations, improved health workforce data, and clarity from programs on the need for research experience.

In response to the findings that emerged from this forum, and from other discussions, both the National Postgraduate and Undergraduate Deans have formed a Working Group on Electives Chaired by Glen Bandiera, Associate Dean, PGME.

For more information on the discussion points of the forum, please [download the PDF](#).

19. Voice of the Resident Surveys

In April 2017, the second annual Voice of the Resident (VotR) reflection survey of all residents was fielded and in June 2017, the second annual VotR Entrant survey of new incoming PGY1s was fielded.

The findings of the VotR surveys have been presented to many audiences: within PGME, in the Faculty of Medicine broadly, at conferences, at various committees of TAHSN (Toronto Academic Health Science Network) and to PARO.

Diversity, Equity, and Inclusion is a core module of every VotR survey. We are working closely with the Office of Diversity to explore the feasibility of implementing Diversity, Equity, and Inclusion surveys of Faculty of Medicine staff, faculty, clinical associates, graduate students and postdoctoral fellows.

20. PostMD Strategic Plan

The PGME office has embarked on a process to renew the current 2012-2017 strategic plan in alignment with the recently developed CPD strategic plan. The two will be integrated into a cohesive PostMD strategic plan, aligned with the faculty.

D. Continuing Professional Development

21. Governance & Staffing

Dr. Shiphra Ginsburg has been appointed CPD Academic Director and will provide leadership in the area of CPD research and scholarship. Dr. Ginsburg is a Professor in the Department of Medicine and a Scientist at the Wilson Centre. She completed medical school at McGill, followed by postgraduate training in Internal Medicine (at U of T), Respiriology and Critical Care (at McMaster) and a Master of Education at OISE, and a PhD in Health Professions Education at Maastricht University. Her program of research involves two inter-related areas. The first explores how clinical supervisors conceptualize, assess and communicate about the performance and competence of their learners, with a focus on the language used in workplace-based assessment. The second area explores the construct of professionalism in medical education, from the perspective of learners, faculty and practicing physicians.

Morag Paton has joined the CPD portfolio as Education Research Coordinator. In this role, Morag is responsible for working with faculty and staff interested in CPD-related research and scholarship and is also the coordinator of the CPD Research and Development Grant, which provides grants of up to \$5000 to scholarly projects related to CPD. Morag holds a MEd in Health Professions Education from the University of Toronto, and is currently enrolled at OISE as a flex-time PhD student in Higher Education. She is also a Fellow at the Centre for Ambulatory Care Education at Women's College Hospital. Morag brings to CPD extensive experience in the Faculty of Medicine that spans the continuum of health professions education in the Faculty, including experience coordinating education grant processes, education awards and research planning.

We have also added two new staff to our Conference and Program Management team. Samantha Smith has been appointed to the position of Lead Planner, Conference Services. Samantha joins CPD from the Munk Centre of Global Affairs at the University of Toronto, where she served as Manager, Conference Facilities and Events. Prior to her role at the Munk Centre, Samantha worked in the Office of the President. Zelene Ni joins CPD in the position of Conference and Event Planner. Zelene has worked for the past 7 years at the Harvard School of Business, where she was the Program Manager at the Harvard University Centre in Shanghai. Prior to joining Harvard, Zelene served as Events Manager, Conference Services at the Pudong Shangri-La Hotel in Shanghai.

22. CPD Enrolment & Accreditation

In the 2016-2017 academic year there were 384 CPD programs, conference and workshops accredited by the CPD Office. Faculty-wide there were a total of 40,574 learners who participated in U of T accredited CPD programming. All of our departments are active contributors to the development of

CPD activities. While the majority were live events, increasingly innovative methods of learning are being incorporated into programs and conferences, including web-based and simulation-based learning. Our faculty continue to be at the forefront of innovation with development of programs such as the hands-on oncoplastic one-day workshop developed by the Canadian Breast Surgery Innovations Group and ImageSim, an online modular platform developed to aid health professionals' accuracy in interpretation of visually diagnosed tests.

Over the past year, CPD worked with the University of Alberta, Office of Lifelong learning providing coaching and accreditation services for this newly formed office over the past year. CPD also developed and delivered a customized certificate program in CPD Foundations for this group. This program consisted of 4- webinars and a 1.5-day live program held in Edmonton, Alberta in February 2017.

23. CPD Strategy Development

Over the past year CPD has engaged key stakeholders to develop a flexible and adaptable 5-year strategy <https://www.cpd.utoronto.ca/about-us/strategic-plan-2017-2022/>. Following the strategic planning retreat in the fall of 2017, strategy development working groups were created to synthesize ideas, develop goals, objectives and action plans. Results of our strategy development have been disseminated to our stakeholder in the faculty of medicine.

CPD also is in the midst of preparation for the Committee on Accreditation for Continue Medical Education (CACME) accreditation which will take place in March 2018. With a renewed academic focus, we look forward to highlighting our strengths and future directions for our office.

24. CPD Academic Program Development

Safer Opioid Prescribing

In the spring of 2017, new national guidelines for use of opioids for chronic non-cancer pain were released by the Michael G DeGroote National Pain Centre. CPD collaborated with the CPSO for funding to update the program based on the new guidelines. CPD was able to rapidly integrate these guidelines within two months of release ensuring that all participants in our Safer Opioid Prescribing program had access to up-to-date information. Additional program sessions have been added in keeping with the demand.

CPD has also entered into a partnership with Canadian Medical Protective Association's (CMPA) recently launched subsidiary Saegis, which will make the Safer Opioid Prescribing program available to all clinicians in Canada. Planning is underway to deliver this program across Canada in 2018. At present, we are also partnering with Fédération des Médecins Spécialistes du Québec (FMSQ) to deliver this program in French in Quebec in the fall 2017.

IDEAS Foundation Program

A new blended-learning version of the IDEAS foundation program in quality improvement was launched in the spring of 2017. The new blended program has been very well received and consists of a 3-hour online component and 1-day live program. CPD successfully delivered 4 programs in the spring 2017 with a total of 295 participants. Partnerships with a variety of groups, including the Ontario Renal Network, the Toronto Central LHIN's Regional Quality Table and Local Collaborative and the Central

West LHIN have led to development of customized programs. Plans are underway to deliver 4 more programs in the fall/winter. CPD is collaborating with the Ontario Longterm Care Association, CAMH, Toronto Central Palliative Care Network and the Collaborative Academic Practice (CAP) fellowship program to develop customized programs for these groups.

Essential Skills in Continuing Professional Development (ESCPD)

Associate Dean Schneeweiss and Jane tipping, Educational Consultant at CPD, led the 5th Annual Essentials Skills in Continuing Professional Development (ESCPD) master class took place in Helsinki, Finland in conjunction with the Association of Medical Education in Europe Conference (AMEE). This program provides an overview of current best practices, evidence and theory of effective CPD, and practical approaches for implementing CPD within different settings. Participants of this program were from diverse backgrounds and countries. This year there were 30 participants from 15 different countries: Ethiopia, Lebanon, Qatar, Finland, Sweden, Denmark, Switzerland, Singapore, Thailand, USA, Australia, Netherlands, Chile, and Argentina. CPD has also played an integral role in promoting CPD at this conference, advocating for the development of a CPD Committee and Special Interest Group. Jane tipping co-chaired a CPD symposium at the AMEE conference and is currently serving as the co-chair of the CPD Committee.

25. CPD Education and Scholarship

CPD Environmental Scan

Under the leadership of Associate Dean Schneeweiss and Dr. Ginsburg, CPD will soon be reaching out to department education/CPD leads as we launch a scholarly environmental scan of CPD activities across the Faculty of Medicine.

The project's objectives are threefold:

- a) To identify CPD-related education scholarship networks and activities within the Faculty of Medicine at the University of Toronto with a focus on the past five years of activity to the present,
- b) To understand how best to support the development of an education scholarship community of practice in CPD, and
- c) To identify potential opportunities to deliver education scholarship-related programming to enhance the professional development of our CPD community.

We know that your engagement and input will be important to the success of our study and we look forward to sharing our progress and results with you.

26. CPD Awards

CPD is proud to congratulate Mark Feldman MD, FRCPC, Oshan Fernando PhD, Michelle Wan MA, Tina Martimianakis PhD, and Mahan Kulasegaram PhD as recipients of the 2017 Royal College Accredited CPD Provider Innovation Award for their study on Test-Enhanced Learning (TEL) in Continuing Education. Dr. Susan Deering of Sunnybrook Health Sciences Centre received the 2017 Department of Family and Community Medicine Sustained Excellence in Teaching Award. This award acknowledges individuals or groups whose contributions go well beyond what is expected in advancing the department's mission. Dr. Deering serves as Attending Physician in the Veterans Centre at Sunnybrook and Lecturer at the University of Toronto. She is also the Academic Director of the acclaimed Medical Record Keeping

program offered through CPD.

Dr. Rene Wong, as well as a team lead by Drs. Sanjeev Sockalingam and David Wiljer were honoured at the Society for Academic Continuing Medical Education (SACME) conference held in May in Scottsdale, Arizona. Dr. Rene Wong was the recipient of the Fox Award presented to the author of an original research project that links theory, methodical rigor and makes an important contribution to CPD literature. Drs. Sockalingam and Wiljer and their team were awarded the Phil R. Manning Research Award in Continuing Medical Education for their project Data and Lifelong learning (LLL): Understanding Cultural Barriers and Facilitators to Accessing and Using Clinical Performance Data to Support Continuing Professional Development (CPD). This distinguished and highly competitive award is granted only every two years and this project was selected out of 24 submissions from across North America.

27. Indigenous and Refugee Health

The biennial North American Refugee Health Conference was successfully held in Toronto, June 16 – 18, 2017. Attendance reached an all-time high of 632 with the more than 50% of our participants residing in the USA. The event provided participants with access to the most recent research, best practices in refugee health, and a great opportunity for networking. Attendee comments and evaluation feedback were highly positive.

Dr. Peter Polatin, a world expert in psychiatry, opened the conference with a talk on PTSD in refugees. Programming included eight keynote lectures, 12 concurrent plenaries, 52 workshops, 88 oral presentations, and over 100 poster presentations covering the latest research and best practices in refugee integration, education and mental health. Other topics included: Updates in refugee health policy in North America and overseas; Global Challenges for LGBTQ Refugees; Recommendations for Future Humanitarian Action; and the migrations of vulnerable populations from American to Canada, and from Latin America.

The personal stories of those who witnessed or experienced the refugee crisis stood out. Susan Ormiston, a journalist with the Canadian Broadcast Corporation gave her accounts of reporting as the Syrian crisis unfolded and following the challenges and successes of a young Syrian family on their journey to Canada. Courageous individuals who lived the perilous refugee journey, shared their stories of loss, resilience and success. Dr. Vanig Garabedian a Syrian gynaecologist, described what it was like to continue to work in Syria despite the hospital being bombed and conducting procedures without electricity; Nevzat Keskin a Kurdish television journalist, in a heart-wrenching account, showed pictures of his house before and after it was bombed in Turkey; Wanes Moubayed, a Syrian violinist, is now playing with the Toronto Symphony Orchestra.

We are making plans for the biennial Indigenous Health Conference, which will be held May 24 – 26, 2018 at the Hilton Meadowvale in Mississauga. The theme will continue to examine the TRC findings from the lens of Indigenous patient health and increased awareness of all Canadians; there will also be a strong focus on the environment.

28. Standardized Patient Program (SPP)

The transfer of the Standardized Patient Program to the portfolio of the Vice Dean MD Program is now complete. Ms. Delon Pereira has been appointed the new Director of the SPP, and assumed the role

June 15, 2017. Delon joins the University of Toronto from the Canadian Alliance of Physiotherapy Regulators (CAPR) where she was the Manager of Operations (Examinations).. She has significant experience in the management of national licensure exams, standardized patient programs, health education and business operations. Delon is a Credentialing Specialist from the Institute of Credentialing Excellence, a certified Project Management Professional, and holds BSc and an MBA degrees.

E. Graduate and Life Sciences Education (GLSE)

I. Undergraduate Life Sciences Education

29. Events

Sixth Annual Undergraduate Research Information Fair Considering Graduate Studies

Sixth Annual Undergraduate Research Information Fair considering Graduate Studies will be held on November 2, 2017, Medical Sciences Building (10:30 am to 2:00 pm). Exhibitors in attendance will include our undergraduate and graduate units, as well as hospitals, Life Sciences Career Development Society and the School of Graduate Studies. Approximately over 1000 students visit this fair.

Special Session for Undergraduate International Students Considering Professional Master's Programs

We have a captive audience of undergraduate international students at UofT (across 3 campuses) and would like to invite them to a special event to meet representatives from our course based and professional programs that are offered in the Faculty of Medicine.

This recruitment session will start with Dr. Allan Kaplan, Graduate and Academic Affairs and Dr. Lynn Wilson, Vice-Dean of Partnerships, giving opening remarks, followed by a representative from SGS to talk about services for international students at UofT. Each department will get a chance to present course-based/professional program and field questions.

Programs:

Applied Immunology
Occupational Science and Occupational Therapy
Applied Clinical Pharmacology
Physical Therapy
Speech-Language Pathology
Translational Research

Discussion in Best Practices in Applying to Summer Research, Jobs and Graduate schools

The GLSE Seminar will be presented by Dr. Nana Lee. Students will learn how to construct a research-focussed resume or CV and enhance their academic career perspectives – for grad school, research opportunities, and beyond on January 16, 1:00pm – 2:00pm at the McLeod Auditorium.

Teaching Seminar Series

In collaboration with Dr. Michelle Arnot (Pharmacology and Toxicology), Dr. Michelle French (Physiology), Dr. Stavroula Andreopoulos (Biochemistry), they initiated a Lunchtime Seminar Series for interested Faculty at the Faculty of Medicine in the Basic Medical Sciences (BMS) that teach/coordinate undergraduate and/or graduate courses. It is an opportunity to learn and share experiences and best-practices/strategies on topics associated with teaching once a month during a lunch time seminar (12-1pm Fridays).

Topics:

Best Practices for Assisting Students in Crisis

Course Management: Accessibility

Medical Notes and Missed Exams

How to Design a Course

Online and inverted Teaching-Best Practices

Education Grants

Student Assessment

Graduate and Professional Schools Fair

GLSE will be attending the University of Toronto Mississauga (September 20, 2017), and University of Toronto Scarborough (September 28, 2017). We will provide support to the 14 graduate departments.

30. GLSE Recruitment Student Group Shadowing Program

The success of our first annual shadowing program during reading week will continue throughout 2017-2018 reading week and summer school (July) for our undergraduate students to be matched up with a graduate student who has volunteered their time.

31. Undergraduate Faculty Teaching Awards

Five awards were adjudicated in four categories. Deadline: January 31, 2018

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

Sustained Excellence and Innovation in Life Sciences Education

32. GLSE Talks: One Minute Video Competition

GLSE video competition is for all undergraduate and graduate students undertaking a research project. The competition invites students to showcase their ongoing (or potential) research project in a brief and creative one-minute video presentation. The competition winners Joanne Plahouras, Human Biology and Immunology (Undergraduate), Antara Chatterjee, Physiology (Masters).

33. GLSE Poster Competition

GLSE Poster Competition will promote student talent for the Sixth Annual Undergraduate Research

Information Fair Considering Graduate Studies on November 2, 2017. The competition winner Siheng Xie, Cell and Systems Biology Animal Physiology (Undergraduate).

II. Graduate Education

34. Creating Mentorship Impact: Graduate Student Mentorship Program

The GLSE team is excited to introduce the Graduate Mentorship Program for mentees in year 1 and 2 to be mentored by a PhD graduate student in years 3, 4, or 5 commencing this Fall 2017. The program aims to give mentees an opportunity to appreciate the innovative research conducted in the Faculty of Medicine and a senior colleague's perspective in graduate life, developing as a whole scientist and career preparation. With this end in mind, we will be pairing graduates across the 14 different graduate programs offered in the Faculty of Medicine. There will be a mandatory information session on October 16, 12:00pm- 1:00pm in the MSB 4279 presented by Dr. Nana Lee, GLSE's newly appointed Director of Mentorship and GPD, and Anita Balakrishna, Faculty's new Diversity Strategist.

35. Establishing Best Practices for Graduate Supervisors Aimed at Reducing Time to Completion (TTC): A Faculty Development Program

To optimize supervisory mentorship in graduate student research progress and professional development aimed at reducing times to completion.

Target Audience:

- 1) Faculty who currently have or are planning to train graduate students.
- 2) Faculty who are interested in establishing their own graduate professional development workshop series, course, or program for their department.

This Innovative Graduate Faculty Development Program is being coordinated by Dr. Nana Lee, GLSE's newly appointed Director of Mentorship and GPD, Director of Graduate Professional Development, Departments of Biochemistry and Immunology. She is also a Co-Author of Success After Graduate School 2016 with Dr. Reinhart Reithmeier.

Topics:

Mentorship Matters
Best Practices in Reducing Times to Completion
Tools for Student Engagement
Conflict Management and Student Wellness
Entrepreneurship
Highlights of Graduate Professional Development (GPD) in One Workshop

36. Graduate Awards

a) Faculty of Medicine (FoM) OSOTF, GSEF, PPEF, Departmental Endowed Awards and Expendable Awards

- 25 FoM-wide OSOTF, Expendable and Other Endowed Funds were adjudicated by the FoM Graduate Awards Committee chaired by the Vice Dean, Graduate and Life Sciences Education (GLSE) in June and July 2017 with over \$725,000 awarded to graduate students for the 2017-18 academic year.
- 250 OSOTF, GSEF, PPEF, Departmental Expendable and Endowed Funds with over \$16.8 million was distributed to 20 graduate units and centres, 11 clinical departments, and 8 affiliated hospitals (total 39) for distribution for the 2017-18 academic year.
- A total of \$3,713,735 University of Toronto Fellowships was distributed in May 2017 to 10 graduate units for 2017-18 graduate students funding.
- 68 QEII-GSST (49 doctoral-stream awards and 19 clinician/surgical-scientist trainee awards) at \$15,000 each were distributed for the 2017-18 academic year (total \$1,020,000).
- \$176,000 Doctoral Completion Award (DCA) has been allocated to 10 graduate units for 2017-18 academic year. The DCA is to support full-time PhD students who are beyond the funded cohort and within time-limit for the degree.
- \$210,378 plus additional \$310,000 (in lieu of the UTAPS program) will be distributed to 5 graduate units with professional masters programs and 3 graduate units with new course based masters in early-Fall 2017. Effective July 1, 2017, the Professional Master's programs (not including course based) in the Faculty of Medicine has phased out of the University Advanced Planning for Students (UTAPS) and transitioned to a divisionally managed program. Continuing students in their second year of their program will still be maintained under the UTAPS program.

b) FoM GSEF Merit Scholarships for International Students

The Office of the Vice-Dean, GLSE, adjudicated the third year of merit-based scholarships valued at \$5,000 each to international graduate students entering their second year of studies in 2017-18. Twenty scholarships were awarded.

c) External Studentships

Over 20 graduate studentships, including CIHR CGS D and other external doctoral research awards are paid through GLSE via ROSI to doctoral-stream students with Principal Investigators affiliated with the Faculty of Medicine.

d) Graduate Faculty Teaching Awards

The Graduate Faculty Teaching Award Competition deadline will be December 1, 2017. Six awards will

be adjudicated by the FoM Graduate Awards Committee in three categories:

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

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

e) Postdoctoral Fellowships

The FoM Postdoctoral Fellowships Review Committee adjudicated the 2017 Banting Postdoctoral Fellowships in early-August 2017 and forwarded 7 nominations to the University for submission to the CIHR and NSERC agencies for nation-wide review. Each Fellowship is worth \$70,000 per year for two years. The Vanier-Banting Secretariat will notify applicants of the results of their application in February 2018.

f) JJ Berry Smith Doctoral Supervision Award: Honorable Mentions

The JJ Berry Smith Doctoral Supervision Award recognizes outstanding performance in the multiple roles associated with doctoral (PhD) supervision in the University of Toronto. Two awards are offered annually, one in the Humanities and Social Sciences and one in the Physical and Life Sciences. The FoM Graduate Awards Committee reviewed 6 applications and forwarded 2 nominations, Dr. Dina Brooks (Rehabilitation Sciences Institute; Physical Therapy) and Dr. Ori Rotstein (Institute of Medical Science) to the Dean of Graduate Studies and Vice-Provost, Graduate Education. Although Dr. Brooks and Dr. Rotstein were not selected by the School of Graduate Studies this year, their nomination acknowledges their outstanding contribution to the doctoral supervision and graduate education in the Faculty of Medicine.

g) Graduate Education Management System (GEMS). Formerly known as Graduate Student Information System (GradSIS)

The Office of Graduate and Life Sciences Education (GLSE) launched GEMS, the new application solution for graduate student, supervisor and graduate unit agreement and financial tracking system on July 4, 2017. All doctoral-stream Master's and Ph.D. students in 12 graduate units in the Faculty of Medicine will annually complete an on-line Agreement. Data will be entered into GEMS by students, supervisors and administrators in the Faculty's graduate units.

GEMS is rebuilt on new technology platform through the Discovery Commons, FoM, replacing GradSIS which is at the end of its life cycle.

GEMS design solution includes additional and new functions, in the following ways:

- Responsive design, fully functional on mobile devices
- Optimized for modern high resolution smartphones and tablets
- Optimized for several desktop browsers: Chrome, Firefox, Safari, within the most recent 2 versions, and IE10+
- Secure with the U of T web-based Single Sign-on (SSO) system: UTOrid

- Robust search capabilities
- Responsive and intuitive and easy to use

37. Curricular Changes 2016/2017

a) Major and Minor modifications

Below is a summary of the major and minor curricular changes that were approved in the 2016/17 academic year

Type of Curricular Change	Totals
New Courses	4
Changes to Programs (e.g. change in admission, change course codes)	9
Other	1

b) New Program – MHSc in Medical Genomics

This program has completed the governance process at the university and is currently being reviewed by the Ministry of Advanced Education and Skills Development (formally known as the Ministry of Training, Universities and Colleges). We anticipate to hear a final decision by November 2017. The first cohort of 15 students are scheduled to start Fall 2018.

c) New Program – Graduate Diploma in Health Research

This program is designed exclusively for undergraduate medical students wishing to complete graduate training in Health Research. This is a joint endeavour between the Physician Scientist Training Program (under the umbrella of UME) and the Institute of Medical Science. The proposal is currently making its way through the governance process, followed by government approvals. We anticipated this process will conclude by August 2018. The program is scheduled to take in its first cohort of 15 students in January 2019.

38. New Graduate Initiatives 2017/2018

a) Online Course Evaluations

Course evaluations are part of an overall teaching and program evaluation framework that includes regular peer review, instructor self-assessment, cyclical program review and other forms of assessment, as appropriate. As part of this framework, course evaluations are a particularly useful tool for providing students with an opportunity to provide feedback on their own learning experiences.

Starting Fall 2017, the Faculty of Medicine (FOM) will be conducting a pilot study to test the implementation and administration of the centralized online course evaluation and online delivery

system. Graduate courses in FOM range from didactic lectures to modules to seminars. Given the variance in how curriculum is delivered across 13 graduate units and 4 types of degree programs (i.e. doctoral, masters research stream, masters course based stream and professional programs), the pilot study will allow us to identify challenges and provide opportunities in finding solutions for a more fuller implementation in the next 2 years.

b) SGS Innovation Fund Initiatives

- Leave of Absence Stipendiary Fund for Medical/Mental Health Leave- in place
- Graduate Professional Skills Training for Faculty- in place
- Online Supervisor Evaluation System- to be developed in 2017/2018

c) Funding for Professional Graduate Programs for International Students

Effective Fall 2017, all international professional graduate students will be funded by the Faculty of Medicine, in a similar manner as the domestic students. This has been true for international graduate students in the PhD and MSc – research stream since 2015. Our hope is to encourage professional programs to take more international students without compromising admission standards

39. Graduate Enrollment

Below is a summary of the anticipated enrolment for 2017/2018 based on data acquired from the School of Graduate Studies on September 18, 2017. Please note that offers for Winter 2018 (January 2018) have not been sent out and therefore we anticipate a slight increase in PhD and/or MSc offers and acceptances.

Domestic Students

	Target	Actual	Variance
PhD	90	93	+3
MSc (Research and Course based)	374	350	-24
PMAS	304	299	-5
Total	768	742	-26

International Students

	Target	Actual	Variance
PhD	20	21	+1
MSc (Research and Course based)	22	23	+1
PMAS	6	2	-4
Total	48	46	-2

40. Graduate Expansion in the Rehabilitation Sector

Graduate Expansion over the course of the next 3 years, starting in 2017/18, in all three professional programs in the Rehabilitation Sectors. Below is a summary:

- a) Occupational Science and Occupational Therapy
 - Expansion to UTM, starting Fall 2018
 - Incoming class of 40 students, steady state of 80 each year
 - Maintain enrolment of 90 students at 500 University

- b) Physical Therapy
 - Along with Speech-Language Pathology, extensive renovations are underway at 500 University Ave to accommodate the proposed expansion of 20%
 - A target of 108 incoming students for Fall 2019 (baseline of 90) has been established
 - Currently for Fall 2017, Physical Therapy is at 100 students

- c) Speech-Language Pathology (SLP)
 - Along with Physical Therapy, extensive renovations are underway at 500 University Ave to accommodate the proposed expansion of 20%
 - A target of 60 incoming students for Fall 2019 (baseline of 50) has been established
 - Currently for Fall 2017, SLP is at 62 (above proposed expansion)



UNIVERSITY OF TORONTO
FACULTY OF MEDICINE

FOR APPROVAL

TO: Faculty Council

SPONSOR: Allan Kaplan, Vice-Dean, Graduate and Life Sciences Education

CONTACT INFO: Rachel Zulla, Graduate Affairs Officer; 416-946-0412;
rachel.zulla@utoronto.ca

DATE: February 12, 2018

AGENDA ITEM: 5.1

ITEM OF BUSINESS: Major Modification: Expansion to UTM and Change in Curriculum Delivery, MSc in Occupational Sciences and Occupational Therapy

JURISDICTIONAL INFORMATION:

The University of Toronto Quality Assurance Process dictates that major modifications constitutes the approval of divisional governance. The By-laws of the Faculty of Medicine Faculty Council dictate major modifications are to be approved by the Education Committee and Faculty Council. The proposal may also need to be approved by the Research Committee, as determined by the FOM Executive Committee.

GOVERNANCE PATH:

Education Committee [For recommendation] – January 11, 2018
Faculty Council [For information] – February 12, 2018

CONSULTATIVE PATH:

The proposal has been seen and approved by the following committees at the Faculty of Medicine

- GLSE Graduate Curriculum Committee [Electronic Vote] – January 4, 2018

HIGHLIGHTS:

The MSc in Occupational Sciences and Occupational Therapy (MScOT) is proposing to expand its student enrolment to UTM effective Fall 2018. This expansion also changes how some courses will be delivered (i.e. video casting from the Medical Sciences Building [MSB] to the Terrance Donnelly Health Sciences Building/ Mississauga Academy of Medicine [MAM]).

PROPOSED MOTION:

"THAT the proposed Major Modification to the Master of Science in Occupational Therapy Program be approved as submitted."

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:	Masters of Science in Occupational Therapy (MScOT)
Proposed Major Modification:	We propose a change in the mode of delivery of the MScOT program through this proposal to offer the MScOT at both the University of Toronto Mississauga (UTM), Terrence Donnelly Health Sciences Complex and the St. George campus. This change also implies enrolment expansion of the existing two year entry to practice professional MScOT program by an additional 40 students per year situated at the University of Toronto Mississauga (UTM), Terrence Donnelly Health Sciences Complex.
Department / Unit (if applicable):	Department of Occupational Science and Occupational Therapy
Faculty / Academic Division:	Faculty of Medicine
Dean's Office contact:	Allan Kaplan, Vice-Dean, Graduate and Academic Affairs
Proponent:	Susan Rappolt, Chair, OSOT
Version Date: <i>(please change as you edit proposal):</i>	December 18, 2017

1 Summary

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

The MScOT program is a 24-month full-time intensive academic program consistent with the requirements for national accreditation for entry-level occupational therapy programs. Graduates of the MScOT program are eligible for national certification and subsequent registration for practice in Canada.

We are proposing to expand our enrolment in the existing entry to practice MScOT program at a second location situated in Terrence Donnelly Health Sciences Complex (TDHSC) at the University of Toronto Mississauga (UTM). The existing academic curriculum will be delivered

through bi-directional videoconferencing of lectures and onsite laboratories, mentorship meetings, interprofessional education. Clinical and community-based fieldwork placement offerings will be increased to accommodate the increased enrolment to ensure that all University of Toronto MScOT students continue to graduate with fieldwork experiences that exceed the requirements for national certification. New faculty will be on-site at the UTM campus to provide graduate and fieldwork coordination, and new on-site staff will provide reception, program administration, student services and IT support throughout the TDSHC-based students' two-year program.

The MScOT program consists of 17.5 full credit equivalent academic courses, and 1072 hours of fieldwork per student, completed within the 24 months of the program. MScOT students are mentored by registered occupational therapists and receive interprofessional education (IPE) from the Centre for Interprofessional Education throughout their 24-month program. Students receive learning, health, counselling, accommodation and financial supports as needed through services available to all graduate students at the University of Toronto. The Department also contracts specialized health and counselling services specific to the needs of student health professionals from the Faculty of Medicine's Office of Health Professions Student Affairs. All of these components of the program and services to support students will be extended to students at the UTM campus.

All attributes of the MScOT curriculum will be delivered to both campuses. The content of the academic curriculum will be delivered through interactive lectures, labs, student-led collaborative learning projects, mentorship and self-study at both campuses. Fieldwork placements in health care (hospital and community based), education and social services, through government-funded, private corporate, and not-for profit organizations, will be available to all MScOT students at both campuses. All MScOT students will continue to be invited to participate in the Department's standing committees (Student Affairs, Curriculum and Research), as well as supported in student-led initiatives (Student's Council and Community Involvement). Students' participation in the Department's committees and student-led initiative across the two campuses will be supported by teleconferencing or videoconferencing.

There will be no substantive changes to the content or pedagogy of the MScOT program for the students at the St. George campus related to the implementation of the second location at UTM, aside from the videoconferencing of lectures between the two campuses. Lectures at the St. George campus will be held at the Medical Sciences Building (MSB) until 500 University Avenue acquires upgraded videoconferencing technology. Lectures at the UTM campus will be held at the Terrence Donnelly Health Sciences Complex (TDHSC). Videoconferencing connectivity between MSB and the TDHSC has been established for medical curriculum, as the Mississauga Academy of Medicine is situated in the TDHSC. The availability of required physical space and video-conferencing technology for bi-directional video-conferenced lectures has been confirmed at both locations.

MScOT students at the TDHSC will have face-to-face access to MScOT course instructors, who will video cast a percentage of their lectures from the TDHSC at UTM. MScOT students at the

TDHSC will have on-site labs and expert lab demonstrators drawn from the professional community, comparable to those provided to MScOT students at the St. George campus. TDHSC-based MScOT students will also have on-site dedicated graduate and fieldwork coordination, program management, academic and fieldwork administration and IT assistance. All MScOT students in the Department will have access to all features of the MScOT academic program.

The expansion of the MScOT fieldwork offerings will be pooled with existing clinical, community and international fieldwork placements so that all placements will be equitably shared with MScOT students at both campuses.

The MScOT program is designed to deliver educational programming that prepares students for current and future practices in occupational therapy. Courses evolve annually with minor changes reflecting professional, scientific and pedagogical advances. The MScOT curriculum as a whole undergoes periodic comprehensive reviews to explore opportunities for not only incorporating new content and methods, but also to look for synergies and efficiencies in the delivery of the curriculum. Any substantive changes to the MScOT curriculum will be implemented for all MScOT students at both campuses, when such changes have been approved by Faculty Council.

2 Effective Date

The Department's current enrolment target is 90 students in both years of the program (180 student enrolled in the MScOT program in total.) It plans to enrol 90 first year students at the St. George campus and 40 first year students at the UTM campus in September 2018. In September 2019, 90 new students will be enrolled at the St. George campus and 40 new students will be enrolled at the UTM campus. By 2019, MScOT student enrolment at the St. George campus will be 180, and 80 at the UTM campus, with a total enrolment of 260 at steady state.

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

Why expand MScOT enrolment?

There are two primary reasons for expanding the MScOT enrolment at the University of Toronto Mississauga: **demographic need** and **demand for the program**. The proposal to expand the MScOT program enrolment reflects the Department's and the Faculty of Medicine's commitment to social accountability. Exploring the feasibility of a second campus for the MScOT program was established as a strategic priority for the Department in 2016.

Demographic Need: The proposed enrolment expansion addresses current and anticipated future demographic needs for more occupational therapists in Ontario. Ontario's population is projected to grow by 30.3 per cent, or more than 4.2 million, over the next 25 years¹. In 2016, the number of seniors aged 65 and over was projected to almost double from 2.3 million, or 16.4 per cent of population, to 4.6 million, or 25.0 per cent, by 2041². Not only are Canadians living longer, more are surviving with chronic conditions and complex disabilities well into their eighth and ninth decades³.

Older adults are three times more likely than other adults or people younger than 20 to be admitted to hospital from emergency departments⁴ and experience higher levels of decline in their overall health and well-being due to long waits in acute care before discharge⁵. Nearly 85% of all acute 'alternative level of care' beds in hospitals are filled with patients that are age 65 or older, and 35% are age 85 or older⁶.

Older adults as well as people with mental illnesses, developmental issues, catastrophic injuries, trauma and degenerative conditions wish to live full lives in their communities. Occupational therapists enable older adults and other hospitalized individuals to return and remain safely in their homes and communities. Occupational therapists assess and treat people with physical, mental and social conditions that result in impairments, disabilities and activity restrictions. Occupational therapy is the sole profession whose scope of practice is dedicated to enabling occupational performance and wellbeing in activities of daily living, work and productivity, and community integration across age groups, diagnoses and social vulnerabilities.

There is very strong evidence to suggest that occupational therapy services in hospitals reduce readmission rates⁷. Similarly strong evidence suggests that community-based occupational therapy interventions are effective and cost effective in reducing primary medical care and emergency room visits among the well older adults⁶. There is growing

¹ Ministry of Finance. Ontario Population Projections Update, 2016–2041, Spring 2017, Based on the 2011 Census. Retrieved from <https://www.fin.gov.on.ca/en/economy/demographics/projections/projections2016-2041.pdf>

² The Chief Public Health Officer's Report on the State of Public Health in Canada 2014: Changing demographics, aging and health. Retrieved from <https://www.canada.ca/en/public-health/corporate/publications/chief-public-health-officer-reports-state-public-health-canada/chief-public-health-officer-report-on-state-public-health-canada-2014-public-health-future/changing-demographics.html>

³ National Ambulatory Care Reporting System Emergency Department Visits and Length of Stay by Province/Territory, 2015–2016, Table 5 Visits and Lengths of Stay by Age Group. Canadian Institute for Health Information. Retrieved from www.cihi.ca.

⁴ Canadian Institute for Health Information. (2011). Health Care in Canada, 2011: A focus on seniors and aging. Retrieved from https://secure.cihi.ca/free_products/HCIC_2011_seniors_report_en.pdf

⁵ 5 Rogers, A.T., Bai, G., Lavin, R.A., Anderson, G. F. (2017). Higher hospital spending on occupational therapy is associated with lower readmissions rates. *Med Care Res Rev*, 74(6):668-686.

⁶ 6 Hay, J., LaBree, L., Luo, R., Clark, F., Carlson, M., Mandel, D., Zemke, R., Jackson, J., Azen, S. (2002). Cost-Effectiveness of Preventive Occupational Therapy for Independent-Living Older Adults. *Journal of the American Geriatrics Society*, 50(8):1381–1388.

⁷ Health Workforce Database, Canadian Institute for Health Information; Statistics Canada, Table 051-0001 - Estimates of population. Occupational therapist workforce per 100,000 population by jurisdiction, Canada, 2011-2015. Data request to Health Workforce Information HealthWorkforceInfo@cihi.ca, July 21, 2017.

evidence of the effectiveness of occupational therapy interventions for return to activities of daily living and work, and community integration for individuals experiencing a wide range of health conditions and social vulnerabilities, including mental illnesses, brain injuries, and dementia.

Ontario has the third lowest number of occupational therapists per capita in Canada. Only Saskatchewan and the Territories have fewer occupational therapists per capita⁷.

Demand: University of Toronto’s MScOT program has been evaluated as one of the top three programs North America, and has consistently received the highest national accreditation rating. We consistently have a very large pool of highly qualified applications.

Current MScOT Applications, Enrolment & Retention

- Average GPA at entry: **3.82**
- Applications to the two-year MScOT program have risen **45%** since 2010
- Retention rates average **96%** annually
- Success on national certification exam, (five year average): **99%**

Table 1. U of T MScOT Applications, Enrolment and Retention 2010-2017

Year	Applications	% Increase (YoY)	Entering (Sept)	% Graduating
2010	662	n/a	85	94.2% (81)
2011	701	6%	80	93.9% (77)
2012	711	1%	86	98.8% (85)
2013	812	14%	88	98.7% (81)
2014	831	2%	106	97.7% (84)
2015	948	14%	90	96.5% (85)
2016	850	(12%)	91	95.2% (101)
2017	957	13%	102	TBD

Given demographic projections of population growth, particularly with respect to elder and disabled Canadians, and given the strong application pool for U of T’s MScOT program, there is a strong academic rationale to increase the enrolment of occupational therapists to address anticipated current and needs for occupational therapy services.

Why expand through a second campus vs downtown?

Established pedagogy for the Master’s entry to practice professional occupational therapy program requires interactive learning between students and instructors, and among students. We know from our experiences of unanticipated high enrolments of class sizes greater than 90, students are not conducive to student engagement with instructors and

classmates during interactive lectures, case studies, student-led seminars and presentations, and lab demonstrations. Expanding enrolment by increasing the size of the classroom is not an effective strategy for training highly competent occupational therapists.

Why expand at UTM?

- “The Greater Toronto Area (GTA) is projected to be the fastest growing region of the province, with its population increasing by almost 2.9 million to reach 9.6 million by 2041”.^{1, p.4}
- “Growth in the GTA census divisions of Durham, Halton, Peel and York is projected to be significantly faster than the Ontario average, with the addition of over 1.8 million people to the suburban GTA. Peel alone is projected to see its population increase by 47.4 per cent between 2016 and 2041”.^{1, p.12-13}
- Across Ontario, “The number of people aged 75 and over is projected to rise from 1.0 million in 2016 to 2.7 million by 2041. The 90+ group will almost quadruple in size, from 115,000 to 400,000”.^{1, p. 8}
- There is a tendency for professionals to work where they train, hence, training occupational therapists at the site of high demographic growth is prudent.
- UTM’s Terrence Donnelly Health Sciences Complex was established to have capacity for training of several health disciplines. Medical education’s implementation of the Foundations Curriculum has decreased the utilization of educational spaces and videoconferencing TDHSC, making classroom, study rooms and IT readily available for the proposed enrolment of 80 MScOT students.

¹ Ministry of Finance. Ontario Population Projections Update, 2016–2041, Spring 2017, Based on the 2011 Census. Retrieved from <https://www.fin.gov.on.ca/en/economy/demographics/projections/projections2016-2041.pdf>

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.*⁸

⁸ Freeland, A & Breukelman, T. The University of Toronto Mississauga Academy of Medicine and Masters of Occupational Therapy Program Collaboration Project. March 7 2017, p. 2.

1. Please describe in detail what changes are being proposed.

This major modification proposal has two components. The primary programmatic change associated with proposed MScOT enrolment expansion involves the videoconferencing of lectures between the UTM and St. George campuses. This change is modelled closely after the established protocol for the Mississauga Academy of Medicine (MAM) cohort of medical students. University of Alberta currently has the only other occupational therapy program with two campuses in Canada, and our proposal has been developed in close consultation with the Director of that program.

The second component of this major modification is an increase in enrolment by 40 students, in addition to the existing cohort of 90 students enrolled per year. We propose that 40 of the 130 student will be situated at UTM and 90 students will be situated at the St. George campus. Applicants will be informed on the Department website (following approval of the major modification) of the process by which students will be assigned to either the UTM or St. George campuses, and that their first choice of placement cannot be guaranteed.

The process of assigning campus location for admissions for September 2018 will be as follows. The Department will survey all applicants for September 2018 admission in March 2018 regarding their preference for being located at St. George or UTM campus. Letters of offer to applicants selected for admission to the MScOT program will include the assignment of each applicant to either St. George or UTM campus. Applicants will then accept admission to the program at the assigned campus. Students admitted to the MScOT program will remain at their assigned campus for the duration of their program.

Applicants for admission to the MScOT program for September 2019 and for subsequent years will be notified on the Department website and other recruitment materials that students have an opportunity to select their preference for UTM or St. George campus, but that their first choice of placement cannot be guaranteed. This information will also be included in the Ontario Rehabilitation Science Programs (ORPAS) application materials and applicants will select their preferred location when they submit their application to the program. Letters of offer to applicants selected for admission to the MScOT program will include their assignment to either UTM or St. George campus. Students will then accept admission to the program at the assigned campus. Students admitted to the MScOT program will remain at their assigned campus for the duration of their program.

Approximately one-third of the lectures of each MScOT course will be videocast from the TDHSC site to ensure that students at both campuses have face-to-face contact with instructors and lecturers. Our videoconferencing technology allows for in-class questions and answers from the remote site. In-course labs and mentorship will be delivered at both sites to ensure that all MScOT students have equitable learning opportunities. Videoconferenced lectures will be recorded and archived for all students to review at a later date.

Assessment, intervention and other teaching tools and supplies that are part of the MScOT curriculum will be replicated for on-site use by MScOT students at UTM. Tamara Breukelman, Operations Manager for the Mississauga Academy of Medicine, has compared the timetable

for the MScOT curriculum to the medical student curriculum timetable. Classroom space for videoconferencing lectures, and small group study rooms for two years of MScOT curriculum implementation in the MAM spaces at TDHSC are available to the Department for the MScOT students at UTM⁸.

Centre for Interprofessional Education Director, Maria Tassone, and Curriculum Lead, Sylvia Langlois, propose that interprofessional education (IPE) for MScOT students at UTM will be delivered in the same way that IPE has been successfully delivered for MAM students, who have annually achieved their IPE competencies. MScOT students, like MAM students, will travel to St. George campus for their foundational IPE events⁹. IPE electives will be delivered at UTM, including the existing elective IPE programming, which will be adapted to engage MScOT students, and new elective IPE programming that will be developed with an occupational therapy focus. Maria Tassone and Sylvia Langlois have assured the Department that IPE offerings will be ready for students entering the MScOT program in September 2018 at UTM. The approved budget for the MScOT enrolment expansion at UTM includes the costs of IPE program modification and development, and ongoing IPE curriculum delivery for 80 MScOT students at UTM.

Students at both the UTM and St. George campuses will have access to their instructors and to staff throughout their program. At least one full time faculty member and one full-time staff member will be on-site at UTM throughout the students' program. Faculty roles at the UTM campus will include graduate coordination, fieldwork coordination, lecturing, lab instruction and mentoring. Staff roles on-site at UTM will include administrative supports (i.e. front line response to student and others' queries; curriculum support for students and faculty; photocopying, mail services), student supports, academic and fieldwork program coordination, IT support, and academic administration.

MScOT students situated at the UTM campus will have access to graduate student coordination and fieldwork coordination services on site. Students at UTM will have equitable access to the MScOT Graduate Coordinator and the Director of Fieldwork, as well as course coordinators, course instructors, mentors and teaching assistants via email. Office hours with faculty members are currently arranged by appointment and may be conducted in person, by phone, Skype, or other videoconferencing modalities. All MScOT students have University of Toronto email addresses and are expected to check them daily and use them for communications within the program. Faculty and staff generally respond to student email inquiries within 24 hours, Monday to Friday. The Graduate Coordinator and Director of Fieldwork are also available to students through confidential telephone communication.

Students who are receiving video-conferenced lectures, whether at UTM or the St. George campus, will have on-site faculty and staff members' support available to them to address questions not amenable to responses through video-conferencing. Arrangements with Discovery Commons and Information and Instructional Technology Services (I&ITS) have been

⁹ Centre for Interprofessional Education's Maria Tassone and Sylvia Langlois report that plans are underway for health sciences students at UTM to receive all their IPE programming at UTM within the next few years.

made for IT support to ensure smooth functioning of videoconferencing media at both and between UTM and St. George campuses. The 40 students per year situated at UTM will be assigned to four study groups of 10 students each, based on the same criteria used for the current students enrolled at St. George campus. Most MScOT academic courses have some learning assignments in study groups. Study group rooms comparable to those used by current MScOT students are available for MScOT students in the MAM spaces in the TDHSC.

The Department provides specialized health services for current MScOT students through a contract with the Faculty of Medicine's Office of Health Professions Student Affairs. The Department will increase payments to the Office of Health Professions Student Affairs to provide additional appointments for MScOT students at UTM. Professionals from the Office of Health Professions Student Affairs are on-site at UTM at specified times during the week when MScOT students can receive services. MScOT students at UTM will also be able to access Office of Health Professions Student Affairs services at St. George campus if they choose to do so. The content of the services provided by the Office of Health Professions Student Affairs for MScOT at St. George and UTM will be the same.

UTM MScOT students' travel for fieldwork, and for their conference registration and travel, will be supported at the same level as St. George campus MScOT students' travel for fieldwork, and for their conference registration and travel.

- 2. Please be explicit about how the learning outcomes have changed and include either the previous and proposed learning outcomes or one version of the current LOs with the new LO in track changes.*

The MScOT curriculum to be delivered at both campuses is the current curriculum that has been approved by the University of Toronto and accredited by the Canadian Association of Occupational Therapists. There will be no difference between the learning or performance outcomes required of students in the MScOT program at the St. George and UTM campuses. The academic and fieldwork curriculum and assessments, and requirements concerning the elements of the program directed toward professional socialization for students at both campuses will be identical.

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*

Impact on Continuing Students

We anticipate no substantive impact on the academic, fieldwork or professional socialization components of the curriculum for the students at the St. George campus. We would manage any unforeseen affects of a second campus on all MScOT students very carefully. One change in the academic curriculum implementation for students at St. George campus will be that lectures will temporarily be held at the Medical Sciences Building instead of at 500 University

Ave, as the videoconferencing infrastructure for bi-directional lectures between the Medical Sciences Building (MSB) and the Terrence Donnelly Health Sciences Complex (UTM) is already established and currently under-utilized. The Department is exploring opportunities for establishing connectivity between 500 University Avenue and the Terrence Donnelly Health Sciences Complex as soon as it is feasible to do so.

MScOT students at St. George campus will be provided with study group rooms at MSB so that they can hold their breakout small group learning assignments during lectures, and study groups in close proximity to their lectures. Since a percentage of the MScOT lectures will be video cast from the TDHSC, MScOT at St. George campus students will also need to accommodate to video cast lectures. Classrooms available to MScOT students at UTM and MSB have high quality videoconferencing technologies with large classroom-sized screens, and opportunities for audio-video communication from both sites. Microphones at each student desk allow students in both classrooms to communicate with the instructor and with each other.

Student accommodations will be available at both sites. The MScOT Graduate Coordinator and Director of Clinical Education have developed and presented guidelines for accommodating students' health and learning needs in academic and fieldwork courses, and are considered experts provincially and nationally. The same standards and processes for accommodating learning and health issues will be applied to MScOT students whether at UTM or St. George campus.

The number of available fieldwork offerings will be increased to meet the needs of the expanded enrolment through new clinical, private practice, international, and role emerging¹⁰ placement opportunities. Students at both the UTM and St. George campuses will have equitable access to all MScOT fieldwork placements. The process for student selection of preferences for fieldwork placements will remain the same. Students at UTM and St. George will select their preferences and will be matched to the available fieldwork placements with the goal of matching every student to one of their top preferences for fieldwork across their fieldwork courses. The proposed expanded enrolment will decrease students' chances of getting their most desired placement, since the number of available placements at popular, highly specialized hospitals, such as Sick Kids, will remain the same.

The Department has a strong history of developing successful community based and role emerging placements. These placements focus on education, primary and second prevention and intervention aimed at maintaining individual's health and wellbeing in their community setting. While hospital-based fieldwork placements continue to be of crucial importance to MScOT students' competencies, the profession at large and the Department place growing emphasis of MScOT students' development of competencies in role emerging settings. Therefore, in addition to developing new hospital-based placements in the Peel Region as the hospital sector expands to reflect the growing population needs, the Department will also

¹⁰ Role emerging placements occur in organizations where there is no established occupational therapy role and where occupational therapist supervision is off-site.

develop new community-based placements in the Peel Region. Dr. Alison Freeland, Associate Dean of Medical Education (Regional), reports that 99 new community-based placements were developed in Mississauga for MAM medical students' internships. Dr. Freeland and MAM staff have indicated their desire to work with the Department's faculty to assess the feasibility of establishing occupational therapy fieldwork sites within the community partnerships established for MAM students.

Whether in hospitals or in the community, all students will continue to be provided with accredited fieldwork placements supervised by occupational therapists that meet the requirements of the program and eligibility for certification and registration.

The professional socialization components of the MScOT program (mentorship, and components imbedded within the academic curriculum including regulation and ethics, diversity and inclusion, etc.) will continue to be core elements of the MScOT curriculum for all students. All professional socialization components of the curriculum will be delivered equitably to all students at both campuses in order that all students will achieve the professional and interprofessional competencies required for entry to practice.

Consultation with Continuing Students

Following the completion of the Department's study of the feasibility of enrolment expansion at UTM and their approval to proceed with this application for a major modification to the MScOT curriculum, the current Year 1 and Year 2 students were invited to provide their perspectives on the potential for the Department to increase its enrolment through a second location at UTM. An overview of the demographic and academic rationale for the enrolment expansion, the proposed videocasting of lectures between the two sites and development of new fieldwork sites, the teaching spaces and services available at UTM, and the anticipated impact on students situated at the St. George campus was provided to each class by the Department Chair.

The OS&OT Student Council and the student representatives to the Department's Student Affairs Committee convened a face-to-face feedback session and sent an online survey to all MScOT students to gather their perspectives on the proposed enrolment expansion at UTM. Approximately 16% of students attended the face-to-face feedback session and approximately 52% of students responded to the online survey.

Student support of the proposed expansion was mixed. Based on the results of the survey, approximately one third of responding students supported expansion, while two thirds of the responding students expressed some concern about the expansion. The Department appreciates the students' perspectives and concerns, and the proposal was amended to address the concerns students raised.

Students questioned whether the Department will be prepared to launch the enrolment expansion at UTM by September 2018. The Department has been exploring the potential for

enrolment expansion at a second location since April 2016, and working collaboratively with UTM and the Faculty of Medicine in developing a comprehensive plan for admissions at UTM in September 2018. All elements related to the enrolment expansion at UTM have objectives and outcomes, assigned leadership and approved resources (human, financial and material).

Students also expressed concern that the proposed enrolment expansion may have an impact on connections and collaborations with students and faculty between the two campuses. As noted above (page 8), MScOT students situated at the UTM campus will have access to graduate student coordination and fieldwork coordination services on site. Students at UTM will have equitable access to the MScOT Graduate Coordinator and the Director of Fieldwork, as well as course coordinators, course instructors, mentors and teaching assistants via email. Faculty are readily available to students by email to arrange appointments that may be conducted in person, by phone, Skype, or other videoconferencing modalities. As noted above (page 2), all MScOT students will continue to be invited to participate in the Department's standing committees (Student Affairs, Curriculum and Research), as well as supported in student-led initiatives (Student's Council and Community Involvement). Students' participation in the Department's committees and student-led initiative across the two campuses will be supported by teleconferencing or videoconferencing.

Students expressed concerns about access to placements and employment opportunities. As noted above (page 10) students at both the UTM and St. George campuses will have equitable access to all MScOT fieldwork placements. All students will continue to have a balance of fieldwork experiences in hospital and community placements. Reflecting demographic needs and professional goals, the Department will be focusing on developing new placements in primary and secondary prevention through community-based and role emerging placements, as well as new hospital based placements. All MScOT students will continue to be provided with accredited fieldwork placements supervised by occupational therapists that prepare them for eligibility for certification and registration as occupational therapists. Given demographic need and recent provincial and national precedents evident in CIHI's occupational therapy workforce data, it is highly likely that graduates will secure jobs in both well-established and emerging roles.

Students also expressed concern about access to financial supports, including awards and bursaries. All MScOT students at both campuses will have equitable access to existing and future financial supports, including awards and bursaries.

Faculty will meet with student leaders early in January 2018 to discuss how their concerns were addressed in this final proposal. At the recommendation of the student leaders, we will provide written materials or arrange an assembly for all students to disseminate this information. The Department will also provide students with information about the planned enrolment expansion across U of T's rehabilitation professional masters programs, and an update on enrolment expansion in relation to the Canadian job market.

Current MScOT students are actively engaged in the MScOT program's Student Affairs Committee and Professional Curriculum Committee, as well as the Department's Research Committee. These student representatives will continue to be engaged with faculty members as they implement strategies to optimize student services, learning and skill development at both sites. The Students' Council will also be supported in their strategies to maintain a cohesive Council across two the sites. Once implemented, students at both sites will have opportunities to participate in our committee structures to provide feedback and recommendations regarding the quality and delivery of the program. Formal student evaluations will be included in course and program evaluation processes.

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

Consultations regarding the proposed expansion of the MScOT program enrolment through a second location at UTM have been held with the Department's faculty and students, and with senior leaders in the Faculty of Medicine, the University of Toronto Mississauga, Trillium Health Partners, and other occupational therapy academic programs and professional organizations in Ontario and Canada.

Faculty in the Department of Occupational Science and Occupational Therapy: Examining the feasibility of the satellite of MScOT program was one of the Department's 2017-2020 strategic priorities. The Dean approved this strategic priority and recommended that the feasibility of developing a second campus for the MScOT program in the available space at the Mississauga Academy of Medicine. The Department's Executive Committee and the Graduate Coordinator and Director of Clinical Education of the MScOT Program were consulted extensively in the development of this major modification proposal. Reports on the development of all aspects of the major modification proposal were provided at Department Affairs Committees meetings, and faculty-wide consultation was sought in response to verbal reports, working documents and drafts of the proposal. Vice-Dean of Graduate and Academic Affairs, Dr. Allan Kaplan, who oversaw the development of this proposal, met with the Department's Executive and later with the Department at large to provide the Faculty of Medicine's perspective and to address questions and concerns. The draft major modification proposal was circulated to all faculty members for consultation prior to September 13 2017, when the majority of the Department's voting faculty members voted to submit the application to establish a second location for the MScOT program at UTM¹¹. Consultation following the decision to submit the application continued with both the leadership and the full membership of the Department until the time of submission.

¹¹ The Department's voting members include all full time and continuing part-time members with a 0.5 FTE or greater. The electronic vote was anonymous and open for over one week.

Faculty of Medicine: The proposed feasibility study for establishing a second campus of 80 new MScOT students was presented to the Dean's Advisory Group* on April 25 2017 by the Associate Dean Medical Education (Regional), Alison Freeland, and the Chair of the Department of Occupational Science and Occupational Therapy, Susan Rappolt. The Dean's Advisory Group provided strong support for the academic rationale for an expanded MScOT enrolment through a second location at UTM. A senior academic advisory group was established at that time for ongoing consultation for the development of this proposal.

The Senior Advisory Group for the establishment of a second location of MScOT students at UTM includes: Vice Dean Graduate and Academic Affairs, Allan Kaplan; Vice Dean MD Program, Patricia Houston; Vice Dean Post MD Education, Salvatore Spadafora; Associate Dean Medical Education (Regional) Alison Freeland, and Chair OS&OT, Susan Rappolt. The Senior Advisory Group met on June 30 2017, with Director of Discovery Commons, Faculty of Medicine, Sam Chan; Director of Education (Interim), Trillium Health Partners, Sonia Pak; and Operations Manager, MAM, Tamara Breukelman; and, IT Manager, Rehabilitation Sciences Sector, Faculty of Medicine, Rob Page, to confirm the availability of space and information technology requirements for the proposal. In light of the reduced utilization of classrooms, videoconferencing technology and IT human resources for videocasting lectures, and small study group rooms at MSB since the introduction of the Foundations curriculum in undergraduate medical education (MD Program), the availability of these resources to the MScOT program has been confirmed by the Dean.

As described above, enrolment expansion at the UTM campus will have no substantive impact on the academic program of the MScOT students at the St. George campus. Current students express concern that an increased enrolment will reduce MScOT students' chances of being matched for unique and highly specialized clinical placements. Logistical changes for future MScOT students at the St. George campus include lectures and study groups being held at MSB rather than at 500 University Avenue, and receiving a portion of their lectures videocast from UTM.

No impact on other academic programs in the Faculty of Medicine at the St. George campus is anticipated. The three entry-level professional programs in the Rehabilitation Sector are academically independent from each other, with the exception of their common participation in Centre for Interprofessional Education programming. The academic programs of student physical therapists and student speech-language pathologists will not be affected by an expansion of MScOT enrolment at UTM.

University of Toronto Mississauga: Consultations regarding the impact of developing a second location for the MScOT program at UTM have been undertaken with members of the UTM Executive Committee, including: UTM Vice-President and Principal Ulli Krull (August 8 2017); Vice-Principal Academic and Dean, Amrita Daniere; Vice-Principal Research, Bryan Stewart; Dean of Student Affairs, Mark Overton; and Interim Chief Administrative Officer, Susan Senese. Members of the UTM Executive Committee have assessed the anticipated impact of 80 new MScOT students at UTM as very modest. The UTM Executive Committee report that they view the use of the space by 80 new MScOT at the TDHSC as primarily

'replacement usage', given the decreased utilization of that space by medical students since the implementation of the Foundations medical curriculum.

A meeting with Vice-Principal Academic and Dean, Amrita Daniere, Vice-Dean Teaching and Learning, Heather Miller, and Vice-Dean Faculty, Angela Lange was held August 31 2017 to discuss the MScOT proposal to expand to the UTM campus. Mutually agreeable plans for space utilization at the TDHSC, MScOT students' use of the UTM library, health services, and athletic centre were discussed. The analysis of the UTM's Chief Administrative Officer Mr. Paul Donahue indicates that the impact of 80 new MScOT students on the UTM library and athletic centre would be negligible, and offset by a portion of the MScOT students' ancillary fees. Possible arrangements for student transportation and parking were discussed. Proposed arrangements were conveyed to Vice President and Principal Ulli Krull, Vice Dean Allan Kaplan, and Associate Dean Medical Education (Regional) Alison Freeland.

Vice Principal and Dean, Ulli Krall has confirmed that the existing agreements for the use of UTM resources (i.e. space and IT) by Faculty of Medicine medical students will be extended to the Occupational Sciences and Occupational Therapy students located at the UTM site, as there is nothing new that impacts UTM that is not presently managed. The students at this second location will be registered upon admission at an "associated organization," similar to how MAM students are registered. Therefore, issues associated with compulsory non-academic incidental fees and access to related campus-specific services are not concern. Although the academic year for MScOT student may differ slightly from other UTM students (i.e. September – August vs. September to April), Mark Overton, Dean of Student Affairs, will be working with our Department to ensure any issues are addressed in a timely manner.

Associate Dean Alison Freeland and Sylvia Langlois, Faculty Lead, Centre for Interprofessional Education anticipate a positive impact on medical students at the Mississauga Academy of Medicine, as a second health profession student body will be studying at that campus, opening possibilities for enhanced interprofessional learning opportunities. Alison Freeland also suggests that medical students will benefit from student occupational therapists in community-based placements and has provided contact information to support the development of new community-based fieldwork placements in Mississauga.

Trillium Health Partners: Trillium Health Partners (THP) is a Toronto Academic Health Sciences Network Associate Member and site of the Mississauga Academy of Medicine (MAM). The Leadership Committee** of THP was consulted on September 5, 2017 to discuss the implications of an MScOT enrolment expansion at UTM for THP. MAM space and other resources at THP will not be affected by an expanded MScOT enrolment at UTM. The Leadership Team was very supportive of having an increased presence of occupational therapy at THP and Mississauga.

Director Professional Practice, Shelley Petruskavich was consulted on September 5 2017 regarding the implications of the proposed MScOT enrolment expansion at UTM on service delivery and professional practices at THP. Occupational therapists at THPs are currently

actively engaged in the MScOT program fieldwork preceptors, lecturers, lab demonstrators and mentors. Twelve occupational therapists employed at THP hold Status-Only Lecturer appointments in the Department. Occupational therapist Carissa Gregorio is the Professional Practice Leader for all three sites at THP, and a member of the Department-sponsored Occupational Therapy GTA Professional Practice Leader Network. The Department and THP continue to be committed to mutually beneficial clinical teaching and learning associated with the MScOT program.

Several meetings have been held with Senior Vice President, Science, and Chief Scientist, Institute for Better Health, Robert Reid concerning opportunities at the Institute for Better Health for MScOT Graduate Research Projects MScOT. Scientists at the Institute are currently supervising two such projects for Better Health, with mutual satisfaction of students and supervisors. Dr. Reid, Director of Research, Susan Law, Manager of Strategic Design and Knowledge Translation, Christine Plaza, and Scientist (and OS&OT Status Only Assistant Professor Elizabeth Mansfield) met with the Rehabilitation Sciences Sector Chairs on September 21 2017 to discuss future scientific collaborations between professional and doctoral students and faculty members in the Rehabilitation Sciences Sector associated with the strategic directions of the Institute for Better Health.

Occupational Therapy Academic Programs and Professional Organizations: Director of Occupational Therapy, University of Alberta, Lili Liu, was consulted and she generously provided guidance on the process and content of the establishment of a second campus for their entry-level occupational therapy program in Calgary. Information shared by Dr. Liu has informed this proposal.

The chairs of each of the other entry-level professional occupational therapy programs in Ontario (Queen's Ottawa, Western, McMaster) were contacted personally by Susan Rappolt, Chair of the Department of OS&OT, to describe the intent to a seek approval for an enrolment increase of 80 MScOT students at the UTM campus and to seek feedback. All occupational therapy programs in Ontario agree that the primary barrier to increasing enrolment is the availability of accredited fieldwork placements for entry-level occupational therapy students. Ontario occupational therapy programs have a fieldwork catchment sharing agreement to optimize the utilization of available placements in the province. As the proposal to increase the enrolment of U of T's MScOT program will be accommodated by the development of new fieldwork sites, the existing fieldwork catchment sharing agreement is not jeopardized. New fieldwork sites will be developed with respect to population need and preceptor availability at eligible hospital and community sites.

The president of the Association of Canadian Occupational Therapy University Programs (ACOTUP), the executive directors of the Canada Association of Occupational Therapists (CAOT) and the Ontario Society of Occupational Therapists were similarly informed of the Department's intent to seek approval for an enrolment expansion of 80 students at UTM, and invited to provide feedback. The need to increase the number of occupational therapists in

Canada is recognized by both ACOTUP and CAOT. Many of the member programs in ACOTUP have increased their enrolments in recent years, including programs in Ontario.

CAOT Director of Standards Alison Douglas has been contacted regarding the requirement for the accreditation of a substantive change to the MScOT program. The application for approval for the substantive change to the MScOT program, specifically, a substantial increase in enrolment at a second campus, is underway. A preliminary selection of the accreditation indicators for the proposed enrolment expansion at UTM have been proposed, and the timeline for accreditation review is currently being established, recognizing that the second site of the MScOT program at UTM must be accredited prior to the graduation of the first cohort of students.

Individuals Consulted, by Organization

Faculty of Medicine and University of Toronto: (*Dean's Advisory Group)

Dean and Vice Provost, Relations with Health Care Institutions, Trevor Young*

Vice-Dean Graduate and Academic Affairs, Allan Kaplan*

Vice Dean MD Program, Patricia Houston*

Vice-Dean Partnerships, Lynn Wilson*

Vice-Dean Post MD Education, Salvatore Spadafora*

Associate Dean, Medical Education (Regional), Alison Freeland* (MAM)

Director, Information Technology (Discovery Commons), Sam Chan*

Chair, Department of Physical Therapy, Darlene Reid

Chair, Department of Speech Language Pathology, Pascal van Lieshout

Director, Rehabilitation Sciences Institute, Angela Colantonio

Director, Centre for Interprofessional Education, Maria Tassone

Curriculum Lead, Centre for Interprofessional Education, Sylvia Langlois

Director, Facilities Management & Space Planning, Heather Taylor*

Assistant Vice-Provost, Relations with Health Care Institutions, Johanne Provencal*

Legal Counsel, Office of the Vice-Provost, Relations with Health Care Institutions, Sara
Gotlieb*

Chair, Department of Medicine, Gillian Hawker*

Associate Dean Postgraduate Medical Education, Glen Bandiera*

Associate Dean, Physician Scientist Training Programs, Norman Rosenblum*

Senior Advisor to the Dean on Clinical Affairs, John Bohnen*

Chief Financial Officer, Nancy Edwards*

Director, Office of the Dean, Meg Connell*

Executive Director, Office of Advancement, Darina Landa*

Director, Human Resources, Jean Robertson*
Executive Director, Office of Communications, Linda Quattrin*
Associate Dean, Continuing Professional Development, Suzan Schneeweiss*
Vice Dean Research, Richard Hegele*
Chief Administrative Officer, Tim Neff*
Associate Dean, Office of Health Professions Student Affairs, Leslie Nickel*
Chair, Department of Biochemistry, Justin Nodwell*
Chief Diversity Officer, Lisa Robinson*
Director of Operations, MD Program, Gina John

University of Toronto Mississauga:

Vice President and Principal, Ulrich Krull,
Vice-Principal, Academic and Dean, Amirta Daniere
Dean of Student Affairs, Mark Overton
Director of Governance, Assistant Secretary of the Governing Council, Cindy Ferencz-Hammond
Chief Administrative Officer, Paul Donaghue
Interim Chief Administrative Officer; Director, Information & Instructional Technology, Susan Senese
Vice-Dean, Faculty, Angela Lange
Vice-Dean, Teaching & Learning, Heather Miller
Director, Operations, Design & Construction, Stepanka Elias.
Operations Manager, Mississauga Academy of Medicine, Tamara Breukelman (MAM)

Trillium Health Partners: (** Leadership Group)

President and CEO, Michele DiEmanuele**
Senior Vice President, Strategy, People and Corporate Affairs, Karli Farrow**
Chief of Staff, Dante Morra**
Senior Vice President, Science, Chief Scientist, Institute for Better Living, Robert Reid**
Senior Vice President, Corporate Services & Chief Financial Officer, Dean Martin**
Senior VP, Enterprise Risk Management & Chief Information & Privacy Officer, Steve Hall
Vice President of Education, Quality and Patient Relations Alison Freeland**
Director of Education (Interim), Sonya Pak
General Counsel, Nicole Vaz**

Associate Vice President Patient Care Services, Debra Carson**
Director of Professional Practice, Shelley Petruskavich
Occupational Therapy Professional Practice Leader, Carissa Gregorio
Director of Research, Institute for Better Health, Susan Law
Manager, Strategic Design and KT, Institute for Better Health, Christine Plaza
Scientist, Institute for Better Health, Elizabeth Mansfield

Occupational Therapy Academic Programs and Professional Organizations

Chair, Department of Occupational Therapy, University of Alberta, Lili Liu (Calgary satellite)
President, Association of Canadian Occupational Therapy University Programs, Lori Letts
Executive Director, Ontario Council of University Programs in Rehabilitation Sciences, Alice Ormiston
Executive Director and Director of Standards, Canadian Association of Occupational Therapists, Janet Craik and Alison Douglas, respectively.
Executive Director, Ontario Society of Occupational Therapists, Christie Brenchley
Assistant Dean, Occupational Therapy, McMaster University, Lori Letts
Director, School of Occupational Therapy, Western University, Angie Mandich
Interim Associate Director (Occupational Therapy Program), Queen's University, Catherine Donnelly
Director, Occupational Therapy Program, University of Ottawa, Jacinthe Savard
Occupational Therapy GTA Professional Practice Leader Network, Co-Chairs, Siobhan Donaghy and Rachel Devitt

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 required resources projected for the enrolment expansion of 80 students, steady state, at UTM's Terrence Donnelly Health Sciences Complex (TDHSC) have been pro-rated based on the resources required for our current programming at St. George Campus. Consultations

with Vice Dean MD Programs Patricia Houston, Associate Dean Medical Education (Regional) Alison Freeland, and other members of the senior executive of the Faculty of Medicine, the UTM Vice-President and Principal, Ulli Krull, Dean Amrita Daniere, and the Mississauga Academy of Medicine have also informed the Department's understanding of the resources needed to implement the proposed major modification. Dr. Freeland led the implementation of the second campus of the medical curriculum at Mississauga Academy of Medicine, which is based at the TDHSC. We have also consulted with academic leaders across Canada about other entry level programs with second campuses. Dr. Lili Lui, Chair, Department of Occupational Therapy, Faculty of Rehabilitation Medicine at the University of Alberta, has provided extensive consultation on the development and current implementation of their second campus in Calgary.

Current Faculty and Staff Complement:

Currently there are 16.45 FTE core faculty, 17 status only/adjunct professoriate, and approximately 300 status only/adjunct lecturers in the Department. There are 6.4 dedicated staff members, plus information technology, space administration, reception and some administrative services shared with other units in the Rehabilitation Sector based at 500 University.

Core faculty members are responsible for coordinating and instructing MScOT courses. One core faculty member serves as the Graduate Coordinator (0.6 FTE) of the MScOT program and another as Director of Fieldwork (1.0 FTE).

Status only/adjunct professoriate contribute guest lectures and supervise MScOT research projects. Status only/adjunct lecturers and other community partners are highly engaged in the delivery of the academic, fieldwork and professional socialization components of the curriculum. They serve as fieldwork preceptors, guest lecturers, lab demonstrators, graduate research project supervisors and mentors.

Staff members dedicated to the MScOT program include: an MScOT Program Manager (including recruitment, admissions, grade administration, awards and bursaries, student financial and housing support, and student council liaison); Fieldwork Administration (managing databases, soliciting placement offers, support for students and preceptors); Curriculum Administration (syllabus, assignment and exam coordination; classroom, lab and study group room assignments, student reception). Other staff positions contributing to the implementation of the MScOT program include the Business Manager (overseeing all human and financial resource administration), Executive and Communications Assistant, and Financial Administration.

Table 2. New Faculty and Staff FTEs for proposed expanded enrolment at UTM

Based on the successful operation of the MScOT program for approximately 180 MScOT students, the projected FTEs and costs for the new faculty, preceptors, mentors, lab and teaching assistants at UTM, and staff for the development and ongoing implementation of

the UTM campus of an additional 80 MScOT students have been calculated on a pro-rated basis.

New HR FTEs	<i>2017-2018</i>	<i>2018-2019</i>	2019-2020	2020-2021	2021-2022
Graduate Coordination	0.1	0.4	0.4	0.3	0.3
Fieldwork Coordination	0.7	1.0	1.0	0.8	0.8
New Faculty Member		1.0	1.0	1.0	1.0
Office Management	0.1	0.2	0.2	0.2	0.2
Program Management (staff)	0.1	0.5	0.5	0.3	0.3
Curriculum Admin (staff)	0.1	0.4	0.4	0.3	0.3
Fieldwork Admin (staff)	0.1	0.5	0.5	0.5	0.5

In addition to the proposed and approved new faculty and staff FTEs that were prorated from the existing FTE for these positions for the current 180 students in the MScOT program, additional resources (prorated for 80 additional students) for teaching assistance, preceptorship and interprofessional education have been requested and approved. Funds requested for project management and communications have been approved. Additional faculty resources to support faculty with their course adaptations for videoconferencing, as well as to recruit and train additional lab instructors and mentors have been requested and approved.

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: Current Student Report

Re: Section 5: Impact of the Change on Students: Consultation with Continuing Students

1) Chair's request for current MScOT student consultation

Subject Line: Proposal for MScOT expansion enrolment through a second campus at UTM
Email Text:

Dear MScOT Students' Council Leaders and Student Affair Committee Members

I'm following up on my request for consultation regarding the Department's proposal to expand the MScOT enrolment through a second campus at University of Toronto at Mississauga. I will include a summary of your feedback in the proposal for this major modification to the curriculum. Just to remind you, there actually are no modifications to the eligibility requirements, academic or fieldwork curriculum, or the criteria for graduation being requested in this proposal. We are required to submit a major modification proposal only because we are proposing a second campus for an expanded enrolment.

If approved, the current first and second year classes of MScOT students will not be affected by this change. If approved 40 additional students would be admitted to the program in 2018. MScOT lectures would be video-conferenced between St. George and UTM campuses. Until 500 University is capable of video-conferencing lectures reliably to UTM, St. George-based students will receive their lectures from the Medical Sciences Building at College and University Ave. If you have any questions about any of my remarks in class, or would like any additional information, please don't hesitate to contact me.

Timeline for submission of your response: November 1st. I realize that second year students are heading into exams, and then on to placements. First year students have another week of Intro to Fieldwork before they return to regular classes. Please send your response(s) to Sandra Sokoloff ot.chair@utoronto.ca. I'm quite happy to have one overall response from all of you, or if it's easier for you, a Students' Council and a student member SAC response. If it's too difficult to get together to summarize your perspectives, please send your individual responses to Sandra and she will compile them. Please note, Sandra will keep the content of your submissions separate from your identity so I will never know who said what. (You may not know this but Sandra was Angela Colantonio's Research Associate before she became EA of the Department, and is a very good researcher in her own right!)

Thanks very much for your consideration of this request. Please don't hesitate to get back to me with questions and comments if you wish to speak with me about this directly.

Yours sincerely,
Susan

Appendix B: Current 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

There are no changes to the program learning outcomes or degree level expectations associated with this application for a major modification to expand enrolment of the MScOT program through a second campus at UTM.

Lectures will be videocast between the St. George and the UTM campuses so that all MScOT students receive the same educational content. Study groups, mentorship and labs, as well as the replication of assessment and intervention materials, will be provided for MScOT students at the UTM campus. The number of accredited fieldwork placements will be increased to accommodate the expanded enrolment. Interprofessional education offerings will be made available to students at UTM to ensure that they achieve the interprofessional competencies required of all University of Toronto student health professionals. Health, learning and financial student services will be made available to MScOT students at UTM. The specialized health and counselling services contracted by the Department of Occupational Science and Occupational Therapy for MScOT students at St. George Campus will be extended to MScOT students at UTM campus.

Appendix C: Current Calendar Copy with Proposed Changes Tracked

Faculty Affiliation: Medicine

Degree Programs: Occupational Therapy

MScOT

Collaborative Specializations

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

1. **Women's Health**

Overview

The Department of Occupational Science and Occupational Therapy is committed to providing graduate and continuing education programs that enable occupational therapists to be leaders in research, clinical practice, and the promotion of health and well-being. Core and clinical faculty members provide dynamic, evidence-based, and comprehensive instruction and mentorship. Graduates are innovative professionals focused on enabling occupation and enhancing health and well-being.

Contact and Address

Web: www.ot.utoronto.ca

Email: ot.reception@utoronto.ca

Telephone: (416) 946-8571

Fax: (416) 946-8570

Department of Occupational Science and Occupational Therapy

University of Toronto

Room 160, 500 University Avenue

Toronto, Ontario M5G 1V7

Canada

Master of Science in Occupational Therapy

Program Description

The 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. practise 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.

The MScOT program is offered as a two-year full-time program and a one-year, advanced-standing part-time option.

MScOT Program (24-Month Full-Time)

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.
- 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.
- 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.
- Apply online using the [Ontario Rehabilitation Sciences Programs Application Service \(ORPAS\)](#). Applications are accepted around October each year, with a deadline near the end of December or early January. Exact deadlines are posted on the [ORPAS](#) website and in the *ORPAS Instruction Booklet*.
- The MScOT program has two sites: 40 seats are located on the University of Toronto Mississauga campus and 90 seats are located at the St. George campus. Students may indicate their preference for either campus in their response to offers of admission, however, first choice of placement is not guaranteed. Once assigned to a campus, students will remain at the campus for the duration of their program.
- 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, section 4.3 English-Language Proficiency](#) 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 the [Occupational Therapy](#) and [ORPAS](#) websites for additional information regarding application document submissions (e.g., confidential assessment forms, resumé, personal statement submission).

Program Requirements

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

Program Length

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

Time Limit

3 years

Occupational Sciences and Occupational Therapy Courses

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.

Graduate Faculty

Full Members

Agur, Anne - BSc, MSc, PhD
Cameron, Jill - BSc, MS, PhD
Carswell, Anne - DipOT , BSc(OT), MSc, PhD
Colantonio, Angela - BA, BSc(OT), MHSc, PhD
Dawson, Deirdre - BSc, MSc, PhD
Friefeld, Sharon - BSc(OT), MA, PhD
Iwama, Michael - BSc(OT), BSc, MSc, PhD
Kirsh, Bonnie - BSc(OT), MEd, PhD
Mihailidis, Alex - BASc, MASc, PhD
Polatajko-Howell, Helene - PhD
Rappolt, Susan - BSc(OT), MSc, PhD (**Chair and Graduate Chair**)
Reid, Denise - BSc(OT), MEd, PhD
Renwick, Rebecca - DipOT , BA, PhD

Members Emeriti

Friedland, Judith - BA, MA, PhD

Associate Members

Barker, Donna - BSc(OT), MSc
Campbell, Kent - BSc, PhD
Cockburn, Lynn - BSc(OT), BCom, MEd, MPH, PhD
Farrow, Susan - BSc(OT), BA
Fourt, Anne - BSc(OT), MEd
Hebert, Debbie - BSc(OT), MSc, PhD
Hitzig, Sander - PhD
Hunt, Anne - MSc
Keightley, Michelle - BSc, MA, PhD
Langlois, Sylvia - BSc, MSc
Lindsay, Sally - BA, MA, PhD
Mckee, Patricia - DipOT , BSc(OT), MSc
Nalder, Emily - BOTH, PhD
Reed, Nicholas - BA, MSc, PhD
Rigby, Patty - DipOT , MHSc
Rowland, Paula - BS, BS
Stergiou-Kita, Mary - BSc(OT), MSc, PhD
Stier, Jill - MA, BMedSc

Trentham, Barry - BSc(OT), MES, PhD



**UNIVERSITY OF TORONTO
FACULTY OF MEDICINE**

FOR APPROVAL

TO: Faculty Council

SPONSOR: Sal Spadafora, Vice Dean, Post MD Education

CONTACT INFO: Trevor Cuddy, Director, Continuing Professional Development Portfolio;
416-978-8337; trevor.cuddy@utoronto.ca

DATE: February 12, 2018

AGENDA ITEM: 5.1

ITEM OF BUSINESS: Continuing Professional Development Mission Statement

JURISDICTIONAL INFORMATION:

Mission statements do not require governance approval within the Faculty of Medicine.

Compliance with the Committee on the Accreditation of Continuing Medical Education Standard 1: Responding to Societal Needs requires that the CPD Office has a formally approved written mission statement that has been formally approved by the Faculty of Medicine.

GOVERNANCE PATH:

1. Education Committee [For recommendation] – January 11, 2018
2. Faculty Council [For approval] – February 12, 2018

CONSULTATIVE PATH:

The CPD Mission Statement was reviewed in October 2017 by both the CPD Executive Committee and the Continuing Professional Development Directors and Leaders Committee.

HIGHLIGHTS:

N/A

PROPOSED MOTION

“THAT, as required by the Committee on the Accreditation of Continuing Medical Education Standard 1.1, the Continuing Professional Development Mission Statement be approved as submitted.”

November 22, 2017

Dr. Luc De Nil
Speaker of Faculty Council
Faculty of Medicine, University of Toronto
1 King's College Circle
Toronto, ON M5S 1A8

Dear Dr. De Nil,

I am writing to request that the Faculty Council of the Faculty of Medicine, University of Toronto formally approve the Mission Statement of the Continuing Professional Development (CPD) unit in Post MD Education.

In March 2018, CPD will be undergoing its quinquennial accreditation review by the Committee on the Accreditation of Continuing Medical Education (CACME). This comprehensive review verifies that CPD is fulfilling its responsibility to address the health needs of society. Reviewers will assess the office mission, vision, scope and quality of learning programs, governance structure and other related components. They will also evaluate CPD by its degree of compliance to four standards. In order to achieve full compliance, it is necessary that the Mission Statement of CPD be formally approved by Faculty Council.

The CPD Mission Statement has been formally reviewed as part of its five-year strategic planning processes in 2011 and 2016, and has been formulated to ensure alignment with the Faculty of Medicine's Mission Statement. In October 2017 the Mission Statement was reviewed again by the CPD Executive Committee and the Continuing Professional Development Directors and Leaders Committee (CPD D&L), both of whom reaffirmed it. The 2017 to 2022 Strategy development report is attached for reference.

I would like to formally submit this request to Faculty Council for approval of the following Mission Statement of CPD:

We fulfill our social responsibility by developing CPD leaders, contributing to our communities, and improving the health of individuals and populations through the discovery, application, and communication of knowledge

Please contact me should you require any further documentation or a formal presentation to Faculty Council.

Sincerely,



Salvatore M. Spadafora MD, FRCPC, MHPE
Professor, Department of Anesthesia
Vice Dean, Post MD Education

Committee on the Accreditation of Continuing Medical Education (CACME)

STANDARD 1: Responding to Societal Needs

1.1 Mission Statement

The CPD Office has a formally approved written mission statement and or goals and objectives document that:

- Defines the role of CPD in the university and for the communities it serves
- Is driven by a consideration of the health needs of these communities
- Defines its role in strengthening the quality of life-long education of physicians and other health professionals
- Describes the office's purpose, goals, major functions, and target populations
- Is congruent with and supported by the mission statement of the Faculty of Medicine/Health Sciences

The CPD office must have a mission statement and/or goals and objectives statement, which concisely and realistically describes the mission and function of the office and has been formally approved by the Faculty of Medicine/Health Sciences. It should be reviewed, updated and/or affirmed on a periodic basis.

Evaluation criteria:

Non-compliance: There is no written statement or goals and objectives document.
Partial compliance: There is a written mission statement and/or goals and objectives document that is either in development, does not include all the listed elements, is otherwise incomplete, or has not been formally approved by the Faculty of Medicine/ Health Sciences.
Compliance: There is a written mission statement and/or goals and objectives document that includes all listed elements and has been formally approved by the Faculty of Medicine/Health Sciences.
Exemplary compliance: In addition to meeting the criteria for compliance, the CPD office regularly evaluates and revises the mission statement and/or goals and objectives document as part of a continuous quality improvement process.



**UNIVERSITY OF TORONTO
FACULTY OF MEDICINE**

FOR APPROVAL

TO: Faculty Council

SPONSOR: Trevor Young, Dean, Faculty of Medicine

CONTACT INFO: Meg Connell, Director, Office of the Dean; 416-978-1339;
meg.connell@utoronto.ca

DATE: February 12, 2018

AGENDA ITEM: 5.2

ITEM OF BUSINESS: Disestablishment of the Centre for Integrative Medicine

JURISDICTIONAL INFORMATION:

The University of Toronto Guidelines for Extra-Departmental Units indicates that the outcome of a review of an EDU:C by the lead Dean(s) closure of the EDU. EDU:Cs are subject to the approval of the divisional governance of the lead Faculty.

GOVERNANCE PATH:

1. Research Committee [For recommendation] – January 9, 2018
2. Faculty Council [For approval] – February 12, 2018

CONSULTATIVE PATH:

The proposal to close Centre for Integrative Medicine (CIM) has been approved by the CIM Executive Committee.

HIGHLIGHTS:

N/A

PROPOSED MOTION

“THAT the proposal to close the Centre for Integrative Medicine as an Extra-Departmental Unit type ‘C’ be approved as submitted.”

Date: November 29, 2017
To: Luc de Nil, Chair, Faculty of Medicine Faculty Council
From: Trevor Young, Dean, Faculty of Medicine
Copy: Todd Coomber, Faculty Affairs Officer
Re: Disestablishment of the Centre for Integrative Medicine (EDU-C)

Please see the attached document: *A Proposal to Close the Centre for Integrative Medicine (CIM) as an Extra-Departmental Unit type 'C' (EDU-C) of the Leslie Dan Faculty of Pharmacy and the Faculty of Medicine at the University of Toronto*

As outlined in the attachment, the Executive Committee of the CIM agreed, at its meeting of October 2, 2017, that the EDU-C be disestablished. According to the By-Laws of the Faculty of Medicine this proposal requires the approval of Faculty Council. Similarly, it requires the approval of the Leslie Dan Faculty of Pharmacy Faculty Council.

On behalf of the CIM Executive Committee and my Co-Chair, Dean Heather Boon, I am pleased to submit this proposal for consideration by Faculty Council at its February 2018 meeting.

A handwritten signature in black ink, appearing to be the initials 'Jm' or similar, written in a cursive style.

**A Proposal to Close the Centre for Integrative Medicine as an Extra-Departmental Unit type
'C' (EDU-C) of the Leslie Dan Faculty of Pharmacy and the Faculty of Medicine at the
University of Toronto**

1. Brief History of the EDU-C

The Centre for Integrative Medicine (CIM), an EDU-C, was established jointly by the Leslie Dan Faculty of Pharmacy and the Faculty of Medicine at the University of Toronto and The Scarborough Hospital in September 13, 2014. The primary purpose of this EDU-C was to establish inter-disciplinary collaborative practice and academic programs in both research and education. Research was planned to focus on the following four areas: 1) natural product molecular discovery research; 2) clinical trials; 3) health services and policy; 4) inter-professional education. These four research areas were thought to collectively enable the evidence-informed integration of complementary and alternative medicine (CAM) and western medicine and allow for investigation of the impact of this integration on health outcomes. The education focus of the CIM was to improve the understanding of CAM of the health professionals trained in western medicine, and to investigate approaches to inter-professional collaboration. The Faculty of Medicine and the Leslie Dan Faculty of Pharmacy envisioned a new collaboration with The Scarborough Hospital, a community-affiliated hospital in the heart of the Asian community in Toronto. It was expected that TSH would grow into a hub for blending CAM and western medicine in clinical practice and studying the impacts of this on patient care.

2. Reasons for Recommending Closure of the EDU-C.

The primary reason for recommending closure of this EDU-C is that the CIM is no longer viable due to: changes in leadership of the CIM as well as changes in the leadership, circumstances and priorities of the founding partners. In 2016, The Scarborough Hospital announced it would merge with Rouge Valley Hospital. The CEO of the newly merged Scarborough Rouge Hospital was appointed as of July 1, 2017 and will now begin the process of leading a strategic planning process to identify the new strategic priorities of the hospital. This strategic planning process is expected to take at least a year and the role of the CIM at Scarborough Rouge is not clear at this time.

In 2016-17, the Leslie Dan Faculty of Pharmacy developed a new academic plan (2021 Forward Together) which currently guides the Faculty's priorities and investments. The CIM was not identified as a high priority within this plan. Similarly, under the leadership of a new Dean, the Faculty of Medicine has been reviewing the role of EDU-Cs in general and their relationship with the Faculty's re-focused strategic directions and the CIM is no longer considered a key priority.

Since the leadership and priorities of all the founding partners has changed significantly, there was consensus at the CIM Executive Committee meeting on Monday October 2, 2017 that a recommendation be made to close the CIM.

3. Closure Plan and Activities

The CIM has several on-going projects, including a visiting scientist program and commitments to support an on-line symposium on the topic of Gut Health and the Microbiome scheduled to launch in Fall 2017, with a significant marketing campaign planned for February/March 2018. In addition, the Endowed Chair in Integrative Medicine, based in the Faculty of Medicine remains vacant. Some of the key legacies from the CIM will naturally be transitioned to the new Chair in Integrative Medicine once s/he is appointed. To enable the CIM to fulfill its external obligations, to allow time to complete a search for the new Chair and to develop a communications plan regarding the closure of the CIM, it was felt that the CIM will need to remain operational until June 30, 2018. All operating funds remaining in the EDU-C account on July 1, 2018 will be split evenly between the Leslie Dan Faculty of Pharmacy and the Faculty Medicine, the two primary contributors to the operating funds of the CIM.

- 4. Effective Date of Closure:** It is recommended that the Centre for Integrative Medicine as an Extra-Departmental Unit type 'C' (EDU C) of the Leslie Dan Faculty of Pharmacy and the Faculty of Medicine at the University of Toronto and in partnership with The Scarborough Hospital be closed as of June 30, 2018.



UNIVERSITY OF TORONTO
FACULTY OF MEDICINE

FOR APPROVAL

TO: Faculty Council

SPONSOR: Allan Kaplan, Vice-Dean, Graduate and Life Sciences Education

CONTACT INFO: Rachel Zulla, Graduate Affairs Officer; 416-946-0412;
rachel.zulla@utoronto.ca

DATE: February 12, 2018

AGENDA ITEM: **705**

ITEM OF BUSINESS: New Graduate Program, Graduate Diploma in Health Research

JURISDICTIONAL INFORMATION:

The University of Toronto Quality Assurance Process dictates that new graduate diploma programs constitutes the approval of divisional and university governance. The By-laws of the Faculty of Medicine Faculty Council dictate new graduate diploma programs are to be approved by the Education Committee, and Faculty Council. If necessary, the proposal may need to be approved by the Research Committee, which is at the discretion of the FOM Executive Committee.

GOVERNANCE PATH:

Research Committee [For recommendation] – January 9, 2018
Education Committee [For recommendation] – January 11, 2018
Faculty Council [For approval] – February 12, 2018

CONSULTATIVE PATH:

The proposal has been seen and approved by the following committees at the Faculty of Medicine

- GLSE Graduate Curriculum Committee, October 2, 2017

HIGHLIGHTS:

The Graduate Diploma in Health Science is designed to offer high quality training in health research to first and second year undergraduate medical students within the timeframe of their MD program. The Graduate Diploma specifically targets future physicians who will need the additional skills necessary to contribute to health-related studies in their future careers and those who will become leaders in health research. The FOM of the University of Toronto, a widely recognized world leader in health-related research and teaching, is uniquely positioned to enhance its activities in its Physician-Scientist Training portfolio through the establishment of this Graduate Diploma, in partnership with the Institute for Medical Science.

PROPOSED MOTION:

"THAT the proposal to establish a new Graduate Diploma in Health Research be approved as submitted."



University of Toronto

New Graduate Program Proposal

This template is for all proposals for new graduate programs. It will help to ensure that all evaluation criteria established by the Quality Council are addressed in bringing forward a proposal for a new program. Separate templates have been developed for other types of proposals.

Full name of proposed program:	Graduate Diploma in Health Research
Degree name and short form:	Graduate Diploma in Health Research, G.Dip.H.R.
Program name:	Health Research
Professional program:	No
Unit (if applicable) offering the program:	Institute of Medical Science (IMS)
Faculty/division:	Medicine
Dean's office contact:	Allan Kaplan, Vice-Dean, Graduate and Academic Affairs, Faculty of Medicine
Graduate Unit Proponent:	Mingyao Liu, Director, Institute of Medical Science
Proponent:	Neil Sweezey, Director, Comprehensive Research Experience for Medical Students (CREMS) Programs, MD Program, Faculty of Medicine
Version date:	November 22, 2017

New Graduate Program Proposal

Graduate Diploma in Health Research

Institute of Medical Science (IMS)

Faculty of Medicine

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1 Summary

This proposal is to establish the Graduate Diploma in Health Research (G.Dip.H.R.), offered by the Institute of Medical Science (IMS) in the Faculty of Medicine (FOM). This will be a stand-alone, direct-entry program known as a type 3 diploma, as defined in the Quality Assurance Framework of the Ontario Universities Council on Quality Assurance (<http://oucqa.ca/framework/1-6-definitions/>). Consistent with School of Graduate Studies requirements for graduate level studies, admission to this master's level Diploma of 2.5 full course equivalents will require a four-year Bachelor's degree. The designation is an appropriate recognition of the academic level, duration and subject matter involved. Potential applicants will be registered students in good academic standing in the 4-year-long Doctor of Medicine (MD) Program of the FOM, University of Toronto. The entire Diploma curriculum will be completed within the MD timeframe. For 5 consecutive terms, Diploma students will be registered as part-time graduate students, beginning with the Winter term of the first MD year.

The purpose of the Diploma is to provide accepted applicants, who will be in the MD program, high quality training in health research in order to understand, interpret and apply the rapid changes in the scientific underpinnings of health care. The Diploma specifically targets those future physicians who will need the additional skills necessary to contribute to health-related studies in their future careers and the select group who will become leaders in health research. The FOM of the University of Toronto, a widely recognized world leader in health-related research and teaching (Section 14, Quality and Other Indicators, page 25), is uniquely positioned to enhance its activities in physician-scientist training through the establishment of this Diploma.

The Diploma will be unique among Canadian Faculties of Medicine in terms of the scope, program duration, credentialing and concurrent delivery of training with regular medical school classes. The aim is to engage selected medical students in health research with the intent to develop enriched, graduate level research knowledge and skills that will inform and support a future career in the field of health research. Moreover, the formal credentialing and recognition of this program will provide graduates with a competitive advantage when seeking future senior positions involving health research.

2 Effective Date

Students anticipated to start the program: January, 2019

3 Program Rationale

Physician-Scientists are qualified as experts in both health care and health-related research, and thus are uniquely positioned to understand, prioritize, conduct and translate health research to clinical application. They are highly sought after by academic institutions in North America and around the world. In practice, the order in which individual physician-scientists receive their training varies: some qualify as scientific researchers first, others as physicians first, and yet others have interspersed, concurrent and/or coordinated clinical and scientific elements of their training. Examples of these last groups are formal MD/PhD programs and Clinician-Investigator Programs in research training for

physicians combined with post-graduate clinical (Fellowship) training. The Diploma will provide one of multiple possible entrance pathways to a career as a physician-scientist through experiences in health research for medical students. It will serve a subset of medical students, interested in health research training, who seek a curriculum that is more extensive than one or two summer research experiences. This will inform the decisions of some students as to whether a more substantial future commitment to a health research career is desired. For others who have already made that decision, it will permit them to maintain and nurture their previously acquired research involvement while initiating their clinical training, without prolonging the time required to complete their MD. Importantly, achievement of such a credential is expected to provide interested students with a competitive advantage in acquiring both future training opportunities and eventually independent research funding in the increasingly competitive health research environment.

The proposed Diploma is informed by, and builds upon, the popularity and success of an existing not-for-credit option for medical students to conduct research. This existing option is the Research Scholar experience, offered since 2010 for a limited number of students within the MD Program. The Diploma will broaden the students' awareness of the scope and depth of Health Research, providing them skills and networking interactions to facilitate their career development. It will also address identified needs in the training of physicians, especially of physician-scientists.

The Diploma will be offered through the IMS, a large Extra-Departmental Unit: B (EDU:B) within the FOM that offers MSc and PhD degrees in medical science. Specific IMS half- courses will be available as appropriate electives. This graduate unit is the appropriate home for the Diploma because of its traditional focus on translational (“bench to bedside”) health research and its involvement in physician-scientist training. IMS also has a large number of clinical faculty with graduate faculty memberships who will participate in teaching responsibilities and as role models. Moreover, for some highly talented Diploma graduates who will pursue careers as physician-scientists, the faculty from IMS and our other partner units may become desirable future training supervisors and career mentors.

Mode of Delivery

The Diploma program will be delivered as a combination of didactic lectures, mentorship, interactive seminars and an online instructional element. The Diploma is a standalone diploma, delivered on a part-time basis, for students who are enrolled in the second entry undergraduate MD Program of the FOM. The core mentored Supervised Research Project (MSC1991Y) course will involve experiential learning as well as face-to-face interactive supervision. Didactic classroom lectures, interactive seminars and tutorials will be delivered face-to-face. The course *Research Skills for the Physician-Scientist* will consist of 4 modules: (1) *Preparing for Research*, (2) *Translational Research Topics for Physicians*, (3) *Special Topics in Health Research*, and (4) *Dissemination of Results*. The mode of delivery for each module is selected to optimize the delivery of the material and to support the achievement of the learning outcomes. The specific courses of the Diploma are described in Section 9, Program Description.

Appropriateness of Nomenclature and Name:

This is a master's level standalone type 3 direct entry diploma called G.Dip.H.R. The nomenclature (Graduate) denotes the level of the course work and supervised research training, and (Diploma) appropriately situates the program. The program name (Health Research) clearly conveys the range of subject areas. Students will develop a conceptual understanding of fundamental aspects of the

disciplines of health research and will demonstrate the appropriate level of analytical, interpretive, methodological and expository skills through course-specific applications.

Distinguishing Features and Context:

The Diploma will be open exclusively to U of T medical students who at the time of admission have (at a minimum) a 4 –year bachelor’s degree. For the class starting in 2016, this was 87% of the class. It will be delivered on a part time basis, spread across 20 consecutive months embedded in the MD Program. It will not extend the time required to complete the MD degree program. It will explicitly provide all students exposure to a range of research approaches, including those of physician-scientists working in areas outside the specific fields of the student's own research.

None of the other Canadian programs that engage medical students in health research are strictly comparable. The University of Alberta awards an additional notation "With Special Training in Research" on the MD degree and on the academic transcript of students who complete a least one summer full time plus subsequent part time school-year hours conducting supervised research. The University of Manitoba regularly offers a Bachelor of Science in Medicine [BSc (Med)] program that is traditionally completed by roughly 50% of the undergraduate medical class of 110 students, who undertake a research experience of 7 months split over the two summers after the first and second years. That program does *not* run concurrently with the MD program, involves much larger numbers of trainees than we propose and shorter training at a lower (undergraduate) level of training. Queen’s University, and the Universities of Montreal, Manitoba, Sherbrooke, Laval and Calgary offer a traditional, full-time MSc program to individual medical students. Most commonly, upon completion of the second medical school year, these students are temporarily released from their medical school program for 12 to 15 months to complete a thesis-based MSc, and then rejoin the third medical year. Although these programs also offer training at a graduate level, they involve smaller numbers of trainees than we propose and they extend the time to completion of the MD degree by at least one year. These comparisons are summarized in the Table in Appendix E - Canadian Comparators of GDipHR.

The highly competitive MD-PhD programs, offered at the University of Toronto and elsewhere in Canada and the United States, are quite different from the Diploma in scope, duration, goals and target trainees. They target a very select group of students who, already committed to a career in health research, undertake to complete both the MD and PhD degrees in roughly eight years. New graduates of MD-PhD programs may reasonably expect to be closer to preparedness for a leadership career in health research than a new graduate with an MD/ Diploma who did not already have a graduate degree in health - related research before starting medical school. The Diploma will offer a unique research-focused offering with a smaller scope appropriate for those who wish to decide if a more substantial future commitment to a health research career is desired, or who wish to keep their pre-existing research skills current while undertaking their initial clinical training in the MD Program.

Aligning Academic Priorities: U of T and FOM

The Graduate Diploma is consistent with the academic mission of the University, the FOM and with the goals of Physician-Scientist Training within the FOM. The Physician-Scientist Training is designed to prepare physicians-in-training for a career of leading medical discovery, and the application of new knowledge to improve human health. Within the MD Program, physician scientist training would then be divided into two streams, each one distinct in its target audience and goals. The MD/PhD program is designed for medical students who wish to integrate their undergraduate (MD) and graduate studies (PhD) with the intent to become physician-scientists. Generally speaking, students

take 8-9 years to complete this program (i.e. MD program is 4 years, PhD program is 5 years). For most MD students interested in pursuing research training, this is not a feasible option. Hence, the proposed Diploma will add a new entrance pathway for physicians-in-training wishing to develop research skills to conduct and participate in research studies in the future. This proposed Diploma addresses the needs of this identified target group of medical students at the beginning stages of their clinical training, builds upon existing programs and partnerships that the MD Program has with graduate units within the FOM, and with the McLaughlin Centre, a research unit in the FOM that supports excellence in genomics research and education. Support for the Diploma will also come from the Institute of Health Policy, Management and Evaluation (IHPME) in the Dalla Lana School of Public Health (DLSPH), as further described in the letter from the DLSPH (Appendix F).

4 Fields/Concentrations

N/A

5 Need and Demand

The existing not-for-credit Research Scholar experience option within the broader Physician-Scientist Training program has been popular with research supervisors and in demand by MD students for 8 years. Between 2014-2017, there have consistently been more prospective supervisors proposing projects (30 - 50) than could match with eligible students (24 -31), and in turn more applications than were funded in competition (11 -16). Importantly, the official recognition of the completion of the graduate Diploma (i.e. parchment) makes this an attractive learning opportunity. A proportion of these students have realistic ambitions to become independent leaders of health research, who will be sought after by academic institutions in North America and around the world. For them, the opportunity offered by the Diploma to develop further specialized research-skills under the supervision of high-calibre health researchers at the University of Toronto will be highly advantageous.

There are two broad groups of first year medical students whose needs will be targeted by the proposed Diploma. The first group are those who find that a single summer of research training is insufficient to learn or achieve enough to meet their needs. Some of these students have not yet committed to embarking on a life-long career as a physician – scientist, in which a significant percentage of their career will be devoted to research. In Canada, training for this type of career is typically through attainment of a graduate degree (MSc or PhD) which requires additional time commitment beyond four years of MD training. This group of students will be able to use the proposed graduate Diploma program to obtain relevant research training and experience within the time frame of a regular four-year MD program, and help them decide whether they wish to pursue additional training that would lead to a career as a physician-scientist.

The second group of targeted students are the roughly 20 - 30 % of recent 1st year medical students (50 - 75 students) who have an MSc or doctorate in health research prior to entering medical school. The proposed Diploma will provide some of the students in this group with an opportunity to continue their research training, building further upon what they have already achieved. They will be able to stay current in their research field and maintain their health research involvement during the MD Program, be mentored by experienced University of Toronto graduate faculty, conduct research

relevant to their interests, have contact and engage with physician-scientists during their clinical training and explore enriching options and opportunities. Roughly 25% of students pursuing the not-for-credit Research Scholar offering have been from this second group. A comparison of the Diploma program with other programs offered in Canada is presented in Section 3, above, and in Appendix E - Canadian Comparators of GDipHR, page 43.

6 Enrolment

Expected enrolment to steady state levels of 30 students are outlined below based on Fall/Winter/Summer registration:

Table 1: Graduate Enrolment Projections

Year of Study	2018-19	2019-20	2020-21	2021-22	2022-23
Year 1 (Jan–August)	15	15	15	15	15
Year 2 (Sept–August)	N/A	15	15	15	15
Total	15	30	30	30	30

The numbers shown (representing about 6% of each year's medical class) are based on budgetary estimates of the numbers of students that can be supported in the Diploma program. The number of students enrolled in the Faculty's MD Program is not altered by the number of students enrolled in the Diploma. Only students registered and in good academic standing in the MD program may apply and remain in the Diploma program (see Section 7, below), and a medical student's optional application to the Diploma does not alter his or her enrollment in the MD program. Currently, we do not anticipate any international students to be enrolled in the program. However, the MD program has started to accept applications from international students so it is possible in the future that international students could apply and be accepted into this program.

7 Admission Requirements

Diploma students must meet the School of Graduate Studies minimum admission requirements for master's level diploma programs, including a four year Bachelor's Degree. They must also be enrolled, and in good academic standing, in the first year of the MD Program of the FOM of the University of Toronto. All courses in all four years of the MD Program at the University of Toronto are evaluated using a credit/no credit grading scale, which is commonly referred to as 'Pass/Fail' at other

institutions. The CR/NC approach to transcription of grades is congruent with our competency-based curriculum and approaches to student assessment. It is also in line with the trend in grading policy across Canada. Diploma students are expected to maintain CR status across all courses and not to be on academic probation for any part of the MD Program. Those who do not meet these criteria will not be eligible to apply or to remain in the Diploma program.

Acceptance of eligible medical students into the Diploma program will occur as follows. At the beginning of the fall term, all first year MD students will be notified about the Diploma Program and directed to resources including the Program's website that will list constituent Faculty and areas of research activity. Any interested students will have until Oct. 20 to apply to the Program through the SGS Online Application Admission (OAA) system

- Curriculum Vitae
- a personal statement explaining their interest in the Program
- a description of a research project they are interested in
- written confirmation of Good Standing in the MD Program (letter from the program, signed by the Registrar/Vice-Dean)
- undergraduate and/or graduate academic transcripts

Applications will be submitted to the Adjudication Committee for competitive selection. Adjudicators will assess each application for overall acceptability as well as provide a cumulative numerical score for rank ordering by November 25. By Dec. 7, the students with the top 15 applications will be informed of their selection as is usual for graduate programs. The IMS Director of Education and the Graduate Coordinator for GDipHR will sign off on the adjudication process.

The requirement for concurrent enrollment in the University of Toronto Doctor of Medicine degree program throughout the registration in the Diploma is by definition central to the learning outcomes for the program. The MD Program office will promptly notify the Diploma program office should any GDipHR student's continuation in the MD be threatened for academic reasons. Withdrawal from the MD Program would automatically constitute withdrawal from the Diploma. The need for a Bachelor's degree at enrollment is consistent with the requirements of the School of Graduate Studies (SGS).

8 Program Requirements

Please see Appendix B for proposed calendar copy.

Completion of the course *Supervised Research Project* (MSC1991Y)

Completion of the course *Research Skills for the Physician-Scientist* (MSC1992Y). It is composed of 4 modules: (1) Preparing for Research, (2) Translational Research Topics for Physicians, (3) Special Topics in Health Research, and (4) Dissemination of Results. Modules will include a combination of face-to-face seminars presented by faculty; graded seminars and oral presentations by students; grading of responses by students to critical questions from their peers and faculty; and online learning.

Completion of a 0.5 FCE elective course selected from an approved list (Appendix A). Substitution of any other graduate-level course relevant to the student's research course but not found on the approved list will require completion of a course exemption form signed by the IMS Graduate Coordinator and the selection of the course will be done in consultation with the Program Director. Maintain good academic standing in the MD program.

Relationship of program structure and requirements to learning outcomes:

The *Supervised Research Project* (MSC1991Y) and *Research Skills for the Physician-Scientist* (MSC1992Y) courses are structured to provide experiences and critically reviewed, graded activities that prepare the student to conduct and disseminate health research. The elective 0.5 FCE course presents an opportunity to explore a field of potential interest in greater depth to assisting the student in selection of areas for future study, acquisition of complementary knowledge and skills applicable to an already selected field of study and / or appreciation of the relevance of the field of interest to the broad goals of clinical medicine.

Providing mental or physical health accommodations:

The potential need to provide mental or physical health accommodations has been considered in the development of this program. The identification of any such need in a Diploma student will trigger a consultation with the Office of Health Professions Student Affairs (OHPSA), which supports MD students and helps them with career counselling, career exploration, personal counselling & student wellness, academic coaching & prep, getting involved & co-curricular activities and summer mentorship programs. Detailed information can be accessed through:

<http://www.md.utoronto.ca/OHPSA>

9 Program Description

The Diploma program consists of two full courses, MSC1991Y and MSC1992Y, and an elective half course:

MSC1991Y (*Supervised Research Project*) involves mentored, supervised experiential learning. The supervisor provides guidance as needed during the conduct of the project, during reflection upon what has been learned thereby and during the dissemination of novel results to target audiences. This classical form of research learning is considered essential to graduate level research training.

MSC1992Y (*Research Skills for the Physician-Scientist*) will consist of four sections of equal weight, involving a blend of lectures, seminar - discussions, project assignments and on-line material. The modes of delivery are selected by topic in order to maximize efficiency of the experiences and retention of the material. The four course sections will be (1) *Preparing for Research*, (2) *Translational Research Topics for Physicians*, (3) *Special Topics in Health Research*, and (4) *Dissemination of Results*.

The **elective graduate level half course** will be chosen by students from amongst the list (Appendix A, pages 27 and following) of available courses offered by the IMS and the Department of Laboratory Medicine and Pathobiology (LMP) in the FOM, and the Institute of Health Policy, Management and Evaluation (IHPE), Dalla Lana School of Public Health (DLSPH), with the approval of the Program Director/Graduate Coordinator. Each available elective course will be delivered as per its respective School of Graduate Studies (SGS) calendar course description.

Critical to achieving the learning outcomes of the program, students interact with and learn from SGS-appointed faculty. While some are full-time research scientists, others are physician-scientists who commit a portion of their professional time to clinical activities and hence serve vital functions as role models.

PROGRAM SCHEDULING - relationship between MD and Diploma programs

All Diploma students must also be registered in the undergraduate MD program, which has Fall and Winter terms in each year, but not Summer terms in the first two years. The Diploma program will begin at the start of the 2nd (Winter) term of the MD Program's first year. The Diploma students will be registered on a part-time basis program over 5 consecutive terms, proceeding with a registration sequence of winter /summer /fall /winter /summer (see Table 2, below). Therefore, Diploma students will also be registered concurrently as full-time MD students in the Winter term of the first MD year and during the Fall and Winter terms of the second MD year.

In order to limit the additional workload generated by Diploma-related activities during the regular MD program, the aggregate of Diploma activities will occupy at least 40 hours per week during the Summer sessions, but no more than 10 hours per weeks during the Fall and Winter sessions. Recent changes to the scheduling of MD for-credit activities early in the MD program have created the opportunity for a small number of MD students to pursue cognate academic activities. The Diploma, with its research focus in the area, will be highly attractive to a small subset of highly qualified MD students.

Table 2: Timing of Delivery of Program Content

Diploma Activities	Full-Course Equivalent (FCEs)	MD Year 1 Winter	MD Year 1 Summer	MD Year 2 Fall	MD Year 2 Winter	MD Year 2 Summer
(a) Research Skills for The Physician Scientist, MSC1992Y 4 Modules (.25 FCE each) within one course	1.0					
(1) Preparing for Research		X				
(2) Translational Research Topics for Health Professionals			X			X
(3) Special Topics in Health Research (spread out over 4 terms)			X	X	X	X
(4) Dissemination of Results						X
(b) Elective (flexible timing*)	0.5	*	*	*	*	*
(c) Supervised Research Project, MSC1991Y (continuous)	1.0	X	X	X	X	X
Diploma (G.Dip.H.R.) Time commitments (a+b+c)		10 hr/wk	40 hr/wk	10 hr/wk	10 hr/wk	40 hr/wk

MD program registration (full-time)		X	—	X	X	—
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The major research requirement will be, in MSC1991Y (*Supervised Research Project*), conducting and disseminating the results of original health research at a graduate level. Students will complete a final Structured Research Report and, where possible, contribute to the dissemination of the results of the research. The adequacy of the student's progress and a grading of the final Structured Research Report will be determined by a Supervisory committee of SGS-appointed faculty recruited by the primary Supervisor, using a standardized assessment form.

The experience of the Research Scholar activity suggests that the allotted time is adequate to complete the mentored Conduct of Research course component of the proposed Diploma. Much of the additional coursework associated with the present proposal can reasonably be completed during the two summer sessions, when the students will be free of workload from the medical program.

The primary research supervisor has overall responsibility for (a) mentoring the student throughout MSC1991Y (b) recruiting a supervisory committee of graduate faculty members, (c) grading the initial written plan by the student describing the health research techniques and how they are to be used in the conduct of their individual research project, (d) ensuring the timely availability of the facilities, material and training necessary for the student to complete the course requirements.

The supervisory committee members (at least two) will assist and advise the primary supervisor, help to ensure the students' needs are met and that their progress is acceptable, and will grade the final Structured Research Report.

10 Degree-Level Expectations (DLEs), Program Learning Outcomes and Program Structure

- Identify the specific learning outcomes for the proposed program for each of the DLEs and describe the elements in the program's requirements that support these.

Table 3: DLEs

Expectations

In the absence of specific Graduate Diploma DLE's based on the OCAV DLEs, it is appropriate that the Degree Levels Expectations (DLEs) for the graduate diploma, G.Dip.H.R. be consistent with Master's DLEs.

This Table 3 summarizes how each DLE Outcome will be supported.

The Graduate Diploma in Health Research (GDipHR) is awarded to students who have demonstrated:

DEGREE LEVEL EXPECTATIONS	PROGRAM LEARNING OUTCOMES	HOW THE PROGRAM DESIGN AND STRUCTURE SUPPORT THE DEGREE LEVEL EXPECTATIONS	ASSESSMENT OF STUDENT ACHIEVEMENT, RELATIVE TO ESTABLISHED PROGRAM LEARNING OUTCOMES AND DEGREE LEVEL EXPECTATIONS
<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>	<p>Depth and breadth of knowledge is defined in GDipHR as a systematic understanding, and critical awareness, of (a) current gaps in health-related knowledge and (b) of approaches to bridging these gaps in health research. Outcomes: This is reflected in students who are able to: 1. Identify current gaps in health research, ranging across studies in a range of fields, such as biomedical discovery; clinical (human subjects) research; health systems and services; and social, cultural and environmental factors that affect the health of populations 2. Outline current approaches to bridge such gaps in knowledge in health research 3. Explain principals and analytical skills that underlie the conduct of health</p>	<p>Outcomes 1, 2 and 3 will be addressed in didactic and interactive seminars taught by senior U of T faculty researchers in the <i>Research Skills for the Physician-Scientist</i> course (MSC1992Y). In achieving Outcomes 1, 2 and 3, library support is available to assist students with relevant literature searching skills. Additional opportunities to address Outcomes 1, 2 and 3 will be provided in the 0.5 FCE elective courses.</p>	<p>For Outcomes 1, 2 and 3, students will, in the <i>Research Skills for the Physician-Scientist</i> course (MSC1992Y), each present to peers and faculty two seminars on focussed health research topics. One topic will be related, and the other topic unrelated, to the field of their personal research projects. For each focussed topic, the student will identify a current gap(s) in knowledge, outline existing approaches to bridge such gaps, and explain a relevant principal and / or analytical skill sustaining health research in the field. All student seminars will be heard and graded by faculty (with peer feedback input directly to students). Each student will also be graded by faculty on the quality of their answers to questions asked at their own presentations, and on the required contributions to questions at seminars presented by their peers. Student-led journal club critical review of a paper from a field outside of the field of their research project to be graded by faculty.</p> <p>The 0.5 FCE elective courses will assess student achievement of Outcomes 1, 2 and 3 through a variety of approaches suitable to their subject areas.</p>

DEGREE LEVEL EXPECTATIONS	PROGRAM LEARNING OUTCOMES	HOW THE PROGRAM DESIGN AND STRUCTURE SUPPORT THE DEGREE LEVEL EXPECTATIONS	ASSESSMENT OF STUDENT ACHIEVEMENT, RELATIVE TO ESTABLISHED PROGRAM LEARNING OUTCOMES AND DEGREE LEVEL EXPECTATIONS
	<p>research in the following areas: ethics; problem-solving and decision-making; communication of results, conclusions, implications for human health, suggested follow-up study; self-management; and teamwork and leadership.</p> <p>(4) Discuss the approaches and techniques of researchers in fields other than their own.</p>		
<p>2. Research and Scholarship 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</p>	<p>Research and Scholarship is defined in GDipHR as having a conceptual understanding and methodological competence that enables the creation and critical interpretation of new knowledge; and the capacity to apply established principals and techniques to the proposition of novel hypotheses or novel approaches to hypothesis testing: Outcomes: This is reflected in students who are able to:</p>	<p>Outcomes 1, 2, 3 and 4 will be addressed by the supervisor / mentor of the <i>Supervised Research Project (MSC1991Y)</i> through role modelling in laboratory meetings and direct one-on-one supervision and mentoring.</p> <p>Outcomes 1, 2, 3 and 4 will also be addressed in faculty - presented didactic seminars of <i>Research Skills for the Physician-Scientist (MSC1992Y)</i>. Selected topics will be addressed in core areas of health research principals and techniques with which all health researchers should</p>	<p>For Outcomes 1, 2 and 3, students in <i>Supervised Research Project (MSC1991Y)</i> will provide required written plans describing pertinent health research techniques and how they are to be applied in the conduct of their individual research project. Graded by their Research Mentor / other faculty).</p> <p>For Outcome 4, students will provide a required, brief written summary of discussions they have had with their <u>MSC1991Y</u> mentor of the student's suggestion of at least one novel question or modified methodological approach (not originating with the mentor) that could in theory be incorporated as an aspect of the student's project. The summary will include a rationale as to why the suggestion was or was not accepted</p>

DEGREE LEVEL EXPECTATIONS	PROGRAM LEARNING OUTCOMES	HOW THE PROGRAM DESIGN AND STRUCTURE SUPPORT THE DEGREE LEVEL EXPECTATIONS	ASSESSMENT OF STUDENT ACHIEVEMENT, RELATIVE TO ESTABLISHED PROGRAM LEARNING OUTCOMES AND DEGREE LEVEL EXPECTATIONS
<p>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>(1) Discuss the features of established techniques of health research that permit the creation and interpretation of knowledge; (2) Identify strengths and weaknesses in the current state of health-related knowledge and literature; (3) Use established principles and methods to simplify the answering of complex questions by breaking them down into more simple component parts; and (4) Demonstrate originality by proposing a novel hypothesis/asking a novel question, or by designing a novel methodological approach to testing an hypothesis / answering a question</p>	<p>have a minimum level of familiarity. These topics include: quantitative and qualitative techniques, clinical and translational research, basic biomedical / molecular / developmental / stem cell biology Outcome 4 will be addressed by the supervisor / mentor of the <i>Supervised Research Project (MSC1991Y)</i> by providing the student one or more citations of a paper(s) in the published literature that demonstrates Outcome 4.</p>	<p>for application in practice. Graded by Mentor / other faculty.</p>
<p>3. Application of Knowledge Competence in the research process by applying an</p>	<p>Application of Knowledge is defined in GDipHR as conducting a continuum of health research from idea</p>	<p>Outcomes 1 and 2 will be addressed and taught by the supervisor / mentor of the <i>Supervised Research Project (MSC1991Y)</i> through role modelling in</p>	<p>Outcomes (1), (2) and (3) will be assessed in graded student presentations summarizing the current state (including gaps) of knowledge in their field, their choice of research question (or hypothesis)</p>

DEGREE LEVEL EXPECTATIONS	PROGRAM LEARNING OUTCOMES	HOW THE PROGRAM DESIGN AND STRUCTURE SUPPORT THE DEGREE LEVEL EXPECTATIONS	ASSESSMENT OF STUDENT ACHIEVEMENT, RELATIVE TO ESTABLISHED PROGRAM LEARNING OUTCOMES AND DEGREE LEVEL EXPECTATIONS
<p>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>creation to data collection to a scientific publication and/or a presentation at an international conference / meeting. Outcomes: This is reflected in students who are able to: (1) Formulate a question to be addressed and/or an hypothesis to be tested (2) Design a study with its specific experimental aims. The study should account for the following: identify methodologies to be employed obtain needed regulatory approval (e.g., ethics – human / animal) recruit human subjects / acquire animals subjects establish contact with needed collaborators</p>	<p>laboratory meetings and direct one-on-one supervision and mentoring in the planning, conduct, analysis and reporting of the research project. Outcomes 1, 2 and 3 will also be addressed in the Research Skills for the Physician-Scientist course (MSC1992Y), Modules 2 (Translational Research Topics for Health Professionals) and 3 (Special Topics in Health Research). Students will experience critical analysis of a new question or of a specific problem or issue in a new setting.</p>	<p>and its rationale and significance to human health, the plan of their own study including aims and methodologies, and potential follow-up studies. Graded by faculty. At the end of the first winter session, the primary supervisor/mentor will grade, on a Pass/ Fail basis, a written plan by the student describing the principals and application of the health research techniques to be used in the conduct of the research project Outcome 4 will be addressed when each student presents a scholarly discussion of their approach to a research question or principles to be considered in problem solving in a research area of a peer student who is working in a different field and / or with different research methodologies from their own. The other student will then be asked to comment on the presentation (student participation required for credit). All student seminars will be heard and graded by faculty (with peer feedback input directly to students).</p>
<p>4. Professional Capacity / Autonomy a. The qualities and transferable skills necessary</p>	<p>Achieving the high levels of Professional Capacity and Autonomy that are required of an independent researcher is beyond</p>		

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<p>for employment requiring i) The exercise of initiative and of personal responsibility and accountability; and ii) Decision-making in complex situations;</p> <p>b. The intellectual independence required for continuing professional development;</p> <p>c. The ethical behavior consistent with academic integrity and the use of appropriate guidelines and procedures for responsible conduct of research; and</p> <p>d. The ability to appreciate the broader implications of applying knowledge to particular contexts.</p>	<p>the scope of this Diploma program.</p>		

DEGREE LEVEL EXPECTATIONS	PROGRAM LEARNING OUTCOMES	HOW THE PROGRAM DESIGN AND STRUCTURE SUPPORT THE DEGREE LEVEL EXPECTATIONS	ASSESSMENT OF STUDENT ACHIEVEMENT, RELATIVE TO ESTABLISHED PROGRAM LEARNING OUTCOMES AND DEGREE LEVEL EXPECTATIONS
<p>5. Level of Communications Skills The ability to communicate ideas, issues and conclusions clearly.</p>	<p>Communications Skills are defined in GDipHR as the ability to communicate ideas, novel findings, issues and conclusions relating to health research clearly to a wide range of audiences. Outcomes: This is reflected in students who are able to:</p> <ol style="list-style-type: none"> 1. Write about elements of research productivity with clarity and concision. Elements of research may include: reasoning methodologies results analyses originalities future directions translational and clinical impacts 2. Deliver engaging oral presentations on elements of research productivity. 3. Communicate to a variety of audiences, orally and in writing. The audiences may include professional, academic and general public end-users of their research productivity. 	<p>Outcome 1 will be addressed particularly in the final written <i>Structured Research Report</i> of each student completing the GDipHR program. It will be the primary responsibility of the supervisor / mentor of the <i>Supervised Research Project (MSC1991Y)</i>, in collaboration with the research project supervisory committee, to guide, teach and maintain the graduate level experience of the student in this activity. The members of the supervisory committee will meet with the student and primary supervisor at a minimum at the beginning of the first summer session and the beginning of each session thereafter. A record of the assessment of progress at each meeting will be submitted to the Diploma office. Outcomes 1, 2 and 3 are addressed in didactic sessions in the <i>Research Skills for the Physician-Scientist</i> course (MSC1992Y). The course will include seminars on career development issues, including communicating with</p>	<p>Outcome 1 will be evaluated primarily through the formal review and grading of the student's final written <i>Structured Research Report</i> by the research project Supervisory Committee. In order to finally pass the course, students must each submit (no later than 2 weeks after the end of the second summer session) to the Supervisory Committee a <i>Structured Research Report</i> that documents their contributions to the research project during the program, representing an equivalent amount of work to earning authorship on a paper. The committee will grade it on a (Credit / No Credit) basis. Students assessed a No Credit grade will be given a single opportunity to revise and resubmit after receiving written reasons for the No Credit grade. Instructors are not obliged to accept late work, except where there are legitimate, documented reasons beyond a student's control. Outcomes 1, 2 and 3 will be assessed through required, graded written reports and oral presentations by students at the various stages of the preparation, conduct, analysis and communication of the results of their research project. Students will be required to think on their feet, responding to critical questions and comments from mentors, other faculty and peers after the students' presentations. All student seminars will be heard and graded by faculty (with peer feedback input directly to</p>

DEGREE LEVEL EXPECTATIONS	PROGRAM LEARNING OUTCOMES	HOW THE PROGRAM DESIGN AND STRUCTURE SUPPORT THE DEGREE LEVEL EXPECTATIONS	ASSESSMENT OF STUDENT ACHIEVEMENT, RELATIVE TO ESTABLISHED PROGRAM LEARNING OUTCOMES AND DEGREE LEVEL EXPECTATIONS
		potential employers, the media (TV, radio, newspapers), trainees at all levels, the general public, publishers, funding agencies, peer reviewers, applicants for funding / training positions, university and hospital administrators, government, industry.	students). Each student will also be graded by faculty on the quality of their answers to questions asked at their own presentations, and on the required contributions to questions at seminars presented by their peers. Outcome 3 will be evaluated with respect to communicating with academic and / or professional audiences of their mentors, other faculty members and their peers. Assessing the achievement of the students in communicating to general public end-users of their research productivity is beyond the scope of this Diploma program. Exercises will be reviewed, and the criteria for the final grading will be approved, at the level of the IMS Curriculum Committee.

11 Assessment of Learning

In the obligatory courses, Supervised Research Project (MSC 1991Y) and Research Skills for the Physician-Scientist course (MSC1992Y):

Assessment of the achievement by students relative to established program learning outcomes and degree level expectations (DLEs) is described above, in the right-hand (fourth) column of Table 3, in Section 10, Degree Level Expectations, Program Learning Outcomes, *Program Structure and Assessment of Student Learning*.

In the Elective 0.5 FCE Courses:

The learning expectations, learning outcomes and associated evaluations of GDipHR students taking elective graduate courses will be the same as for the other students taking the same course.

The effectiveness of the proposed Diploma program as a whole will be assessed by:

The numbers / proportion of the students successfully completing the program, and the assessments of their performance by the faculty.

Evaluations by the students of the courses they have taken, *Supervised Research Project* (MSC1991Y) and *Research Skills for the Physician-Scientist* course (MSC1992Y), along with their elective 0.5 FCE course.

The number of papers / presentations by the students, and the quality as assessed by the impact factor and stature in their particular field of the publications or the fora in which they are found. Ongoing interest in the program, as evidenced by the numbers of applications from highly qualified students and by interest from SGS-appointed faculty in mentoring the research activity and in contributing to the mentoring / evaluating / traditional teaching of the students.

The interest in ongoing collaboration by partner Faculties / Departments

Program graduates will be asked to provide ongoing contact information, and permission to poll them triennially for information about research publications and funding, faculty appointments, and supervision / mentoring / teaching of research / Physician trainees.

Collected data will be assessed at scheduled annual meetings of the Diploma Steering Committee to discuss Diploma program assessment.

12 Consultation

Expected impact on the nature and quality of other programs at U of T:

The Diploma program will require support for a new core course (MSC1992Y); access to relevant elective graduate courses, and faculty with graduate faculty membership to support and supervise students in MSC1991Y. The training offered will have clearly described objectives and a specified level of required scholarship. The MD Program and Physician-Scientist Training will be impacted by expanding the engagement in research of a select cohort of medical students, offering them another potential entrance pathway to longer-term subsequent training as physician-scientists. For our partner graduate units, IMS and LMP in the FOM and IHPME in the DLSPH, the proposed program will provide new ways for them to engage a highly talented group of students who may wish, at a later time, to undertake further training in their respective fields. The Diploma program will provide a vehicle for the McLaughlin Centre for Genomic Medicine to leverage the funds it distributes while investing in the training of potential future leaders in genomic medicine.

Consultation

Within the FOM, initial consultation about the proposal was undertaken with Dr. Allan Kaplan, the Vice-Dean of Graduate and Academic Affairs, and Dr. Patricia Houston, Vice-Dean of Undergraduate Medical Education (MD Program). After detailed consultation with the Director of the Institute of Medical Science (IMS) and the Chair of the IMS Curriculum Committee, circulation of a draft proposal and presentation to the IMS Leadership and Executive committees, IMS agreed to be the home graduate unit for the Diploma. The focus and leadership of the IMS in translational medicine, with a strong emphasis on bench-to-bedside clinical applications and on physician-scientist training, make this a highly suitable arrangement. The Director (S. Scherer) of the McLaughlin Centre reviewed the proposal favourably and confirmed the Centre's annual contribution of funding the Diploma's 50% contribution to the stipend of 5 Diploma students. There has been extensive consultation with the Office of Graduate and Life Sciences, FOM. Important support was received from the Interim Chair of Laboratory Medicine and Pathobiology (LMP), A. Gotlieb, who agreed to solicit and encourage contributions from LMP faculty to mentor, teach, and evaluate in the Diploma program's courses

(MSC1991Y and MSC1992Y). Memoranda of Understanding (MOUs) were signed establishing partnerships between the MD Program, Graduate Diploma in Health Research as well as Institute of Medical Science and the Department of Laboratory Medicine and Pathobiology.

In the DLSPH, we consulted with the Director of Clinical Epidemiology & Health Care Research (R. Fowler), the Associate Director and Graduate Coordinator (R. Cockerill) and the Director (A. Brown) of IHPME. After subsequent consultation between Professor Brown and DLSPH Dean H. Hu, they agreed in writing to support the Diploma by: facilitating access to appropriate IHPME half-courses as electives for a limited number of Diploma students; helping recruit faculty to be teachers / seminar leaders / markers for the new MSC 1992Y course; and supporting curriculum and high quality research experiences for Diploma students. Since the more recent changes in leadership at the DLSPH, their ongoing support was confirmed after additional consultations with the Interim Dean (Professor Brown), the Associate Dean, Academic Affairs (N. Baxter) and the Acting Director of IHPME (Professor Cockerill), in the letter in Appendix F.

The Course Director (D. Katzman) of the new Health Science Research (HSR) course, MD Program, FOM, has discussed coordination of the material in HSR and the Diploma to ensure complementarity and avoid redundancy. Ongoing coordination is facilitated by the Diploma Program Director sitting on the HSR course committee.

13 Resources

13.1 Faculty Complement

Adequacy of Number of Faculty

The faculty listed in Table 4 (*pages 21 and following*) will contribute to the Diploma by directly teaching (lecturing, leading seminars) and grading students in the *Research Skills for the Physician-Scientist* course (MSC1992Y), contributing to online modules and / or serving as Research Supervisors for the *Supervised Research Project* MSC1991Y. A few will serve on the Diploma Steering Committee.

Quality of Faculty

Supervisors in the new *Supervised Research Project* (MSC1991Y) course will be highly successful Scientists and Physician-Scientists from a wide range of disciplines covering the four pillars of health research described by the Canadian Institutes of Health Research (CIHR), the major federal funder of health research. All students will be exposed to excellent representatives of both of these groups of scientists through their interactions in the new *Research Skills for the Physician-Scientist* course (MSC1992Y). The faculty members of both courses will be characterized by their experience in teaching and supervising at the graduate level, which is one of the criteria for their selection. The Diploma aims to engage medical students, concurrently beginning their clinical training, in health research. The critical role of role modeling and mentoring is met (as individual research supervisors and / or course instructors – evaluators) by scientists who are clinical faculty, with ongoing clinical activities. In this, the University of Toronto offers faculty with depth and breadth of expertise unparalleled in Canada, as reflected in current international rankings summarized in Section 14, Quality and Other Indicators, page 25. The leaders of MSC1992Y and the overall Diploma program are themselves physician – scientists, experienced leading in institutional / departmental physician – scientist training programs. They include members of the Steering Committee (V. Venkateswaran, R.

Fowler, C. Hawkins), the G.Dip.H.R. Program Director (N. Swezey), with oversight by N Rosenblum (Associate Dean, Physician-Scientist Training, MD Program, FOM; winner of the Maureen Andrew Mentorship Award, Society for Pediatric Research; founder of the highly successful national CIHR STIHR program, the Canadian Child Health Clinician Scientist Program). The culture of clinical faculty involves lecturing / teaching a few hours each year, consistent with expectations around their responsibilities.

Table 4: Faculty Complement

Name	Unit of Primary Budgetary Appt (for tenure and tenure stream faculty) or department (for clinical faculty)	University Rank	Graduate Faculty Membership Status (e.g., Associate/ Full privileges)	Commitment to other programs (please list other programs in which the person routinely teaches / supervises)	Nature of contribution to this program Course Instructor (CI), Thesis Supervision (TS), Clinical or practice supervisor (C/PS).
Non-Tenure Stream Clinical Faculty					
Anne S. Bassett	Psychiatry, FOM	Full Professor	Medical Science, Full	Genetics, (MD Program, Genetic Counselling)	Research Project Supervision
Douglas O. Cheyne	Neurosciences & Mental Health, SickKids Research Institute	Full Professor	Medical Science, Full	Neuro-Imaging,	Research Project Supervision
Natalie Coburn	Surgery, FOM	Associate Professor	Health Policy, Management and Evaluation, Associate	Surgery, Clinical Epidemiology & Health Care Research (IHPME)	Research Project Supervision
Peter Cram	General Internal Medicine, FOM	Full Professor	Health Policy, Management and Evaluation, Associate	Internal Medicine	Research Project Supervision
Sunit Das	Surgery, FOM	Assistant Professor	Laboratory Medicine and Pathobiology, Associate	Neurosurgery, Medical Science	Research Project Supervision
Charles Deber	Molecular Structure and	Full Professor	Biochemistry, Full	Biochemistry	Research Project Supervision

Name	Unit of Primary Budgetary Appt (for tenure and tenure stream faculty) or department (for clinical faculty)	University Rank	Graduate Faculty Membership Status (e.g., Associate/ Full privileges)	Commitment to other programs (please list other programs in which the person routinely teaches / supervises)	Nature of contribution to this program Course Instructor (CI), Thesis Supervision (TS), Clinical or practice supervisor (C/PS).
	Function, SickKids Research Institute				
W. Brent Derry	Developmental and Stem Cell Biology, SickKids Research Institute	Full Professor	Molecular Genetics, Full	Human Biology	Research Project Supervision
Michael Fehlings	Surgery, FOM	Full Professor	Medical Science, Full	Neurosurgery	Research Project Supervision
Robert Fowler	Internal Medicine and Critical Care, FOM	Associate Professor	Health Policy, Management and Evaluation, Full	Program Director, Health Policy, Management and Evaluation	Program Supervisory Committee
Anne-Marie Guerguerian	Paediatrics, FOM	Assistant Professor	Medical Science, Full	Biomaterials & Biomedical Engineering; Neuroscience and Mental Health, SickKids	CI
Meredith Irwin	Paediatrics, FOM	Full Professor	Medical Science, Full	Laboratory Medicine and Pathobiology, Medical Biophysics	Research Project Supervision
Marc Jeschke	Surgery, FOM	Full Professor	Immunology, Full	Plastic Surgery, Immunology	Research Project Supervision
Warren Lee	Medicine, FOM	Assistant Professor	Medical Science, Full	Laboratory Medicine and Pathobiology, Biochemistry	Research Project Supervision
Lorraine Lipscombe	Internal Medicine, FOM	Associate Professor	Health Policy, Management and Evaluation, Associate	School of Public Health	Research Project Supervision

Name	Unit of Primary Budgetary Appt (for tenure and tenure stream faculty) or department (for clinical faculty)	University Rank	Graduate Faculty Membership Status (e.g., Associate/ Full privileges)	Commitment to other programs (please list other programs in which the person routinely teaches / supervises)	Nature of contribution to this program Course Instructor (CI), Thesis Supervision (TS), Clinical or practice supervisor (C/PS).
Steven P. Miller	Paediatrics, FOM	Full Professor	Medical Science, Full	Medical Science	Research Project Supervision
Daniel Mueller	Psychiatry, FOM	Associate Professor	Medical Science, Full	Pharmacogenetics (MD Program), Medical Science	Research Project Supervision
Donald Redelmeier	Medicine, FOM	Full Professor	Medical Science, Full	Health Policy, Management and Evaluation	Research Project Supervision, CI
Norman Rosenblum	Paediatrics, FOM	Full Professor Associate Dean	Medical Science, Full	Physiology, Paediatrics, LMP, Physician-Scientist Training	Academic Oversight
James Rutka	Surgery, FOM	Professor and Chair	Laboratory Medicine and Pathobiology, Full	Neurosurgery, Medical Science	Research Project Supervision
Neil Sweezey	Paediatrics, FOM	Associate Professor	Physiology, Full	Medical Science	Diploma Program Director, MSC1992Y Course Director CI
Jack Ven Tu	Surgery, FOM	Full Professor	Medical Science, Full; Health Policy, Management and Evaluation, Full	Clinical Epidemiology and Health Care Research (IHPME)	Research Project Supervision
Catherine Walsh	Paediatrics, FOM	Assistant Professor	Medical Science, Associate	Wilson Centre for Research in Education; Clinical Epidemiology and Health Care Research (IHPME)	CI

Name	Unit of Primary Budgetary Appt (for tenure and tenure stream faculty) or department (for clinical faculty)	University Rank	Graduate Faculty Membership Status (e.g., Associate/ Full privileges)	Commitment to other programs (please list other programs in which the person routinely teaches / supervises)	Nature of contribution to this program Course Instructor (CI), Thesis Supervision (TS), Clinical or practice supervisor (C/PS).
Elysa Widjaja	Medical Imaging	Associate Professor	Medical Science, Associate	Psychology; Neuroradiology, SickKids	Research Project Supervision
David Wiljer	Psychiatry, FOM	Associate Professor	Health Policy, Management and Evaluation, Associate	Medical Science	Research Project Supervision
Minna Woo	Internal Medicine	Full Professor	Medical Science, Full	Medicine, Medical Biophysics	Research Project Supervision
Tenure Stream:					
Anna Maria Reet Agur	Surgery, Faculty of Medicine (FOM)	Full Professor	Medical Science, Full	Gross Anatomy, Neuroanatomy, Anatomy (MD Program, Occupational and Physical Therapy)	Research Project Supervision

13.2 Learning Resources

Please see the following appendices:

Appendix C: Library statement confirming the adequacy of library holdings and support for student learning

Appendix D: Standard statement concerning student support services

13.3 Financial Support for Graduate Students

Each Diploma student will receive a stipend of \$15,000 for the 20 month (5 consecutive terms) period. The amount of this stipend is consistent with the amount a student would be paid within the FOM for undertaking research outside of the regular curriculum for 6 months. The 50% of the stipend will be covered by the Diploma's existing resources and 50% by the resources of the research project supervisor, who will also be responsible for covering the expenses of the student's research project.

Norman Rosenblum, Associate Dean, Physician-Scientist Training, and Patricia Houston, Vice-Dean, MD Program, are committed for a minimum five year period to providing funds to cover the costs of the Diploma (*see letters, Appendix F, page 44 and following*). The funding situation is very stable, in

that the administrative staff are paid directly by the FOM and the program's commitments of student funding support are based upon existing perpetuity endowments.

13.4 Space/Infrastructure

We anticipate 30 students enrolled across two academic years at steady state.

The primary space and infrastructure requirements (laboratories, equipment, information technology, study space, etc.) for the Supervised Research Project MSC1991Y will be provided by the individual research supervisors. Space and infrastructure support for the MSC1992Y course will be provided by existing facilities of the MD Program and Institute of Medical Science, FOM. No additional space is required.

The Diploma will be administered in partnership with the Physician-Scientist Training Program, FOM, and IMS, with oversight by the Diploma Program Director and the Diploma Steering Committee. IMS will be responsible for the registration of these students and will provide curricular support through the oversight of the IMS Curriculum Committee. The Diploma Program Director will be a member of the IMS Curriculum Committee and this should facilitate communication between the two parties.

As agreed with the Diploma program in their respective MOUs, the IMS and LMP will both assist with the recruitment of members of their faculties to serve as instructors, seminar leaders and graders of performance in the core IMS / Diploma course MSC1992. In addition, IMS will provide access to elective half-courses to Diploma students (see Appendix A, pages 27-36).

The infrastructure for the existing online material is supported by the budget of the Clinician-Investigator Program, Physician-Scientist Training, Faculty of Medicine.

14 Quality and Other Indicators

The Faculty of Medicine (FOM) of the University of Toronto is recognized as the leading research and training medical faculty in Canada, and among the best in the world. This is consistently reflected in world-wide rankings in Medicine and related fields from various sources. A selection of major recent rankings follows:

In the 2016 National Taiwan University Ranking of universities based on scientific paper performance in the area of Clinical Medicine, the University of Toronto again placed **third in the world**, behind only Harvard and Johns Hopkins universities. Within Canada, the next highest ranked universities (UBC, McGill and McMaster) had global rankings of 35, 37 and 51 respectively in this category.

<http://nturanking.lis.ntu.edu.tw/DataPage/countries.aspx?query=ClinicalMedicine&country=Canada&y=2016>

In the 2016 U.S. News & World Report ranking, U of T placed **seventh in the world** in Clinical Medicine. Within Canada, the next highest ranked universities (McGill, McMaster and UBC) had global rankings of 41, 44 and 47 respectively in this category.

<https://www.usnews.com/education/best-global-universities/clinical-medicine>

In the 2017 QS World University Rankings by Subject, the U of T Medical School ranked **11th in the world** (up from 12th in 2016). The other Canadian Universities in the top 50, McGill, UBC and McMaster, had global rankings of 22, 27 and 35 respectively in this category.

<https://www.topuniversities.com/university-rankings-articles/university-subject-rankings/top-medical-schools-2017>

In 2017, *Times Higher Education* magazine named U of T the top university in Canada and **14th in the world** in Clinical, Pre-clinical and Health fields. <https://www.timeshighereducation.com/world-university-rankings/university-of-toronto#ranking-dataset/595522>

In 2017, the Shanghai Ranking's Global Ranking of Academic Subjects, the U of T was placed **16th in the world** in Clinical Medicine, **fifth in the world** in Public Health and **third in the world** in Medical Technology.

<http://www.shanghairanking.com/Shanghairanking-Subject-Rankings/clinical-medicine.html>

The FOM has an established culture of supporting Physician-Scientist Training, including through the MD/PhD and Clinician-Investigator programs, and the Comprehensive Research Experience for Medical Students (CREMS) suite of elective options. The Diploma program builds upon the success of the existing mentored Research Scholar option, with an established record since 2010 of superbly qualified SGS-appointed scientists and physician-scientists serving as the supervisors/mentors of the research projects conducted by the students taking this elective. Each year the FOM receives volunteer proposals of high-quality, faculty-generated research projects, in greater numbers than the numbers of students applying and more than the number of available positions. The Diploma program's diversity is enhanced by the wide range of areas of faculty strengths, innovation and scholarly record, including: Molecular biology, molecular structure and function, developmental biology, genomic medicine, medical genetics, endocrinology, clinical epidemiology, health economics, health education, health services research, international health, public health, laboratory medicine and pathology, neuroscience / neurosurgery, transplantation and immunity, cancer biology and therapy, critical care medicine, psychiatry. The student body of the MD program, FOM, from whom the students of the Diploma will be drawn, are highly accomplished representatives of a variety of backgrounds. The leaders of the new Diploma are physician – scientists with experience in leading successful U of T institutional or departmental clinician – scientist programs that have contributed to the training of physician-scientists currently appointed to faculties in North America and overseas.

15 Governance Process

Steps	Levels of Approval Required
Consultation with Provost	
Decanal and Provostial signoff	Sept 13, 2017
	Faculty/divisional governance
Submission to Provost's office	
	AP&P
	Academic Board
	Executive Committee of Governing Council

The program may begin advertising as long as any material includes the clear statement that, “No offer of admissions will be made to the program pending final approval by the Quality Council and the Ministry of Advanced Education and Skills Development (where the latter is required).”

	Ontario Quality Council
	Submitted to the Ministry (in case of new graduate degrees and programs, new diplomas)

Appendix A: Courses

All existing graduate level courses, unless specifically marked "New"

Summary of Elements of the New Course

MSC1992Y: Research Skills for the Physician-Scientist

Preparing for Research

0.25 FCE, 1 hr / wk X 13 wk, one session (Jan - April, Yr 1 of Medical School)
faculty seminars: bridging knowledge gaps; ethics; management; teamwork; leadership.
CIP module: grant writing
grading: presentations/answering questions
required: attendance/discussion participation

Special Topics in Health Research

0.25 FCE, 1 hr/ alternate wk X 26 wk over two sessions, MD yr 2
expert introduced seminars/modules
broad range of principals and techniques:
quantitative and qualitative techniques,
clinical and translational research,
basic biomedical / molecular / developmental / stem cell biology
required: student participation

Translational Research Topics

0.25 FCE; 1hr/wk; 13 wk during two summer sessions.
graded presentations: in own field / research question/ significance to human health;
problem solving: in a different field and / or with different methodologies (Pass / Fail)
critical review: paper from outside their field; (Pass / Fail)

Dissemination of Results

0.25 FCE, 1 hr/ alternate wk X 26 wk, two sessions, (Summer UME yr 2)
Graded: presentations of research project.
Graded: responding to critical questions
Seminars: how to speak to various target audiences

Elective Courses offered by the Institute for Health Policy, Management and Evaluation, Dalla Lana School of Public Health

Introduction to Clinical Epidemiology Research, HAD5301H

To introduce principles of epidemiology as applied to clinical research, emphasizing diagnosis, prognosis, treatment, the measurement of signs and symptoms of health and disease, and the evaluation of diagnostic, treatment and compliance-improving manoeuvres.

Introduction to Health Economics, HAD5744H

This course is designed to provide an introduction to econometric methods. That is, the basic principles of regression model development and testing that underlie much of applied health economics and health services research. The starting point is the fact that a great number of possible data generating processes yield very similar looking data series. The course deals with how to determine which data generating process, from among the range of possible ones, has actually generated the data you are working with. To that end, the course deals with application of statistical tests and procedures in the context of distinguishing between potential regression models. Students will learn about important methodological considerations when working with both survey and administrative datasets. It is assumed that students have a basic training in statistics.

Introduction to Health Services Research Theory, HAD6760H

The field of health services research draws upon theories, research designs and methods from a wide variety of disciplines including social and behavioural sciences, clinical sciences, management and administrative sciences, law, epidemiology and biostatistics. The goal of this course is to provide a forum for doctoral students to explore theoretical/conceptual frameworks, study designs and research methods, and to apply them in the preparation of a health services research project.

Introduction to Big Data in Health Research, MH13000H

Introduction to Big Data for Health is a new elective course intended to introduce students to the many types of data and analytical methods now available that will enhance our ability to investigate and explain the health of communities. These include data that are relevant to measurement of the social economic and genetic determinants of health, the quality and outcomes of healthcare programs and healthcare interventions. The quantity and variety of relevant data have increased substantially in the last decade and now include data from: healthcare administration, electronic medical records, diagnostic laboratories, censuses, vital statistics, environmental exposures, disease and device registries, research data-bases and bio-repositories. To this may be added relevant information extracted from social services, taxation records, education, justice and corrections services. This is a rapidly changing field. The aims of the course are to introduce students to the different types of data, to provide an overview of the different analytical approaches and to assess the potential value of these big data-sets by examining a number of examples of their use.

Elective Courses offered by the Institute of Medical Science, FOM

Studies in Schizophrenia, MSC1081H

This course, consisting of a series of readings, seminars, and a term paper, is intended to provide an in-depth and multidimensional understanding of schizophrenia spectrum disorders. Readings and seminars will include both foundational perspectives and recent advances in knowledge, bringing together the complexity of specialized knowledge that is required to carry out good research in the area of schizophrenia.

Topics included are:

- Introduction to course. What is Schizophrenia?
- Signs and symptoms
- Prodrome and First episode Schizophrenia. Early detection

Sociocultural aspects and vulnerable populations
Neuropsychology
Genetics
Neuroimaging
Neurophysiology
Pharmacotherapeutics
Animal models
Research Ethics
Overview and feedback

Neuroimaging methods using MRI, MSC1087H

Over the last two decades, the study of human brain structure and function has come to rely on the latest developments in medical imaging technology, especially magnetic resonance imaging (MRI). This course will provide fundamental knowledge relating to the neuroimaging methods commonly used to estimate spatially resolved maps of brain structure, such as grey matter volume and white matter connectivity. The rest of the course will focus on techniques used in functional MRI (fMRI) to measure the blood flow changes associated with neuronal activity. The course is primarily intended for students who will use neuroimaging techniques in their own thesis projects, and need to have a solid understanding of the physical and mathematical principles behind these tools in order to acquire good data and analyze them appropriately. Relevant physiology of cerebral blood flow and brain metabolism will also be reviewed. The specific statistical considerations for neuroimaging – in particular whether the average spatial maps of some structural or functional measure differ significantly between a patient group and a control group – have resulted in the new field of statistical parametric mapping, which will be covered in depth.

Brain Positron Emission Tomography, MSC1088H

Positron emission tomography (PET) has become an important tool for the early detection of disease, the understanding of basic molecular aspects of brain function and the evaluation of medical treatment. This course will build on a multidisciplinary team involving chemists, physicists, image scientists, computer scientists and clinician scientists currently investigating brain diseases such as schizophrenia, mood disorders, addictions, geriatrics and movement disorders. The principal objectives of this course are to review the fundamental concepts of PET imaging and to convey an understanding of the opportunities that PET technology offers in brain research and drug development. Specific issues will be addressed in a perspective to answer basic research questions: 1) The chemistry of labelling compounds with short-lived positron-emitting radionuclides; 2) The design of PET radiopharmaceuticals – impact on interpretation of scanning data (e.g. position of labelling, metabolism, drugs vs. ligands); 3) PET instrumentation – how does a PET scanner or a cyclotron work (physics)?; 4) How PET data is analysed (kinetic modelling, image analysis); How PET can be used as a tool in brain research and drug development.

Biopsychosocial basis of mental health and addictive disorders, MSC1089H

Prof. George and colleagues will review the biopsychosocial basis of mental health and addictive disorders from the perspectives of etiology, pathophysiology, clinical phenomenology and diagnostics, genetics, neuroimaging, and treatment which have all contributed to our increasing understanding of psychiatric and substance use disorders from a biomedical (“disease”) concept. The role of stigma and

recovery would also be discussed from a bio-behavioural and social determinants of health perspective, to produce an integrated perspective on mental health and addictive disorders. The contemporary approach to treatment of these disorders would also be discussed which emphasizes biological, psychological and social policy and prevention perspectives.

Elective Courses offered by Laboratory Medicine and Pathobiology, FOM

Cellular Imaging in Pathobiology, LMP1006H

This course explores the powerful intersection of Physics, Biological science, and Imaging technologies. Basic principles of optics such as the nature of light, diffraction, refraction, the nature of lenses, and the design of the light microscope will be covered in this course. We will discuss phase contrast, dark field, interference contrast, and modulation contrast, as well as polarization and fluorescence microscopy. Different types of microscopes and imaging technologies and their use in biological sciences including dissecting, compound, scanning and transmission electron microscopes, positron emission tomography, single photon emission computed tomography, nuclear magnetic resonance imaging, ultrasound, optical imaging, stereology and 3D imaging, optical microscopy, nanoscopy, live cell and whole animal imaging techniques, cytogenetics, X-ray crystallography and imaging in forensic science and their use in diagnostic pathology will be discussed. Some of the lectures will be complemented by laboratory sessions demonstrating these systems. As a result, students will have the opportunity for hands-on experience with state-of-the-art optical, electronic, and digital imaging equipment guided by an experienced staff from the University, hospitals, research facilities, government agencies as well as the industry. This course will focus on the theory, application and implementation of different imaging techniques, and more importantly, on application of biological experimentation relevant to modern biological research or clinical biochemical studies and the common real-life research goal in the industry, hospitals and research laboratories.

Tissue Injury, Repair and Regeneration, LMP1017H

This seminar/reading and conference course is an interactive course designed to provide graduate students a basic understanding of tissue injury, repair and regeneration processes in major body tissues. Each week, we will invite leading guest speakers to present a seminar on their respective field of research related to tissue injury, repair and regeneration. The Invited Speaker will present a seminar on his/her research for one hour. During the next hour, students present and discuss a particular paper from the one to two papers that are chosen by the guest speaker on his/her topic. This will include a 15 minute presentation by one selected student followed by a 45 minute discussion/question period under the guidance of the mentor (guest speaker).

A total of two hours will be dedicated to each session, which will include the seminar by the Guest Speaker and student presentation/questions/discussion session, so the course is 26-hours over 13 weeks. The first class on September 5th will be an introductory session where students will choose one paper for the presentation and a different one for the dissertation.

Format: Weekly lectures, student presentations, and discussion.

Prerequisite: None.

Research Techniques in Molecular Biology and Pathology, LMP1019H

Course Format: Weekly 2-hour lectures from experts in the field.

Prerequisite: Students are assumed to have a basic knowledge of molecular biology. For those students not familiar with molecular biology techniques LMP1510 would be a useful prerequisite.

Curriculum: This course focuses on techniques that are used in the diagnosis, discovery of the genetic basis, and treatment of human disease.

Inflammation, Immunity and Immunopathology of Atherosclerosis, LMP1020H

Course Objective: To understand the role of humoral, cellular and molecular mechanisms of innate and adaptive immunity in the pathogenesis of atherosclerosis.

Atherosclerosis is a chronic inflammatory disease characterized by the accumulation of lesions or plaques in the intima of muscular elastic arteries. Worldwide, atherosclerosis is a leading cause of death due to the development of myocardial infarction and stroke at advanced stages of the disease. This course will focus on the role of the immune system in atherosclerosis with special attention on different types of immune cells and endothelial cells. The relationship between hypercholesterolemia, a major risk factor for atherosclerosis, and inflammation will be explored.

Several themes will be studied in detail. Each theme will be introduced by a lecture, followed by student-led presentations of several related papers and general discussion. All students are expected to read the papers prior to class.

Themes for LMP1020H:

- The fertile soil for atherosclerotic lesion formation.
- Monocyte and macrophage dynamics in atherosclerotic lesions.
- The inflammasome: friend, foe or bystander.
- Adaptive immunity and atherosclerosis.
- Cellular and humoral anti-inflammatory mechanisms.
- Dendritic cells, what are they and how and where do they modulate atherogenesis?

Signal Transduction Pathways in Normal and Diseased Tissues, LMP1503H

Curriculum: Role of Glycolipids in Signal Transduction Pathways

- Receptor Pathogenesis
- Endotoxin Signaling
- Evolution of Signal Transduction
- Growth Factor receptor signaling in cancer
- Lymphocyte signaling and immune deficiencies
- Lysosomal Signaling
- Regulation of gene expression

- Signal transduction via cell adhesion receptors
- Cytokines and Signal Transduction

Course Format: 10 two-hour sessions

Cell and Molecular Biology of Cardiovascular Diseases, LMP1504H

Course Objective: The objective is to discover, understand, and communicate current concepts in the pathogenesis of cardiac and vascular disease. Extensive use of the current literature will be required.

Course Format: The format will be problem based learning. Each student will be required to make presentations of current literature to the student group. Students then will be required to participate in a discussion of material presented by their peers.

Curriculum: Some topics that will be considered include the use of in vivo and in vitro models to study pathogenesis; the influence of stem cell research on cardiovascular disease; and the cell and molecular biology of the atherosclerosis, ischemic heart disease, and cardiomyopathy.

Prerequisite: This is an advanced pathobiology course. The course requires knowledge about basic concepts in molecular biology and disease pathogenesis. Thus the starting point is a thorough knowledge of cardiovascular pathology as described in Robbins and Cotran Pathological Basis of Disease, V Kumar et al (2004) or Rubin's Pathology, E Rubin et al (2004).

Analytical Clinical Biochemistry: Basic Principles, LMP1505H

Curriculum: Topics covered include spectroscopy, enzymology, separation methods, immunochemistry, electrochemistry, instrumental methods of analysis and a variety of other analytical techniques that are commonly used in clinical laboratories.

Evaluation: Evaluation of student performance is based on a final written examination.

Remarks: The course will be run as tutorials for clinical and medical biochemistry residents, and graduate students.

Molecular Biology Techniques, LMP1510H

Course Format: Lecture

Prerequisite: None

Curriculum: An introduction of molecular techniques used in Laboratory Medicine and Pathobiology

Evaluation: Course mark will be based on a mid-term exam (30%), a Final exam (40%), and a written paper (30%).

The Role of Genomics in the Era of Personalized Medicine, LMP1525H

Course Description: The idea of this course stems from the necessity for our graduate students to get a grasp of the new advances in technology, especially those related to the concept of informatics and the role of molecular profiling and high throughput data generation and analysis. A unique role of the Department of Laboratory Medicine and Pathobiology is to bridge the gap between basic and translational sciences. An important objective of this course is to

explore how understanding the pathobiology of disease can be translated to answer clinically meaningful questions. This course will also highlight the important role of biobanking in biomarker discovery, which are of core importance to our department.

Format: Didactic lectures: weekly lectures (one and a half hours each)

Student participation: half an hour per week including presentation and critical appraisal of an article. A selection of articles will be available for students to choose from.

Writing a research proposal: 5-7 pages maximum, on a topic related to the subject of the course, but distinct from the scope of the student's thesis.

Prerequisite: There are no prerequisite to enrol in this course; however, a strong background knowledge in cellular/molecular biology is expected (e.g. LMP1510 or equivalent).

Next Generation Genomics in Clinical Medicine, LMP1530H.

Course Objective: Next generation genomics, especially whole genome sequencing, will facilitate the application of genomics in clinical practice at a grand scale. Despite the fact that there are already many individual molecular tests which are currently looking at genomic alterations in individual, or a few genes (known as molecular diagnostics), there is still no widespread clinical applicability of next generation genomics, such as whole genome sequencing.

This course will teach how our recently acquired ability to sequence nucleic acids rapidly and cost-effectively can become a very powerful test in the clinical setting for diverse applications and diseases. This new technology has the capacity not only to delineate the molecular basis of diverse diseases with a genetic component but also to assist in defining predisposition, for early detection, monitoring, selection of therapy, prenatal diagnosis, etc. This technology will also raise many ethical questions which will be addressed in this course.

Course Format: Lectures and student presentations

Proteomics, Mass Spectrometry and their Clinical Applications, LMP1535H

This course will cover the fundamentals of mass spectrometry and its use with biochemical techniques to provide analyses of proteins and small molecules. The interface with bioinformatics and other -omics technologies will be examined. The second half of the course is designed to bridge the gap between basic and translational sciences and will examine the research and clinical applications of mass spectrometry.

Selected Topics in Cellular Microbiology, LMP2115H

Course Objective: The objective of this course is to study how microbial pathogens interact with their mammalian hosts to cause disease.

Course Format: Weekly classes will consist of lectures and student presentations of research papers.

Prerequisite: Although there no specific prerequisites, students should have a good background in molecular biology.

Curriculum: The course is designed to span the fields of microbiology and cell biology to address how pathogens evade and exploit mammalian systems. The topics will include bacterial adherence to cells; host cell invasion; intracellular survival of pathogens; protein toxins; modulation of host cell function by microbes; and microbial evasion of host defences.

Molecular Clinical Microbiology & Infectious Diseases, LMP2120H

Course Objective: With particular emphasis on new laboratory techniques, the goal of this course is to provide students with the scientific basis for how these techniques help us understand the epidemiology of infectious diseases, their current impact on human medicine and their role in the detection and characterization of etiologic agents causing diseases.

The major course objectives are:

- To learn the common microorganisms associated with specific clinical diseases.
- To understand how genomics and proteomics have been applied to the diagnosis, control and management of infectious diseases.
- To provide knowledge of both practical and theoretical aspects of the specialist area of medical microbiology and the necessary skills to undertake individual and collaborative research in this field.
- To be introduced to recently developed and constantly improving techniques such as new generation sequencing and high resolution proteomics and how they can impact our understanding and control of important infectious diseases.

Curriculum: Molecular Clinical Microbiology & Infectious Diseases is a course that provides an introduction to medical bacteriology, virology, mycology and parasitology. The course consists of lectures from specialists in each topic, and discussions on selected papers. Students should be familiarized with concepts pertaining to basic molecular biology principles and techniques for understanding various contemporary areas of research in clinical microbiology and their applications. This programme covers these areas, together with training in research skills.

Prerequisite: A background in infectious diseases, microbiology and molecular biology is expected.

Neurodegenerative Disease - Mechanisms, Models, and Methods, LMP2222H

Course Syllabus, September 2016

The course will first be offered in the 2016/17 academic year and will run for 14 weeks in the Medical Science building (Room MS 3287). It aims to prepare students for research in neurodegenerative diseases and enhance their knowledge about disease mechanisms, models and methods, including strategies for treatment and diagnosis.

The course will be coordinated by Joel Watts (Dept. of Biochemistry) and Gerold Schmitt-Ulms (Dept. of LMP), who will teach two lectures each and will also jointly give the first and last lectures of the course. Eight guest lecturers will teach one session each.

In preparation of the course, a research theme will be selected by each of the two course coordinators and publishing houses (preference will be given to open source, non-profit publishers) will be contacted to solicit interest for hosting two review articles, which will be assembled by course participants.

Week 1: First hour: course description and introduction of research topics for review articles, as well as instructions on how to write a review article (emphasizing science and publication ethics, plagiarism, post-publication review). Second hour: break-up into two groups to discuss and develop suitable outlines for the two review articles and to assign sections to the students.

Weeks 2-5: Lectures on Alzheimer's disease, tauopathies and prion diseases in the clinic, neuroanatomy, neuropathology and disease mechanisms.

Weeks 6-7: Lectures on big data and "-omics" approaches for studying neurodegenerative diseases (genetics and genomics, CRISPR and cell models, proteomics and systems biology)

Weeks 8-9: Lectures on emerging methods for studying neurodegenerative diseases (animal models, propagated protein misfolding, structural studies, biophysics of protein aggregation)

Weeks 10-13: Lectures on brain repair/stem cells, diagnostics and therapies and clinical trials

Week 14: Course attendees will be split into two groups, presentations and discussions moderated by course coordinators will finalize the skeletons for the two review papers.

List of lectures: (note that the order might change according to availability of speakers)

Neuroanatomy, neuropathology and disease mechanisms

2. AD and prion diseases in the clinic (Carmela Tartaglia)
3. Brain anatomy, neuropathology and cellular neurotoxicity (Speaker TBD)
4. Alzheimer's disease/tauopathies (Gerold Schmitt-Ulms)
5. Prion diseases (Joel Watts)

Omics-based discovery approaches:

6. Genetics/genomics (Ekaterina Rogaeva)
7. CRISPR cell models, proteomics and systems biology (Gerold Schmitt-Ulms)

Protein aggregation and structure:

8. Animal models/propagated protein misfolding (Joel Watts)
9. Structural studies/biophysics of protein aggregation (Simon Sharpe)

Stem cells and repair, diagnosis, clinical trials and therapeutics:

10. Stem cells and regenerative medicine (Derek van der Kooy)
11. Diagnostics (Avi Chakrabartty)
12. Clinical trials (JoAnne McLaurin)
13. Therapies (Barry Greenberg)

Student evaluation:

1. Each student will research information pertinent to a section of one of the two review articles that will be assembled by course participants and will organize this information as a written skeleton and by producing one illustration (which might become a figure in the review article). Note that this component of the mark is to be completed at midterm and will be shared with two other students who will be asked to critique it in writing and during the oral presentation – see below (20%).
2. Students will present (10-15 min) the review article section and illustration they produced to other course participants (20%).
3. Written (1 page) and oral critique of the skeleton (10%) and presentation of another student (10%).
4. Assembly of contribution to final review article within one week of presentation (40%).

With regard to the scope of the review articles, the objective is not to generate monumental reviews but to teach students skills pertinent to writing a concise high quality review. As such,

we will emphasize manuscript organization, scientific scholarship, style of writing, and overall presentation. Participating students will be made aware that only a subset of the most informative illustrations proposed can find their way into the article. Because students will have different levels of expertise in the assembly of manuscripts, the marking of student contributions will not be foremost on the style of writing but on scientific scholarship (i.e., the balance and selection of references, the clarity of scientific thought, the organization of their written section, and the quality of the illustration). The order of the author lists on the review manuscripts will be determined randomly (by draw) and a note will be included in the manuscripts stating that all authors contributed equally to its preparation. All students will participate in rounds of editing and revisions of the review manuscript they contributed to but these steps will occur following the formal completion of the 14-week course.

Appendix B: Graduate Calendar Copy

Program Description

The Graduate Diploma in Health Research provides a select group of medical students high quality training in health research in order to understand, interpret and apply the rapid changes in the scientific underpinnings of health care. Future physicians will gain skills relevant to contributing to health-related studies in their future careers; some of whom will become leaders of health research. Taken concurrently with the MD program, the Graduate Diploma in Health Research aims to engage medical students in health research with the intent to develop applicable knowledge and skills that will inform and support a future career in any field of health research.

Minimum Admission Requirements

Diploma students must meet the School of Graduate Studies minimum admission requirements for master's level diploma programs. Applicants must be enrolled, and in good academic standing, in the first year of the MD Program of the Faculty of Medicine of the University of Toronto

Applicants must submit the following:

- Curriculum Vitae
- a personal statement explaining their interest in the Program
- a description of a research project they are interested in
- written confirmation of Good Standing in the MD Program (letter from the program, signed by the Registrar/Vice-Dean)
- undergraduate and/or graduate academic transcripts

Program Requirements

- A total of 2.5 FCEs:
 - ▶ Two required courses (2.0 FCEs):
 - Supervised Research Project (MSC 1991Y)
 - Research Skills for the Physician-Scientist (MSC 1992Y).
 - ▶ 0.5 FCE elective course selected from an approved list (Appendix A). Substitution of any other graduate-level course relevant to the student's research course but not found on the approved list will require completion of a course exemption form signed by the IMS Graduate Coordinator and the selection of the course will be done in consultation with the Program Director.
- Maintain good academic standing in the MD program throughout

Program Length

5 sessions part-time (registration sequence: W/S/F/W/S)

Time Limit

8 sessions part-time

Appendix C: Library Statement

University of Toronto Libraries Report for the Graduate Diploma in Health Research, Faculty of Medicine, January 2017

Context: The University of Toronto Library (UTL) system is the largest academic library in Canada and is currently ranked 4th among academic research libraries in North America, behind Harvard, Yale and Columbia.¹ The UTL has an annual acquisition budget of \$31 million. Its research and special collections comprise over 12 million print volumes, 5.6 million microforms, over 17,000 journal subscriptions, and rich collections of manuscripts, films and cartographic materials. The system provides access to more than 1.9 million electronic books, journals and primary source materials.² Numerous, wide-ranging collections, facilities and staff expertise reflect the breadth of research and instructional programs at the University, and attract unique donations of books and manuscripts from around the world, which in turn draw scholars for research and graduate work.

Major North American Research Libraries³

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
ARL RANK	UNIVERSITY	UNIVERSITY	UNIVERSITY	UNIVERSITY	UNIVERSITY
1	Harvard	Harvard	Harvard	Harvard	Harvard
2	Yale	Yale	Yale	Yale	Yale
3	Toronto (3rd)	Toronto (3rd)	Toronto (3rd)	Toronto (3rd)	Columbia
4	Michigan	Columbia	Columbia	Columbia	Toronto (4th)
5	Columbia	Michigan	Michigan	Michigan	Michigan

Top 5 Canadian Universities in the ARL Ranking of Major North American Research Libraries

	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015
	RANK/ UNIVERSITY	RANK/ UNIVERSITY	RANK/ UNIVERSITY	RANK/ UNIVERSITY	RANK/ UNIVERSITY

¹ Chronicle of Higher Education, "Library Investment Index at University Research Libraries, 2014 – 2015." In the Almanac of Higher Education, 2016. http://www.chronicle.com/interactives/almanac-2016?cid=cp51#id=65_416

² Figures as of 2015 taken from UTL's 2016 Annual Report.

<http://www.library.utoronto.ca/library/aboutlibraries/annualreport/2016/AnnualReportUTL2016.pdf>

³ Association of Research Libraries Statistics, 2014-15 <http://www.arlstatistics.org/analytics>

3/Toronto	3/Toronto	3/Toronto	3/Toronto	4/Toronto
11/Alberta	10/British Columbia	18/Alberta	22/British Columbia	27/Alberta
16/British Columbia	15/Alberta	24/British Columbia	26/Alberta	31/British Columbia
32/Montreal	18/McGill	30/McGill	35/McGill	43/McGill
38/McGill	32/Montreal	35/Montreal	36/Montreal	49/Calgary

Space and Access Services: The UTL’s 44 libraries are divided into four administrative groups: Central, Departmental/local, Campus (UTM and UTSC) and Federated and Affiliated College Libraries. The UTL provides a variety of individual and group study spaces for students. Study space and computer facilities are available twenty four hours, five days per week at one location, Robarts Library, with additional extended hours during study and exam periods at both UTSC and UTM. Web-based services and electronic materials are accessible at all times from campus or remote locations.

Teaching, Learning and Research Support: Libraries play an important role in the linking of teaching and research in the University. To this end, information literacy instruction will be offered to assist in meeting Health Research degree level expectations in the ability to gather, evaluate and interpret information. Librarians will collaborate with instructors on assignment design, provide student research consultations, and offer just-in-time student research help in person, by phone or through online chat. Special initiatives, such as an annual forum for student journal editors, extend information literacy beyond the classroom. These services align with the Association of College and Research Libraries (ACRL) Framework for Information Literacy for Higher Education.⁴

Program Specific Instructional Support: Instruction occurs at a variety of levels for Health Research students and is provided by the faculty liaison librarian for Graduate Medicine. The Gerstein Library facilitates formal instruction integrated into class schedules and hands-on tutorials related to course assignments. As this program is still in development, the Library does not yet provide any formal instruction. The liaison librarian has agreed to support the Health Research Program in principle and will work with the program administration to form a concrete plan in the coming months. In the past, the Library has supported Health Research students on an individual basis, expanding on the information literacy instruction they have received as part of the MD Program. The Library, through its liaison librarians, customizes feeds of library resources which appear prominently in Portal/Blackboard course pages. The Gerstein Library has created and updates the following research guides: Medicine, Clinical EBM, Systematic Reviews, Pharmacy, Public Health, Rehabilitation and others that support interdisciplinary health research. Example: <http://guides.library.utoronto.ca/medicine>

Collections: Selected college and campus libraries collect materials in support of Health Research; the largest collection of materials is centrally located in the Gerstein Science Information Centre. Collections are purchased in all formats to meet the variety of preferences and styles of our current students and faculty. The University of Toronto Library is committed to collecting both print and electronic materials in support of Health Research at the University of Toronto.

⁴ Association of College & Research Libraries. Framework for Information Literacy for Higher Education. ACRL, 2016. http://www.ala.org/acrl/sites/ala.org/acrl/files/content/issues/infolit/Framework_ILHE.pdf

Journals: The Library subscribes to 24 of the top 25 journals listed in Journal Citation Reports (JCR)⁵ in subject area Medicine, Research and Experimental. Of these titles, all are available electronically to staff and students of the University. We prioritize acquisition of online journals where possible.

Monographs: The UTL maintains comprehensive book approval plans with 51 book vendors worldwide. These plans ensure that the Library receives academic monographs from publishers all over the world in an efficient manner. In support of Health Research programs, monographs are purchased in electronic form where possible, and the Library currently receives all current e-books directly from the following publishers: Springer, Elsevier, Books@Ovid, Wiley-Blackwell, Royal Society of Chemistry and Cambridge.

Preservation, Digitization and Open Access: The UTL supports open access to scholarly communication and research information through its institutional research repository (known as T-Space), its Downsvie print repository, its open journal services, subscriptions to open access publications, and support for preservation of research materials in all formats. In addition to acquiring materials in support of Health Research, the Library has digitized its monograph holdings published before 1923. These books are available without charge to any Internet user.

Key Databases: *Medline (Ovid), Embase, CINAHL, PsycINFO, Web of Science* and *Scopus*.

Prepared by: Gail Nichol, Selector for Life and Health Sciences, January 4, 2017

Submitted by: Larry Alford, Chief Librarian, University of Toronto Libraries, Date

⁵ 2015 Journal Citation Reports® (Thomson Reuters, 2016)

Appendix D: Student Support Services

Student service information for Quality Assurance Framework [St. George Campus]

All University of Toronto undergraduate and graduate students have access to student services on all three campuses, Mississauga, St. George (downtown Toronto), and Scarborough, regardless of their 'home campus'. The services and co-curricular educational opportunities provide a complement to the formal curriculum by engaging and challenging students to reach their full potential as learners, leaders and citizens. At the University of Toronto (St. George Campus) these services are organized by Student Life Programs and Services, the academic division registrar offices, and the School of Graduate Studies, and support the success of our students from the time they are admitted through degree completion and beyond.

Students have access to comprehensive physical and mental health care on campus including a medical clinic, travel medicine services, immunization, contraception and sexual health education. Counselling and treatment options for psychological and emotional concerns include psychotherapy, group therapy and pharmacotherapy, as well as specialized assault counseling services. Detailed information can be accessed through: <https://www.studentlife.utoronto.ca/hwc/services-offered>

The Office of Health Professions Student Affairs (OHPSA) supports MD students and helps them with career counselling, career exploration, personal counselling & student wellness, academic coaching & prep, getting involved & co-curricular activities and summer mentorship programs. Detailed information can be accessed through:

<http://www.md.utoronto.ca/OHPSA>

Since all Diploma students will also be full time MD students, they will already have full access to all of the OHPSA services (which is where they would probably go in the first instance unless a graduate support service is required).

Housing needs, including off-campus housing listings and resources for students living independently, are met through the Student Housing Service.

Coaching and education in the development of key **learning skills** – from time management to overcoming exam anxiety – is provided through the Academic Success Centre. The ASC also partners with faculty to integrate success strategies and support into the curriculum.

Students' career exploration and employment services are provided through a **Career Centre** offering resume and interview coaching, workshops, career resources, on and off-campus employment and volunteer listings, job shadowing, and career counseling.

Specialized services are provided for **international students** (orientation, advising, cross-cultural counselling), students with **disabilities** (academic accommodations, advising), students with **children or other family responsibilities** (advising, resources, subsidized child care), **aboriginal students** (academic support, financial counselling) and **lesbian, gay, bisexual and transgender** students (counselling, referrals, equity outreach and engagement).

Participation in **campus life** and **experiential learning** are facilitated through Hart House (clubs, committees, events), the Centre for Community Partnerships (service learning), the Multifaith Centre (interfaith dialogue, events), and the Office of Student Life (leadership development, orientation,

recognition and support for student groups, activities.) **Sport and recreational facilities and programs** are provided to all students through both Hart House and the Faculty of Kinesiology and Physical Education.

School of Graduate Studies, Student Services [all campuses]

All graduate students at the University of Toronto have access to registrarial services and co-curricular programs at the School of Graduate Studies that assist students in meeting their academic goals. Administrative staff at the School of Graduate Studies (SGS) provide registrarial services to graduate students including but not limited to recruitment, admission, orientation, registration, fees, program progress, awards/financial assistance and graduation.

The **Grad Room** is an accessible space on the St. George campus which provides University of Toronto graduate students with a lounge area and a multi-purpose space for academic, social and professional graduate student programming. Grad Room is home to the **Graduate Professional Skills Program (GPS)**. GPS is a non-academic program presented by SGS consisting of a variety of offerings that provide doctoral stream students a range of opportunities for professional skills development. The program focuses on skills beyond those conventionally learned within a disciplinary program, skills that may be critical to success in the wide range of careers that graduates enter, both within and outside academe. GPS aims to help students communicate effectively, plan and manage their time, be entrepreneurial, understand and apply ethical practices, and work effectively in teams and as leaders.

Appendix E: Canadian Comparators

Research training, leading to credential or note on academic transcript, for undergraduate medical students who already hold Bachelor's degrees.

PT = part-time; FT (E) = full-time (equivalent)

Not including MD/PhD training programs

University	Level of Training	Credential	Months of Research Training	Concurrent with MD	Number of students per yr	Completion of MD delayed
Alberta	Under-graduate	Notation on MD <i>"With Special Training in Research"</i>	6 FT	Yes	Variable	No
Manitoba	Under-graduate	BScMed	7 FT (two summers)	No	~ 50 - 60	No
Toronto (GDipHR)	Graduate	Diploma	20 PT	Yes	15	No
Manitoba	Graduate	MSc	24 FT (intervening 2 years off MD)	No	Variable	Yes - 2 yr
Queen's	Graduate	MSc	18 FT (intervening year off MD)	No	Variable	Yes - 1 yr
Montréal	Graduate	MSc	15 FT (intervening year off MD)	Yes (course work) / No (research)	Variable	Yes - 1 yr
Sherbrooke	Graduate	MSc	12+ FT (intervening year off MD)	No	Variable	Yes - 1+ yr
Calgary	Graduate	MSc	12+ FT (intervening year off MD)	No (not standard)	Variable	Yes - 1+ yr
Laval	Graduate	MSc	12+ FTE	Yes	Variable	Varies - 1+ yr

Appendix F: Letters

Letter from Associate Dean, Physician-Scientist Training Program, FOM

See attached PDF

Letter from Vice-Dean, MD Program, FOM

See attached PDF

Letter from Director, McLaughlin Centre, FOM

The McLaughlin Centre, an Extra-Departmental Unit (EDU):C unit, that supports excellence in genomics research and education. For more information, see

http://www.mclaughlin.utoronto.ca/Director_s_Message.htm

See attached PDF

Letter from Dalla Lana School of Public Health

See attached PDF



McLAUGHLIN
CENTRE

*Advancing Genomic Medicine through
Research and Education*



UNIVERSITY OF
TORONTO

February 5, 2017

Neil Sweezey, MD, FRCPC
Director, CREMS Programs,
MD Program, Faculty of Medicine
University of Toronto

Dear Neil:

Further to our meeting of September 8th, 2016, I am writing to confirm that with support of its executive committee the McLaughlin Centre will provide \$37,500 annually to cover the CREMS Program's 50% contributions towards the stipends of five medical students enrolled in the new CREMS Graduate Diploma in Health Research Program. Our support of the CREMS Scholar Program will cease at that time.

In addition to providing this ongoing support, we will consider future requests from you for support of additional CREMS initiatives related to the goals of the McLaughlin Centre.

Sincerely,

Stephen Scherer, PhD, FRSC
Director, McLaughlin Centre and
The Centre for Applied Genomics (TCAG)
GlaxoSmithKline/CHIR Chair in Genome Sciences
Senior Scientist, The Hospital for Sick Children
Professor of Medicine, University of Toronto

cc. Norman Rosenblum, MD, FRCPC



MD Program
UNIVERSITY OF TORONTO

Office of the Vice Dean

July 31, 2017

Neil Sweezey, MD, FRCPC
Director, CREMS Programs,
MD Program, Faculty of Medicine
University of Toronto

Dear Neil:

I write in support of the proposal by the Comprehensive Research Experience for Medical Students (CREMS) / MD Program, to establish an optional *Graduate Diploma in Health Research* (G.Dip.H.R.) for medical students.

The MD Program hereby commits that the costs of this new Diploma Program will be covered for at least the first five years. As outlined by the Associate Dean of Physician-Scientist Training in his letter to you, these costs will include the program's leadership and main administrative costs and a 50% contribution to the students' stipends. The faculty supervisor of each individual research project will pay for the other 50% of their student's stipend as well as the costs of the research and the dissemination of the results. We also anticipate modest administrative expenses for the partner Institute of Medical Science (IMS), the administrating unit for the Graduate Diploma within the School of Graduate Studies (SGS).

I wish you every success with this exciting Diploma Program.

Sincerely,

Patricia Houston, MD, MEd, FRCPC
Vice-Dean, MD Program
Faculty of Medicine, University of Toronto.

July 31, 2017.

Neil Sweezey, MD, FRCPC
Director, CREMS Programs,
MD Program, Faculty of Medicine
University of Toronto

Dear Neil:

I hereby confirm the commitment of the Physician-Scientist Training portfolio, Faculty of Medicine, University of Toronto, to cover the costs of the new *Graduate Diploma in Health Research* for at least the first five years.

We will cover costs that include the program's leadership and main administrative costs, and a 50% contribution to the students' stipends. We will cover administrative expenses for the Institute of Medical Science (IMS, our partner graduate unit in the Faculty of Medicine) related to registration as graduate students in the School of Graduate Studies (SGS).

The individual faculty supervisors of the students' research project will pay 50% of the student stipend as well as all costs of the conduct of the students' research and of the dissemination of the results.

Sufficient funds to cover the necessary expenses will come from Physician-Scientist Training endowment income and advancement sources, as well as new advancement income. As documented in letters or in Memoranda of Understanding, the Program's 50% contribution to the students' stipends will be provided for up to 12 students each year collectively by the McLaughlin Centre of the University of Toronto (5 students) and our partner units, the Department of Laboratory Medicine and Pathology (2 students) and the IMS (3 students) in the Faculty of Medicine, and the Institute of Health Policy, Management and Evaluation in the School of Public Health (2 students).

Sincerely,



Norman Rosenblum, MD, FRCPC
Associate Dean, Physician - Scientist Training
Faculty of Medicine, University of Toronto.

7.0 Faculty Council Forum

Academic Strategic Planning

As you may be aware, [the UofT Faculty of Medicine is embarking on a strategic planning process](#) to chart our course for the next 3 years. Over the next 6 months, under the leadership of Lynn Wilson, Vice Dean, Partnerships, our plan is to engage our partners, faculty, staff, students, alumni and key collaborators in a dialogue about how we can truly take advantage of our strategic position as a single Faculty of Medicine within a diverse community like Toronto, and how we want to evolve our role as leaders in medical education and research. Through January and February, discussions will take place with key groups within the Faculty and across our networks to gather perspectives about our strengths today and where we need to focus over the next 3 years to position us for success to 2030 and beyond.

On February 12 Danny Nashman from the Potential Group will be attending the meeting of Faculty Council to engage in a discussion during Faculty Council Forum to update Faculty Council members on: the development of the academic strategic plan; how they become engaged in the process; and to gather input on some key topics, including:

- What we have been doing as Faculty in recent years that has made the most difference
- Developments in our environment that we need to pay attention and respond to in the next 10-15 years
- How we can fully leverage collaboration across the city and the unique opportunities that come with the “Toronto Advantage”
- What we might want to put in place to create an environment where learners and faculty feel valued, engaged and supported
- Opportunities to assert a new form of leadership in medical research and education

We look forward to you being there to add your voice to this important conversation.