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# Undergraduate Medical Professions Education

Annual Report  
2012-2013

Integration/Innovation/Impact



UNIVERSITY OF TORONTO  
FACULTY OF MEDICINE

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# Faculty of Medicine

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## Vision

International leadership in improving health through innovation in research and education

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## Mission

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

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## Values

- Integrity in all of our endeavours
  - Commitment to innovation and excellence
  - Life-long learning and critical inquiry
  - Promotion of social justice, equity, diversity, and professionalism
  - Effective partnership with all our stakeholders
  - Multi-professional and interdisciplinary collaboration
  - Supportive and respectful relationships
  - Accountability and transparency
  - Responsiveness to local, national, and international health needs
- 

## Undergraduate Medical Professions Education

**Undergraduate Medical Education (MD) Program**  
[www.md.utoronto.ca](http://www.md.utoronto.ca)

**MD/PhD Program**  
[www.mdphd.utoronto.ca](http://www.mdphd.utoronto.ca)

**Medical Radiation Sciences (MRS) Program**  
[www.radonc.utoronto.ca/future-students/programs/bsc-in-medical-radiation-sciences](http://www.radonc.utoronto.ca/future-students/programs/bsc-in-medical-radiation-sciences)

**Physician Assistant (PA) Program**  
[www.paconsortium.ca](http://www.paconsortium.ca)

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# Message from the Vice-Dean



It is my pleasure to share the 2012–13 Undergraduate Medical Professions Education annual report. This report highlights progress made over 2012–13, including activities that support achievement of the education goals articulated in the Faculty of Medicine Strategic Plan (2011–16), particularly the development and enhancement of educational pathways for the training of the physicians and other health care professionals of tomorrow.

Accreditation plays a significant role in ensuring the ongoing quality of our programs. In October 2012, the MD program was fully accredited for another eight-year term. The Medical Radiation Sciences program also underwent accreditation in 2012–13, and all three of the program's disciplines (radiological technology, nuclear medicine, and radiation therapy) were granted accreditation for another six-year term.

With an annual entry class of 259 students, the MD program at the University of Toronto is the largest in Ontario and one of largest in Canada. The large and highly qualified applicant pool as well as the consistently high rate of acceptance of offers of admission speaks to the desirability of the program. While the MD program is committed to maintaining the quality of its applicant pool, we are also continually striving

to increase opportunities for learners from diverse backgrounds to gain admission to the program. In the pages that follow, you will read about enhancements to our recruitment and outreach programs, innovations to our admissions processes, and increased bursary support for students with the highest level of financial need, all of which support achievement of our diversity goals.

While efforts to address the increasing cost of medical education and minimize student debt are ongoing, other forms of student support are, of course, also integral to ensuring student success. In 2012–13, important steps were taken towards the development of an integrated culture of wellness across all of our programs. The Office of Health Professions Student Affairs (OHPSA) also implemented a number of initiatives to address a concern that is of particular importance to our MD students: career planning. For example, a new Faculty Lead in Career Exploration position was filled in 2012–13, and the OHPSA introduced a new electronic scheduling system to facilitate career counselling appointments for our MD students.

Throughout this document, you will find examples of how our programs are engaged in an ongoing process of

curriculum renewal. While accreditation often provides an impetus for change, evidence-informed assessment and continuous quality improvement are guiding principles that inform all of our strategic activities, including curriculum renewal. Thanks to the efforts of a dedicated group of curriculum leaders, course directors, teachers, theme leads and staff administrators, this past year saw the development and implementation of curricular innovations that support achievement of the education goals expressed in the Faculty of Medicine Strategic Plan as well as recommendations found in *The Future of Medical Education in Canada (FMEC) MD Project Report*. To further advance our integration efforts, three new theme lead positions were introduced in 2012–13: Indigenous Health Education, Health Advocate, and Health Humanities.

Our unique Academy system – which provides MD students with a clinical home in an affiliated teaching hospital for the duration of the program – was identified as a particular strength by the accrediting bodies in their October 2012 accreditation report. In 2012–13, the inaugural class of the Mississauga Academy of Medicine (MAM) moved into year two of the MD program. The first ever MAM Clerkship Information Day was held for the inaugural clerkship

MAM class in March 2013 and, working in collaboration with Trillium Health Partners, we achieved over 75% capacity across the ten mandatory clinical rotations in the first year of clerkship at the MAM for 2013–14.

Historically, the Vice-Dean of Undergraduate Medical Education has been responsible for oversight of the MD and MD/PhD programs. In 2012–13, the role (and title) of the Vice-Dean was expanded to include decanal responsibility for the Medical Radiation Sciences and Physician Assistant undergraduate degree programs. I am honoured to work with and support both of these programs.

I would like to thank our faculty, staff, students and all other members of the undergraduate medical profession education community for their outstanding work and another remarkable year.

Sincerely,

**Jay Rosenfield**  
MD, MEd, FRCPC

Vice-Dean, Undergraduate Medical Professions Education

*With an annual entry class of 259 students, the MD program at the University of Toronto is the largest in Ontario and one of largest in Canada.*



# Organization & Leadership

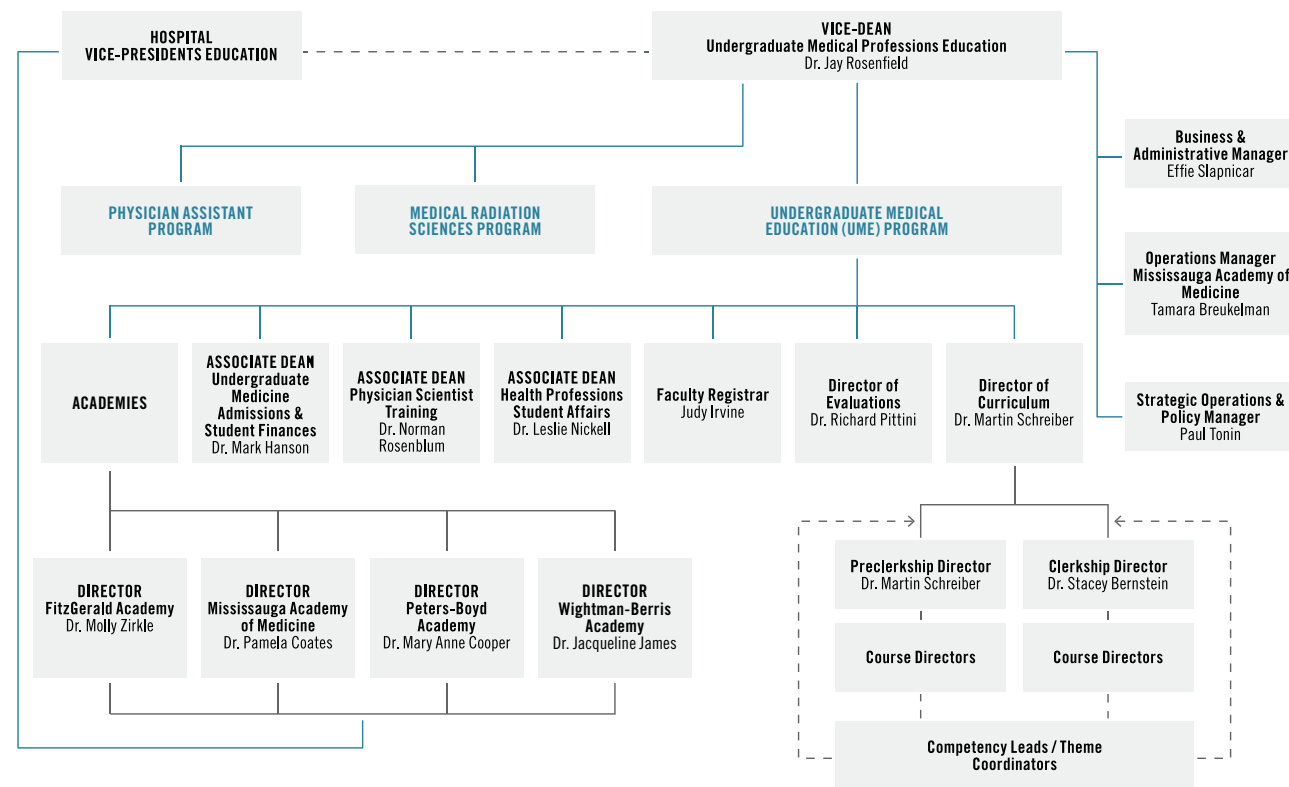
The Vice-Dean, Undergraduate Medical Professions Education, is responsible for oversight of the MD and MD/PhD programs. In 2012–13, the role of the Vice-Dean was expanded to include decanal responsibility for the Medical Radiation Sciences and Physician Assistant undergraduate degree programs.

A team of senior academic and administrative leaders is responsible for the management of the MD program and MD/PhD program, while governance is supported by a robust committee structure that includes active participation by student leaders.

The Medical Radiation Sciences (MRS) program is based in the Department of Radiation Oncology, Faculty of Medicine, and is jointly administered by The Michener Institute for Applied Health Sciences.

The Physician Assistant (PA) program is based in the Department of Family and Community Medicine, Faculty of Medicine, and delivered in collaboration with the Northern Ontario School of Medicine and The Michener Institute for Applied Health Sciences.

UNDERGRADUATE MEDICAL PROFESSIONS EDUCATION PROGRAM LEADERSHIP ORGANIZATION CHART



# The Medical Academies & Clinical Teaching Sites

*Each Academy offers a unique combination of educational settings based on the strengths of their member hospitals while at the same time maintaining a consistent high standard of curriculum delivery.*

A unique feature of the Undergraduate Medical Education program is its Academy system. The four Academies – FitzGerald, Mississauga, Peters-Boyd, and Wightman-Berris – are comprised of clusters of the University's affiliated hospitals and healthcare sites. Students are assigned to an Academy as part of the admissions process, with each Academy providing its students with a clinical home in an affiliated teaching hospital for the duration of the MD program. Each Academy offers a unique combination of educational settings based on the strengths of their member hospitals while at the same time maintaining a consistent high standard of curriculum delivery.

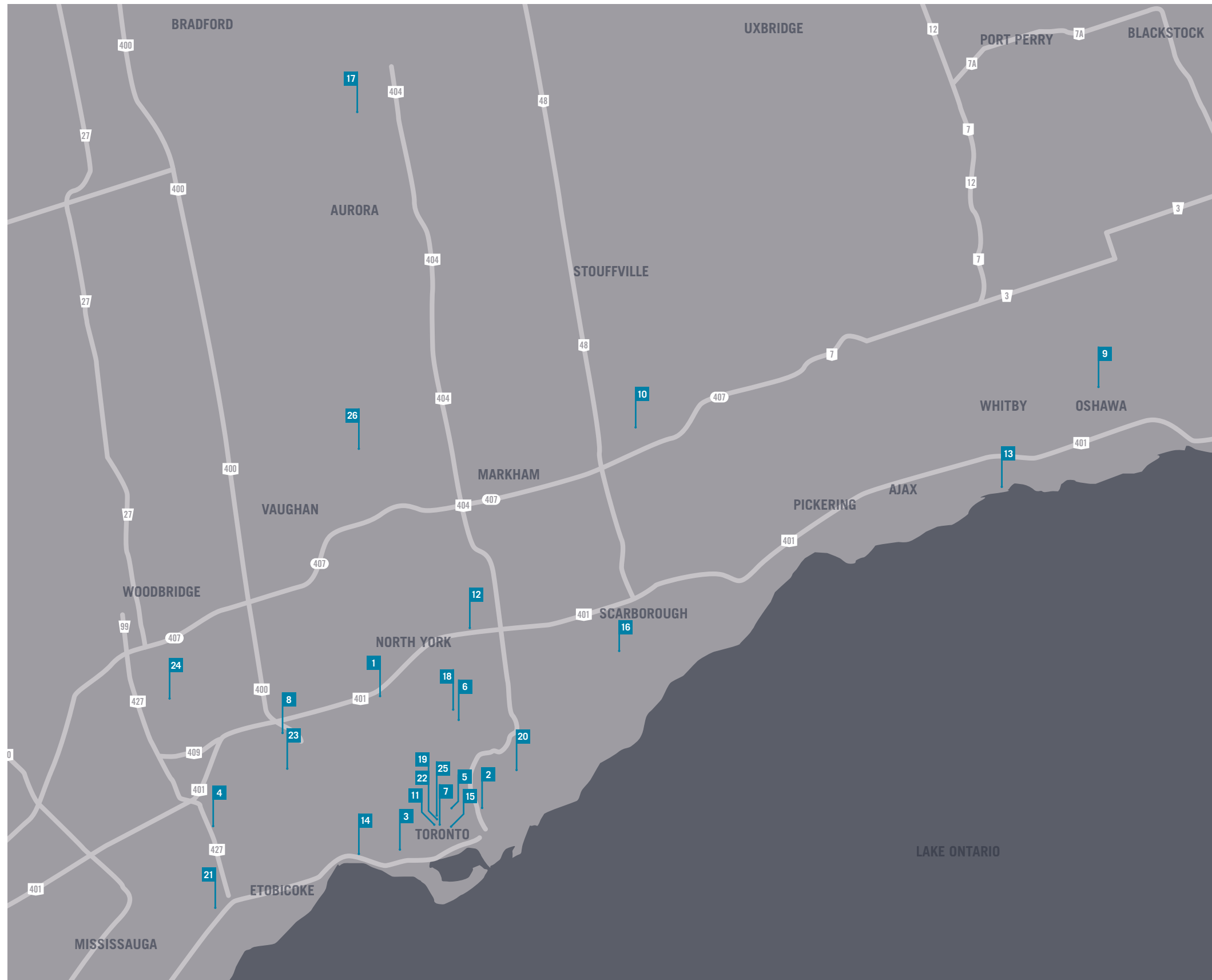
A process to develop Academy membership principles and guidelines for health care institutions participating in the Academy system was initiated in 2012–13. This process involved consultations with the four Academy Directors and designated education leads of the University's nine fully-affiliated hospitals and four major community-affiliated hospitals. Next steps include endorsement of an Academy Membership Framework, including membership type definitions as well as principles and guidelines for the collaborative delivery of the MD program through and within the Academy system.

**FitzGerald Academy**  
**Anchor Hospital:**  
**St. Michael's Hospital**  
[www.md.utoronto.ca/partners/academies/FitzGerald.htm](http://www.md.utoronto.ca/partners/academies/FitzGerald.htm)

**Mississauga Academy of Medicine**  
**Anchor Hospital:**  
**Trillium Health Partners**  
[www.md.utoronto.ca/partners/academies/mam.htm](http://www.md.utoronto.ca/partners/academies/mam.htm)

**Peters-Boyd Academy**  
**Anchor Hospital: Sunnybrook Health Sciences Centre**  
[www.md.utoronto.ca/partners/academies/Peters-Boyd.htm](http://www.md.utoronto.ca/partners/academies/Peters-Boyd.htm)

**Wightman-Berris Academy**  
**Co-Anchor Hospitals: Mount Sinai Hospital, University Health Network**  
[www.md.utoronto.ca/partners/academies/Wightman-Berris.htm](http://www.md.utoronto.ca/partners/academies/Wightman-Berris.htm)



## Clinical Teaching Sites

Clinical teaching, which occurs in the first two years of the MD program and to a greater extent in clerkship over years three and four, is provided in both academic hospitals and community-based hospitals and healthcare sites, located mainly in Toronto and Mississauga. The number and breadth of clinical teaching sites is a strength of the Undergraduate Medical Education program, as they provide students opportunities for learning experiences in a variety of settings that often involve different perspectives on patient care.

- 1 Baycrest Centre for Geriatric Care
- 2 Bridgepoint Health
- 3 Centre for Addiction and Mental Health
- 4 George Hull Centre for Children and Families
- 5 Hincks-Dellcrest Centre
- 6 Holland Bloorview Kids Rehab Hospital
- 7 The Hospital for Sick Children (SickKids)
- 8 Humber River Regional Hospital
- 9 Lakeridge Health Network
- 10 Markham-Stouffville Hospital
- 11 Mount Sinai Hospital
- 12 North York General Hospital
- 13 Ontario Shores Centre for Mental Health Sciences
- 14 St. Joseph's Health Centre
- 15 St. Michael's Hospital
- 16 The Scarborough Hospital
- 17 Southlake Regional Health Centre
- 18 Sunnybrook Health Sciences Centre
- 19 Surrey Place Centre
- 20 Toronto East General Hospital
- 21 Trillium Health Partners
- 22 University Health Network
- 23 West Park Healthcare Centre
- 24 William Osler Health Centre
- 25 Women's College Hospital
- 26 York Central Hospital

# About the Programs

## Undergraduate Medical Education

### MD Program

The MD program at the U of T delivers an innovative and rigorous curriculum that educates undergraduate medical students in the first phase of their medical education within a social accountability framework that focuses on the health needs of Canadians.

The MD program curriculum consists of 149 weeks of instruction over four years. The overarching goal of the first two years of the program (preclerkship) is to help students learn the necessary biomedical and humanistic knowledge and skills, and to develop the appropriate professional attitudes, that they will need for success in their clinical clerkship program and beyond. The final two years of the program (clerkship) are designed to provide an integrated learning experience in diverse clinical settings to support the development of knowledge, skills and attitudes essential to care for patients effectively, efficiently and humanely. In the Portfolio courses, which were initially introduced into clerkship in 2010–11 and since then have expanded to preclerkship, students focus on their professional development as physicians, largely through discussions about and written reflections on clinical experiences that have enhanced their understanding of the CanMEDS roles. The Transition to Residency (TTR), which is the final phase of the program in year four, was introduced in 2011–12 to ensure that students are well-prepared to transition to the workplace-based learning of residency.

The delivery of the preclerkship and clerkship curriculum is integrated through a series of program objectives, which are grounded in the Royal College of Physicians and Surgeons of Canada CanMEDS roles and competencies as well as the four principles of Family Medicine. The MD program objectives support achievement of two overall goals:

- Graduates of the program will demonstrate the foundation of knowledge, skills and attitudes necessary to achieve the CanMEDS competencies and the four principles of Family Medicine.
- In keeping with the Faculty of Medicine's vision of international leadership in improving health through innovation in research and education, the program curriculum will encourage, support and promote the development of future academic health leaders who will contribute to our communities and improve the health of individuals and populations through the discovery, application and communication of knowledge.

With the support of 28 departments and one of the largest academic health science network in North America, our students have the unique opportunity to interact and collaborate with world-renowned faculty and researchers, participate in cutting edge research, and apply their knowledge in both urban and community-based environments.

### MD/PhD Program

The MD/PhD program at the U of T was established in 1984 and was the first of its kind in Canada. The goal of the MD/PhD program is to generate physician scientists who are well prepared, highly competitive and productive. Students in the program must complete the full MD program and satisfy the rigorous standards of the School of Graduate Studies for a PhD degree.

MD/PhD students can do their PhD in any graduate department or institute within the School of Graduate Studies at the U of T. The majority of MD/PhD students are enrolled in programs within the Faculty of Medicine in the Departments of Biochemistry, Immunology, Laboratory Medicine and Pathobiology, Medical Biophysics, Institute of Medical Science, Molecular Genetics, and Physiology. In addition to programs offered through graduate departments, centres and institutes, unique collaborative programs are also available. These innovative programs emerge from the cooperation between two or more graduate units, providing students with a broader base from which to explore novel interdisciplinary areas or special developments in particular disciplines.

Regardless of their PhD program, students start the MD/PhD program with the first year of medical school. September of the second year marks the beginning of formal registration in graduate school and commencement of the PhD degree. Students remain in the graduate phase for four to five years, depending on the research topic selected and the outcome of their experiments. Following successful completion of their thesis, students then return to complete years two, three and four of the MD program.

A new Longitudinal Mentorship Program was launched in 2013–13, designed to connect MD/PhD students with alumni and established physician scientists. Students meet regularly with their mentors to establish a lasting connection, with the mentors providing advice on career choices and professional development opportunities.

### Supporting Leadership

Effective leadership is essential to improving health and transforming the health care system. The Leadership Education and Development (LEAD) program is an innovative interdisciplinary collaboration among UME, the Rotman School of Management, the School of Public Policy & Governance, and the Institute of Health Policy Management & Evaluation. The objective of the LEAD program, which is available to nine medical students from each year, is to create a new generation of physician leaders committed to improving health care and the health of our communities. To do so, the LEAD program provides a solid foundation of values, skills and experiences that allow students to realize their full potential as leaders. The program curriculum includes a longitudinal sequence of six graduate courses that provide LEAD Scholars with knowledge and skills required for leadership and two summer-long practicum experiences, in which they have an opportunity to apply their leadership skills and knowledge and further develop their understanding of career opportunities in leadership.

About the Programs  
Undergraduate Medical Education

UME Enrolments

2012-2013



TOTAL NUMBER OF MD AND MD/PHD STUDENTS



MD PROGRAM ONLY



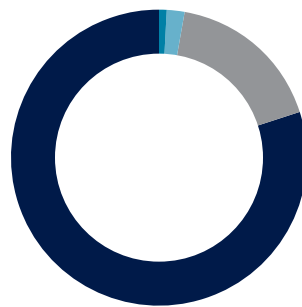
MD/PHD PROGRAM

Gender distribution



● FEMALE (53.5%)  
● MALE (46.5%)

Age distribution



● 18-20 (2%)  
● 21-25 (80%)  
● 26-30 (17%)  
● 31-40 (1%)

Student Diversity

The Faculty of Medicine's *Diversity Statement* articulates our principles and goals with respect to student diversity, and identifies three groups for priority attention: Indigenous Peoples of Canada (First Nations, Inuit, and Métis), People of African ancestry, and the economically disadvantaged. In alignment with the *Diversity Statement*, we are committed to maximizing opportunities for students from diverse backgrounds and under-represented populations to gain admission to the MD program.

Top 3 Ethnic Identities

White/Caucasian	53.9%
Chinese	18.4%
South Asian	14.7%

Priority Groups

Indigenous peoples	2.1%
African ancestry	1.2%
Economically disadvantaged	16.7%

Student diversity data drawn from entry surveys for admitted MD students completed by students entering first year in 2010-11, 2011-12 and 2012-13. Of those three cohorts, 576 of 772 (74.6%) students responded to the survey.

UME Admissions

The Undergraduate Medical Education program has a large and highly competitive applicant pool as well as a consistently high rate of acceptance of offers.

MD Program

	SEPTEMBER 2012 ENTRY	SEPTEMBER 2013 ENTRY
Applicants	3052	3153
Files Reviewed	1572	1775
Interviews	576	587
Offers	328	338
Acceptances	259	259
Acceptance Rate of Offers (without deferrals)	80%	78%

MD/PhD Program

	SEPTEMBER 2012 ENTRY	SEPTEMBER 2013 ENTRY
Applicants	86	88
Files Reviewed	73	79
Interviews	25	42
Offers	13	14
Acceptances	9	12
Acceptance Rate of Offers	69%	86%

Gender distribution

September 2012 entry



● FEMALE (49%)  
● MALE (51%)

Percentage of new students with graduate degree

September 2012 entry



● GRADUATE DEGREE (36%)  
● UNDERGRADUATE DEGREE (64%)

About the Programs  
Undergraduate Medical Education

## UME Student Financial Assistance

Minimizing the cost of medical education is an important component of UME’s diversity initiatives, particularly with respect to students who are economically disadvantaged. UME is committed to supporting students with the highest level of financial need through a number of programs, including Faculty of Medicine Grants, Faculty of Medicine Enhanced Bursaries, Faculty of Medicine MD Admission Bursaries, and Needs-Based Travel Stipends.

### Faculty of Medicine Grant Program

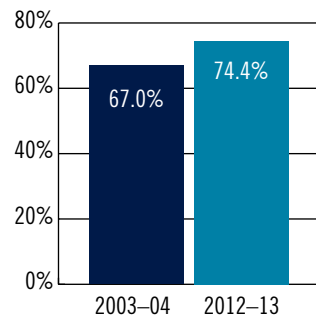
**75%** of MD students receive needs-based funding through the Faculty of Medicine Grant Program.

In 2012–13, 740 MD students received financial assistance through the Faculty of Medicine Grant Program for a total allocation of \$4,726,389, equivalent to 45% of the unmet financial need of the eligible recipients.

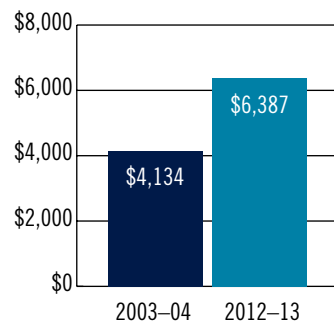
Since 2003–04, there have been significant increases in the:

- percentage of students receiving assistance
- average individual student grant
- total grant assistance provided to students

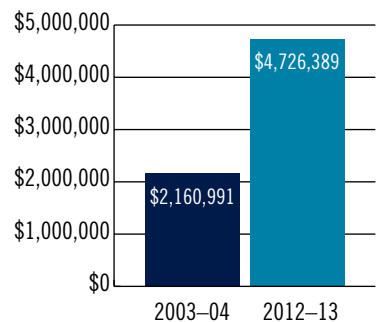
**FACULTY OF MEDICINE GRANTS:  
INCREASE IN PERCENTAGE OF STUDENTS  
RECEIVING ASSISTANCE**



**FACULTY OF MEDICINE GRANTS:  
INCREASE IN AVERAGE STUDENT GRANT**



**FACULTY OF MEDICINE GRANTS:  
INCREASE IN TOTAL ASSISTANCE**

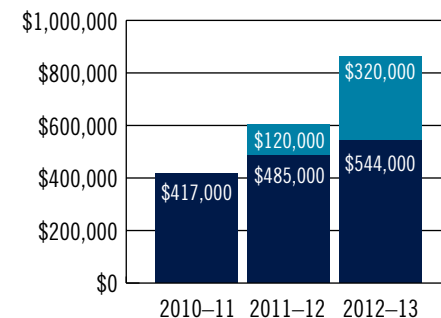


## Increased Bursary Support

Our high-needs bursary programs provide additional funding to students with particularly challenging financial situations.

- The Enhanced Bursary Program, introduced in 2005, is designed to assist MD students with the highest level of financial need.
- The Faculty of Medicine MD Admission Bursary Program was introduced in 2011–12 to provide assistance to applicants who might not otherwise apply for entry to the MD program due to financial constraints. In 2012–13, the number of admissions bursaries was increased from six to ten and the value of each bursary was increased from \$50,000 to \$80,000 over the four years of the MD program.
- A new “entire expense” bursary was introduced for September 2013 entry to the program. With an approximate total value of \$160,000, this bursary covers tuition and living expenses for one high-needs student per year over the four years of the MD program.
- A Need-based Travel Stipend was introduced in January 2012 to assist students with transit and travel costs related to second year family medicine longitudinal experiences, third year core clinical rotations, and fourth year selectives.

**TOTAL EXPENDITURES:  
HIGH NEEDS BURSARIES**



## UME Residency Match

Our MD students are consistently matched into residency positions at a rate equal to or greater than the national average. In spring 2013, 97% of U of T MD students who applied to Canadian residency positions were matched in the first round of CaRMS, in comparison with the national average of 95%. 60% of our students matched to U of T residency programs. We are also pleased that 35% of our graduates matched to the specialty of Family Medicine.

### First Round CaRMS Match

SPRING 2013	
U of T	97%
National Average	95%

### Medical Council of Canada Qualifying Examination (MCCQE) Part I Results

The Medical Council of Canada (MCC) is a national body which grants a qualification known as the Licentiate of the Medical Council of Canada (LMCC). Upon completion of medical school, MD graduates demonstrate competence by successfully completing the Part I of the Medical Council of Canada Qualifying Examination (MCCQE). The MCCQE Part I assesses knowledge, clinical skills and attitudes as outlined by the Medical Council of Canada Objectives. (Part II follows after one year of residency.)



SPRING 2013  
PASS RATE



# About the Programs

## Medical Radiation Sciences Program

The Medical Radiation Sciences (MRS) program is a second-entry, professional undergraduate program jointly administered by the Department of Radiation Oncology, Faculty of Medicine and The Michener Institute for Applied Health Sciences. This special partnership combines the strengths of the two institutions and makes full use of their complementary resources and expertise to offer both a Bachelor of Science in Medical Radiation Science (BScMRS) from the U of T and an Advanced Diploma in Health Sciences from The Michener Institute. This collaboration has contributed to an exceptional level of program integration in all three of the program's disciplines: radiological technology, nuclear medicine technology, and radiation therapy. The program remains unique in Canada as the only undergraduate program of its kind to award its graduates with both a bachelor's degree and advanced diploma.

The Medical Radiation Sciences program is offered in an intensive 32 consecutive month format and is comprised of didactic teaching, simulation and clinical courses. The integrated three-year curriculum provides students in each of the three disciplines a broadly based theoretical and analytical core foundation along with discipline-specific courses and clinical practice activities for their professional responsibilities. The clinical practicum components of the program, which are delivered at affiliated hospital sites, integrate and apply the material taught in lectures and labs.

*The program remains unique in Canada as the only undergraduate program of its kind to award its graduates with both a bachelor's degree and advanced diploma.*

## Nuclear Medicine Redesign

A challenge within medical radiation sciences in general is the need to balance changes in clinical practice and technology with the needs and expectations of students. Due to changes in the nuclear medicine technology discipline in particular, the program agreed that a redesign was in order. In February 2012, the program's Joint Management Committee suspended intake to the nuclear medicine discipline for the 2012–13 and 2013–14 academic years. Over 2012–13, the program consulted broadly with various professional stakeholder groups (clinical managers, educators, professional associations, etc.) and sought expertise from curriculum design experts and medical imaging professionals. A redesign of the curriculum and change of name to nuclear

medicine and molecular imaging technology was approved by the Faculty of Medicine in the spring 2013, and the program is involved in an active recruitment campaign for the 2014–15 academic year. When the newly designed nuclear medicine and molecular imaging technology discipline is launched in September 2014, it will include a hybrid of synchronous and asynchronous learning methods. In addition, the curricular modules and components will be integrated across a longitudinal course that will run over the fall and winter terms of each of the first two years of the program, and which will support an educational experience that more effectively replicates the realities of clinical practice.

## MRS Admissions

### FOR SEPTEMBER 2012 ENTRY

	RADIOLOGICAL TECHNOLOGY	NUCLEAR MEDICINE	RADIATION THERAPY	TOTAL (SEPT 2012)	TOTAL (SEPT 2011)
Applicants	195	42	175	412	437
Successful Candidates	39	n/a*	53	92	112

\*Intake to the nuclear medicine discipline was suspended for the 2012–13 and 2013–14 academic years. A redesign of the curriculum and change of name to nuclear medicine and molecular imaging technology was approved by the Faculty of Medicine in spring 2013. The program is involved in an active recruitment campaign for the 2014–15 academic year.

## MRS Enrolments

<b>TOTAL NUMBER OF MRS STUDENTS (2012–13)</b>	<b>316</b>
in radiological technology	109
in nuclear medicine	55
in radiation therapy	152

# About the Programs

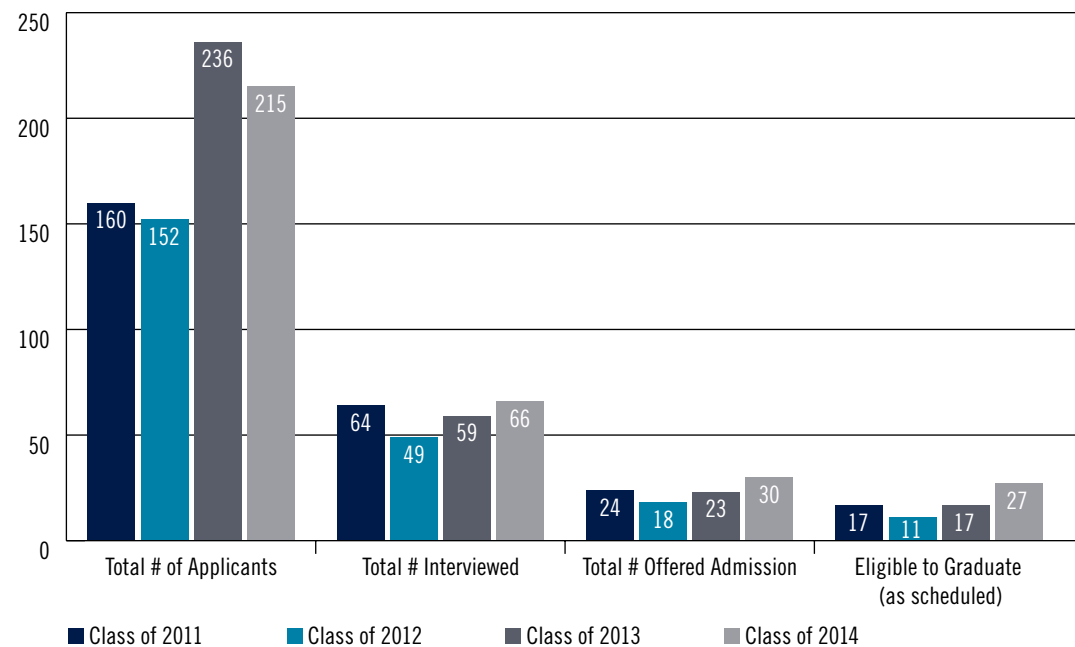
## Physician Assistant Program

The Physician Assistant (PA) program is a second-entry, professional undergraduate program based in the Department of Family and Community Medicine (DFCM) in the Faculty of Medicine. The Bachelor of Science Physician Assistant degree (BScPA) is delivered in collaboration with Northern Ontario School of Medicine (NOSM) and The Michener Institute for Applied Health Sciences. The three institutions form the Consortium of PA Education and collaboratively participate in the development, administration and delivery of the degree program.

The BScPA is a distance and distributed education program. While the majority

of the program is delivered on-line, students also attend classroom and lab-based sessions at specific intervals throughout the program. These “Residential Blocks” are used for simulation-based learning and assessments, for skills development, and for integration with other health professions learners for inter-professional education opportunities. During the second year of the program, students focus on learning in clinical placements, with rotations in both northern and southern Ontario. The interprofessional curriculum (associated with the Faculties of Health Sciences at the U of T) is incorporated as a mandatory part of the program.

### PHYSICIAN ASSISTANT PROGRAM ADMISSIONS AND STUDENT DATA



Class of 2011 (January 2010 – December 2011), Class of 2012 (January 2011 – December 2012), Class of 2013 (January 2012 – December 2013), Class of 2014 (January 2013 – December 2014)

## Academic Teaching

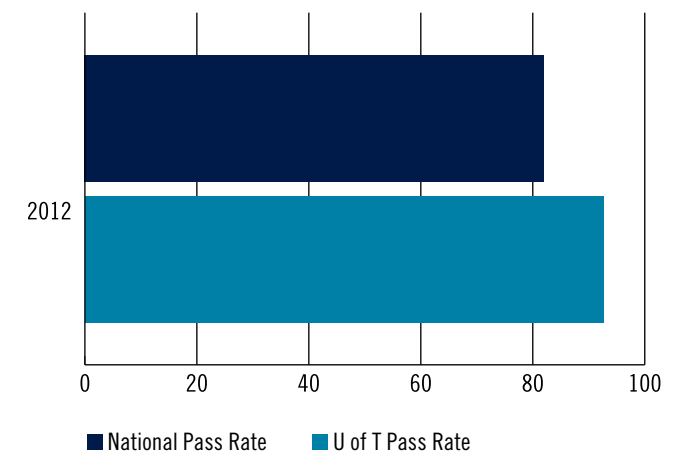
The Physician Assistant program invites guest teachers to assist in the delivery of the academic program for simulation and online Problem Based Learning (ePBL) facilitation. These teachers include residents from a variety of disciplines, U of T faculty, community based physicians, and practicing PAs. Recently, the program has included some BScPA program graduates in small group facilitation and as clinical preceptors. The involvement of those with experience in the PA profession is highly appreciated by the learners, particularly as the profession is relatively new in Ontario, with small numbers of practicing PAs and few physicians with experience working with PAs.

## Clinical Placements

Since program inception, we have become affiliated with 135 clinical sites across Ontario in 56 different communities. Over 300 clinical preceptors have been involved in the clinical training of the BScPA students. Preceptors include faculty at NOSM, U of T, Michener, and other Ontario institutions.

## Physician Assistant Certification Council of Canada (PACCC) National Certification Exam Results

At the October 2012 sitting of the PACCC National Certification Exam, graduates of the BScPA program represented 15.5% of candidates who wrote the exam. The pass rate of our BScPA graduates was 92%, compared to the national pass rate of 82%.



## Accreditation

### Undergraduate Medical Education

In October 2012, the Undergraduate Medical Education (MD) program received a report from the Committee on Accreditation of Canadian Medical Schools (CACMS) and Liaison Committee on Medical Education (LCME), which are the two organizations jointly responsible for medical school accreditation in Canada. The program was delighted to receive full accreditation for the maximum allowed term of eight years (until May 2020).

In their findings, the CACMS-LCME identified several notable strengths of the MD program at U of T:

- strong institutional support for education demonstrated by effective leadership at all levels
- a supportive culture for excellence in education evidenced by substantial financial investments
- a strong academy structure providing an educational home base for smaller groups of students, supported by the leaders of our affiliated hospitals
- effective use of “human, physical, financial and organizational resources to create a culture of healthy competition around excellence in education and research among its students, teachers and affiliated partners”

The accreditation process involves representatives from the CACMS and LCME assessing whether the medical school is in compliance with each of 128 accreditation standards. To make this assessment, a survey team reviews extensive written materials prepared by the program and then conducts a site visit, which includes interviews with all relevant constituents. The site visit – which took place over four days in May 2012 – was the culmination of eighteen months of intensive reflection and self-study by faculty, staff and students regarding all aspects of the program.

Although the results of the site visit were positive – of the 128 accreditation standards, 119 were judged by the CACMS-LCME to be fully in compliance – the program was required to provide a status report on actions taken and progress made with respect to three areas of noncompliance and six areas that were in compliance but required monitoring. The CACMS-LCME findings were used as an opportunity to further refine, enhance and strengthen the program. Under the leadership of Dr. Martin Schreiber, Director, Curriculum & Senior Academic Coordinator, Accreditation, and thanks to the contributions of all those who participated directly in the accreditation process, a very thorough and comprehensive follow-up status report was submitted to the accrediting bodies in July 2013.

### Medical Radiation Sciences Program

The Medical Radiation Sciences (BScMRS) program underwent an accreditation review in 2012–13 by the Conjoint Accreditation Services of the Canadian Medical Association (CMA). The required documentation was submitted to the CMA in June 2012. Following submission of a Phase I report in October 2012, the program prepared for an onsite clinical visit, which has held in January 2013. After addressing concerns expressed by the surveyors, all three of the program’s disciplines (radiological technology, nuclear medicine, and radiation therapy) were granted accreditation for the maximum allowed term of six years (until 2019).

### Physician Assistant Program

In December 2011, the Physician Assistant (BScPA) program received accreditation status from the Canadian Medical Association (CMA) for the maximum allowed term of six years (until December 2017).



# Supporting Our Students

*Supporting students is essential to the development of future academic health professionals*

Supporting students is essential to the development of future academic health professionals who will contribute to our communities and improve the health of individuals and populations through the discovery, application and communication of knowledge. The role of the Office of Health Professions Student Affairs (OHPSA) is to provide such support and enhance student resilience, enabling our students to achieve their full potential academically, in personal growth, and in their professional development. The OHPSA serves students in the Undergraduate Medical Education (MD), Medical Radiation Sciences (MRS), Physician Assistant (PA), Occupational Science (OS), and Occupational Therapy (OT) programs. Under the leadership of Dr. Leslie Nickell, Associate Dean, the OHPSA:

- provides personal, academic, and career counselling services through a dedicated and knowledgeable team of counsellors
- supports the Summer Mentorship Program (which aims to provide high school students from under-represented populations an opportunity to experience the university environment and exposure to the health sciences as potential future career options) and other early exposure diversity outreach initiatives
- works with the student Medical Society to support a robust community affairs portfolio
- facilitates a range of student life activities and initiatives

## OFFICE OF HEALTH PROFESSIONS STUDENT AFFAIRS (OHPSA) COUNSELLING APPOINTMENTS (not including informal meetings and email correspondence)

	2009–10	2010–11	2011–12	2012–13
Personal	640	837	852	962
Career	360	450	825	1415
Academic	51	49	48	46
Associate Dean	203	168	224	225

## OHPSA Highlights from 2012–13

### Supporting Wellness

In July 2010, an **Integrated Wellness Task Force** was established, chaired by Dr. Leslie Nickell, Associate Dean, OHPSA. Based on an extensive literature review of medical student wellness, which was conducted with the assistance of a medical summer student, the task force developed a wellness definition as well as a vision and goals for a wellness program, both of which were released in 2012–13. Next steps include the development of a more formalized UME wellness program as well as consideration of how to most effectively cultivate an integrated culture of wellness across all of our programs. To support these next steps, the Task Force initiated a longitudinal research project in conjunction with The Wilson Centre. Focusing on the relative contributions of environmental and individual factors on students' mental health and distress levels, the goal of the project is to develop conceptual models of stress and vulnerability that can inform interventions to equip students with the skills required to sustain the stress of health professions training and practice. A second project, currently in planning, involves looking at present UME programs and addressing their protective factors in building student resilience to the inherent stresses in medical school.

### Supporting Career Management

The process of choosing a medical specialty and the preparation that comes with it is a stressful process for many students. In 2012–13, the commitment by the OHPSA and Career Counselling Services to address this concern included offering **invited career appointments** to every MD student in every year throughout the duration of their program.

2012–13 also saw the appointment of Dr. Jon Novick as the first **Faculty Lead in Career Exploration**. In addition to providing oversight and management of the Enriching Educational Experiences (EEE) program, Dr. Novick's role as Faculty Lead includes facilitating important linkages among the Electives office, Academies and Clinical Departments, particularly with respect to student career planning. The expansion of shadowing experiences for the preclerkship students, as well as ensuring equitable and accessible clinical opportunities, are also key mandates of the Faculty Lead in Career Exploration.

**Check Your Pulse** is an innovative wellness initiative in which first year students are invited to make an appointment with one of the OHPSA personal counselors to have a check-in to see how the first year of medical school is shaping up. During the visit, the student's adaptation to school and general wellness are assessed, and potential areas of risk are identified. In the first two years of the program, which was initiated in 2011, 27% of first year students attended a Check Your Pulse session.

### Supporting Academic Success

This past year saw the vision of a full-time **academic coach and educational consultant** come to fruition. The new position, which was developed over 2012–13, will fill two mutually-related needs: academic support for students, including the development of proactive approaches to identifying students in academic difficulty and consideration of student learning challenges, and consultative support for faculty regarding teaching and learning trends, curriculum design, evaluation and remediation.



# UME Strategic Plan Implementation Highlights

The Faculty of Medicine Strategic Plan (2011–16) is grounded in three core concepts – integration, innovation and impact – and is based on six overarching goals. **High quality education** is one of the Faculty's primary goals: "U of T Faculty of Medicine is recognized for top-ranked, innovative education programs that apply leading-edge teaching and learning models and new knowledge relevant to all health professional and graduate students." Some of the many UME strategic activities from 2012–13 that support achievement of the Faculty of Medicine education goals are highlighted in this section of the report.

## Reaching Out to Diversify Our Student Body

In alignment with the Faculty of Medicine *Diversity Statement*, we are committed to maximizing opportunities for students from diverse backgrounds and under-represented populations to gain admission to the MD program. The **Summer Mentorship Program (SMP)** provides high school students from under-represented populations with an opportunity to explore health sciences at the U of T over four weeks in July. SMP participants are exposed to the university environment and professional careers in the health sciences, and learn through experiments, simulation experiences, mentorship by health professions students, lectures and shadowing of health care professionals in many clinical settings. The SMP is offered to approximately 50 students each year.

Enhanced SMP outreach over the 2012–13 academic year, including presentations to school groups and participation at education fairs throughout the Greater Toronto Area, contributed to a 100% increase in the number of SMP applications for summer 2013.

## SMP Outcomes

97% of SMP alumni have completed or are currently pursuing post-secondary education. Of those:

- 20% are in a health sciences field
- 4% are in medicine

Based on responses from 52% of SMP graduates from 1994–2011 (n=302)



INCREASE IN SMP APPLICATIONS  
FOR SUMMER 2013



EDUCATIONAL TRAJECTORIES  
OF SMP ALUMNI

## Early Exposure Initiatives

An important component of our diversity strategy is to facilitate and support early exposure of under-represented youth to health sciences education and professions. One of the ways in which this strategy is being operationalized is through partnerships with organizations whose mandates align with our diversity goals. Led by Ike Okafor, our Senior Officer, Service Learning & Diversity Outreach, UME expanded its community outreach in 2012–13 to initiate partnerships with organizations such as the Black Physicians Association of Ontario, which is a not-for-profit organization that enhances professional development outcomes of Black Canadians and other under-represented youth in the health sciences field, and the Working Women's Centre, which works with under-represented youth from low-income backgrounds in Toronto. In 2012–13, a new initiative was developed and implemented in collaboration with medical students from the University Discovery and Career Exploration (UDACE) student group, which is a student-led initiative that exposes high school students to various programs and faculties at the U of T. As part of this new initiative, U of T medical students visit high schools in priority communities across Toronto to promote post-secondary education and the health science professions among students under-represented in health sciences education and professions.



## UME Strategic Plan Implementation Highlights

### Supporting Indigenous Students

Indigenous Peoples of Canada (First Nations, Inuit, and Métis) are one of the three groups of students identified for priority attention in the Faculty of Medicine *Diversity Statement*. The **Indigenous Student Application Program (ISAP)** promotes and supports Indigenous student entry into the medical school. Through the ISAP, applicants who self-identify as Indigenous are invited to participate in a welcoming and culturally safe admissions process. The ISAP was approved by Faculty Council in November 2011. The first intake for entry to the MD program through the ISAP was for September 2012, and the ISAP was fully implemented over the 2012-13 academic year. Since its inception, the ISAP has contributed to an encouraging increase in the number of applications from and enrollment of Indigenous students.

There was more than a **two-fold increase** in the number of Indigenous student applicants to the MD program from the 2010 cycle to the 2012 cycle

In January 2013, Dr. Jason Pennington and Dr. Lisa Richardson were appointed as the first **Curricular Co-Leads in Indigenous Health Education**. Drs. Pennington and Richardson play a central role with respect to intersections between Indigenous student recruitment, Indigenous health curriculum development within UME, and liaison activities with Indigenous community organizations. They have already made important contributions to the strengthening of curricular offerings in the MD program related to Indigenous health issues and Indigenous approaches to health.

Rochelle Allan was appointed in the summer 2013 as our new **Indigenous Peoples' Undergraduate Medical Education Program Coordinator**. She supports Indigenous medical students and other students in the Faculty seeking to learn more about Indigenous people and Indigenous concepts of health and healing, and is working to develop a comprehensive community outreach program.



From left: Jason Pennington, Rochelle Allan and Cat Criger.

Recognizing the important role of Elders as key knowledge carriers in Indigenous communities, Cat Criger was appointed in November 2013 as **Aboriginal Elder-in-Residence** in the Faculty of Medicine to act as a resource for UME students, faculty and staff.

The Curricular Co-Leads, Program Coordinator, and Aboriginal Elder-in-Residence jointly constitute an **Office of Indigenous Medical Education**, which officially opens in 2013–14.

### Admitting the Physicians of the Future

A key recommendation of *The Future of Medical Education in Canada (FMEC) MD Project Report* is that “Faculties of Medicine must enhance admissions processes to include the assessment of key values and personal characteristics of future physicians – such as communication, interpersonal and collaborative skills, and a range of professional interests – as well as cognitive abilities.” To develop a response to the challenge issued by FMEC, UME held an **Admissions Retreat** in April 2011, which was attended by over 90 individuals, representing medical students, residents, faculty, scholars, academic leaders and administrative staff. During the 2012–13 admissions cycle, UME took action, under the leadership of Dr. Mark Hanson, Associate Dean, UME Admissions and Student Finances, on **two key recommendations** from that retreat:

- A competency based and multiple independent sampling approach to file review, which enables a more effective balance between academic and non-academic factors, was implemented.
- A new Modified Personal Interview (MPI) format, which enhances consideration of key values and personal competencies required of future physicians, was developed and piloted for full implementation in the 2013–14 admissions cycle.

### Innovations in e-Learning: Introducing Mr. G.B.

Mr. G.B. is a **virtual patient module** developed under the leadership of Dr. Marcus Law, Director of Academic Innovation, and introduced into the undergraduate medical curriculum in 2012–13 to promote integration among three of the MD program’s first year courses: Structure & Function (for aspects of the patient’s anatomy, physiology and pathophysiology); Art & Science of Clinical Medicine (for aspects of the patient’s clinical findings); and Determinants of Community Health (for aspects of the patient’s social situation). Based on multiple real-life scenarios, Mr. G.B. is a 74-year-old widower with congestive heart failure. Through an interactive online case, together with tutorial instruction, students first encounter Mr. G.B. as a patient being assessed in an emergency department. The learning experience is designed to provide students with a chance to work through a clinical scenario from a physician’s perspective and helps support the development of their clinical reasoning skills. During their virtual encounter, students ask Mr. G.B. a series of questions, review his medical history, and consider the results of the physical examination and of investigations. The case concludes with assignments in which students draw on and integrate information from basic anatomy, cardiac and respiratory physiology, the social determinants of health, and the cardiorespiratory physical exam.



## UME Strategic Plan Implementation Highlights

### Integrating Ethics into First-Year Courses

Under the leadership of Dr. Pier Bryden, then-Faculty Lead for Ethics & Professionalism, the **ethics and professionalism sessions** offered in the first term of the MD program were integrated into three of the core courses in 2012–13. This was the first step towards further integration of ethics sessions throughout the entire two years of the preclerkship curriculum.

- In Structure and Function, students are introduced to the ethical obligations of the physician through a lecture focusing on models of bioethical decision-making. That lecture is followed by a small group tutorial facilitated jointly by ethicists and clinicians that draws on ethical dilemmas faced by medical students early in their training to shed light on medical professionalism, ethical principles, and ethical reasoning.
- The first year Determinants of Community Health course includes didactic teaching on public health ethics, as well as a small group tutorial on “Physician Social Responsibility: Are there limits?”. The tutorial draws on ethical dilemmas encountered by students in their community visits, global health electives, and other education-related community health experiences, with the objective being to assist students in developing approaches to these dilemmas related to their role as health advocates.
- In the Art & Science of Clinical Medicine, students take part in a session on power, boundaries and hierarchy jointly led by ethicists and clinicians. The session consists of encounters with standardized patients who act out ethical dilemmas that students may encounter in their clinical skills training and placements. Students are encouraged to identify and role play approaches to these dilemmas that are consistent with ethical principles and professional behavior.

All of the ethics and professionalism sessions have been highly rated by students, who have positively commented specifically on the integration within their course materials and the co-teaching model.

### Learning to Work Collaboratively

From the international (such as the World Health Organization) to the local (such as Health Force Ontario) level, interprofessional education has been identified as an essential component in the development of collaborative, practice-ready health care professionals. Interdisciplinary collaboration and communication are integral components of in-hospital care, and positive interactions between MD and non-MD health care professionals have been associated with good patient outcomes. To maximize the development of competencies in the domains of collaboration and communication, educators must rely on alternative teaching methods, such as shadowing activities. In 2012–13, a **shadowing activity** was introduced in the beginning-of-third-year Transition to Clerkship (TTC) course that marks the transition from preclerkship to clerkship.

Working in collaboration with the Centre for Interprofessional Education and the Academy Directors, the new shadowing activity was developed under the leadership of Dr. Mark Bonta, Faculty Lead, Collaborator Role. The shadowing activity took place at eight different institutions over a three-hour period. Each student was randomly assigned one health care professional (all disciplines in the hospital were included, ranging from nursing staff to laboratory technicians) and shadowed them for the morning. Prior to the activity, the students met in a central location where they were introduced to the activity and provided with a series of reflective questions intended to guide their experience. These questions were based on the learning objectives of the activity, which centered around developing an awareness of the roles and responsibilities of different health care professionals as they pertain to patient care; fostering the communication skills that facilitate effective collaboration; and, identifying the components of the interprofessional teams responsible for excellent health outcomes in patients. By seeing health care through the lenses of different health care professionals, medical students gain a new perspective on patient care and a more accurate understanding of what ‘other players on the same team’ contribute.

### Working With(in) the Community

The **Mississauga Academy of Medicine (MAM)** officially opened in August 2011. Formed in partnership with the Faculty of Medicine, the University of Toronto Mississauga, and Trillium Health Partners, the MAM is the fourth of the Medical Academies at the U of T, but first in setting the standard for **community-based health professions education**.

In August 2011, the entering class of the MD program included, for the first time, 54 MAM students. That inaugural MAM class moved into year two of the MD program in 2012–13. As part of the MD program’s second year determinants of community health (DOCH-2) course, students were required to complete a research project using appropriate methods to study determinants of health and their relationship to a health issue in a defined population. Thanks to ongoing liaison activities, six research methods tutors and over 70 community agencies were successfully recruited, and we were able to offer a full roster of projects for MAM students.

In March 2013, the first ever MAM Clerkship Information Day was held for the inaugural clerkship MAM class. Trillium Health Partners achieved over 75% capacity across the ten mandatory clinical rotations in the first year of clerkship at the MAM for 2013–14.



### Supporting Our Teachers

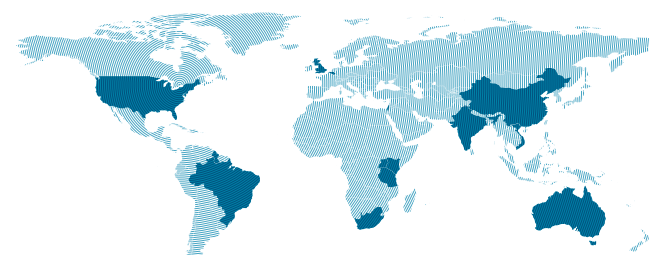
In conjunction with the launch of the Mississauga Academy of Medicine (MAM) in August 2011, a new **faculty development program** to support medical staff at Trillium Health Partners was created under the leadership of Dr. Jana Bajcar, Faculty Development Director for MAM. The program consists of a variety of faculty development opportunities that have been customized and locally delivered to meet the needs of the Mississauga medical community. In 2012–13, 837 participants took part in 82 MAM-based faculty development sessions. Twenty of those sessions brought departments at Trillium Health Partners together to discuss best practices for incorporating learners into their practice, while 41 of the sessions provided ongoing support for MAM tutors and seminar leaders who teach in the preclerkship curriculum. In addition, 21 sessions were offered to support preclerkship and clerkship teaching through general teaching skills development, general orientations and leadership development.



## UME Strategic Plan Implementation Highlights

### Health Knows No Boundaries

The Transition to Residency (TRR) curriculum was revised in 2012–13 to include opportunities for **international selectives**, which allow students to experience the rich diversity of international health settings while supporting achievement of the TRR educational goals and objectives. Selectives have taken place in well-resourced clinical settings in traditional locales such as the United Kingdom, the Netherlands, Israel, Australia, and the United States. Other selectives in low-resourced settings, mostly initiated by students, have involved work in rural South Africa, Kenya, Uganda, Tanzania, Vietnam, China, India, and inner city locales in Guyana and Brazil. Students are educated prior to departure about their potential effect on the health care environment of the locale, about safety issues, and how to adapt to local conditions. They have a Toronto-based supervisor who maintains contact with the student during the experience, and who also assists the local supervisor in evaluating the student's performance.



### Developing New Educational Pathways

The development of competency-based and flexible approaches to medical education is one of the ten recommendations of *The Future of Medical Education in Canada (FMEC) MD Project Report*. Based on the recommendations of the 2012 Faculty of Medicine Task Force on Physician Scientist Education, an **integrated pathway of physician-scientist education** along the continuum of undergraduate, graduate and postgraduate medical education is under development. Led by Dr. Norman Rosenblum, Associate Dean, Physician Scientist Training and supported by Nataliya Korchagina, Project Manager, the Task Force's vision of a distinct pathway for the education of research-interested students and residents is being transformed into a working model of an integrated training pathway. Guided by the principles of integration, customization, flexibility and innovation, and harnessed to facilitate student aspiration, success and career sustainability, the pathway model provides the basis for the design of specific implementation components. The draft model includes:

- integration of graduate-level and medical curriculum featuring graduate-level seminars that complement specific aspects of the undergraduate curriculum
- graduate-level courses that prepare pathway students for intensive graduate-level research
- a community of physician-scientist mentors and educators
- linkage between customized educational pathways in undergraduate and postgraduate education
- customized postgraduate training pathways



# UME Awards

## UME Students

UME offers a significant number of student awards and scholarships, which have been established through the generosity of donations from private individuals and corporate bodies. Our student awards fall under the following eight categories:

- Admission Scholarships
- In-Course Awards
- Elective Awards
- Awards Requiring Application
- Convocation Awards
- Undergraduate Medical Program Medalists
- Research Support (CREMS)
- Ankle Award

In 2012–13, **203** medical students received **271** awards for a total amount in excess of **\$250,000**.

## The CREMS Program & Medical Student Research Day

The importance of research for the progress of medicine is widely recognized. The ability for critical thinking, scientific inquiry and generation of new medical knowledge are highly valued assets in physicians, who are in a position to contribute to both frontline clinical care and the advancement of medicine. The Comprehensive Research Experience for Medical Students (CREMS) Program is a unique research program in Canada that allows interested medical students to gain extracurricular research experiences in various structured programs without interrupting their medical studies. Students participating in a CREMS Program undertake an original research project under the supervision of a member from the U of T Faculty of Medicine. The research may be basic, clinical, applied biomedical, epidemiological or social science/humanities related to medicine or medical practice, and the project may involve laboratory experiments, prospective and retrospective clinical or social studies.

Students participating in a CREMS Program present their work at the Medical Student Research Day (MSRD), which is an annual one-day conference to showcase biomedical and other medicine-related research by U of T medical students. The MSRD includes poster presentations, oral presentations, awards and a keynote speaker. It not only provides a forum for presentation of medical student research, but also encourages discussion and interaction among all the medical students that participate in this important event.

At the 2012–13 MSRD on January 29, 2013, Dr. Peter Singer (CEO of Grand Challenges Canada and the Director of the McLaughlin-Rotman Centre for Global Health) gave a keynote address on research challenges in global health. There were over 180 students presenting posters from a range of nine different research categories, spanning diverse fields. Six students were selected by a panel of peer medical students to present their research at the event as oral presentations, and awards were given by faculty judges for the best poster presentation. The 2012–13 award winners are listed on the next page.

## Oral Presentations:

- **Health Care**  
Jennifer Campbell: *Public Attitudes towards Safer Drug Use Practices in British Columbia, Canada*
- **CREMS Scholar 2011**  
Robert Mitchell: *Neural Stem Cells Clonally Selected from Embryonic Stem Cells Promote Recover After Spinal Cord Injury*
- **Basic Science**  
Farshad Nassiri: *Riluzole mediated plasticity results in locomotor recovery after high cervical hemileision*
- **International Health**  
Johnny Nguyen: *Prevalence of Pain and barriers to Pain Management in Breast Cancer Survivors in Vietnam*
- **Clinical**  
Azra Premji: *Noninvasive positive pressure ventilation as a weaning strategy for intubated adults with respiratory failure*
- **MD/PhD**  
Jared Wilcox: *Forelimb function and tissue integrity of the injured spinal cord is improved following stem cell transplantation in a novel model of cervical injury*

## Poster Presentation Awards:

- **Basic Science**  
Michael Fridman: *TMEM43 mutation alters intercalated disc proteins and reduces conduction velocity in arrhythmogenic right ventricular cardiomyopathy*
- **Clinical**  
Mary Yang: *What is the added value of using functional outcomes in cervical spondylotic myelopathy?*
- **CREMS Scholar 2011**  
Mark Szykaruk: *The neuroprotective compound p7c3 and its analogue p7c3a20 enhances regenerative properties following sciatic nerve crush in neonatal rats*
- **CREMS Scholar 2012**  
Mostafa Fatehi: *The use of decellularized scaffolds to assess the proliferation and differentiation of lung progenitors*
- **Determinants of Community Health**  
Jordan Silverman: *Sociodemographic risk factors for pedestrian and cyclist collisions in Toronto intersections*
- **Determinants of Community Health**  
Milinana Vojvodic: *Assessing the impact of cochlear implants on healthcare utilization and patient satisfaction in deaf individuals*
- **First Year**  
Nardin Samuel: *Analysis of somatic copy number gains in pancreatic ductal adenocarcinoma implicates ECT2 as a candidate therapeutic target*
- **First Year**  
Liang Zeng: *An international prospective study establishing minimal clinically important differences in the EORTC QLQ-BM22 and QLQ-C30 in cancer patients with bon*
- **Health Care**  
Andrew Kapoor: *Feasibility of remote proctoring fundamentals of laproscopic skills (FLS): a cost effective way to assess laproscopic proficiency*
- **International Health**  
Suparna Sharma: *Inhaled nitric oxide for the adjunctive therapy of severe malaria*
- **MD/PhD**  
Sean Nestor: *A direct morphometric comparison of five labeling protocols for multi-atlas driven automatic segmentation of the hippocampus in Alzheimer's disease*

# UME Awards

## UME Teachers

The 11th Annual Education Achievement Celebration was held on May 7th, 2013, at the Great Hall in Hart House, University of Toronto. Dr. Adalsteinn (Steini) Brown (Director, Institute of Health Policy, Management & Evaluation; Chair, Public Health Policy, Dalla Lana School of Public Health; Scientist in the Keenan Research Centre of the Li Ka Shing Knowledge Institute) gave a keynote address titled, *Evidence, Leadership, and Getting the Right Acronym: Lessons from a career in health policy.*

### W.T. Aikins Faculty Teaching Awards

These awards, named after William Thomas Aikins, the first Dean of the Faculty of Medicine following the 1887 reorganization, are the Faculty's most prestigious awards in Undergraduate Medical Education. Recipients of these awards have significantly contributed to high-quality undergraduate teaching by establishing and integrating new and effective methods of instruction into the undergraduate curriculum.

- **W.T. Aikins Faculty Teaching Award - Individual Teaching Performance (Large Group)**  
Jeffrey Wassermann,  
Department of Anesthesia
- **W.T. Aikins Faculty Teaching Award – Course/Program Development Coordination**  
Eleanor Latta, Department of  
Laboratory Medicine & Pathobiology
- **W.T. Aikins Faculty Teaching Award – Innovative Instructional Methods**  
Christopher Perumalla, Stephen  
Matthews and Nohjin Kee,  
Department of Physiology

### Medical Alumni Association Awards

The winners of the Medical Alumni Association Awards are honoured at Convocation. Award recipients are also acknowledged at the Annual Education Achievement Celebration in the following academic year.

- **E. Mary Hollington Award – Excellence in Preclinical or Basic Science Teaching**  
Ian Taylor, Department of Surgery
- **E. Mary Hollington Award – Excellence in Clinical Teaching**  
Martin Schreiber, Department  
of Medicine
- **Dean A. L. Chute Awards (The Silver Shovel)**  
Dante Morra, Department  
of Medicine





# Scholarly Activities by UME Teachers & Staff

Included below are scholarly activities from 2012–13 by teachers and staff who have major leadership roles in UME.

## PEER REVIEWED PUBLICATIONS

Bogoch, I., Frost, D.W., Bridge, S., Lee, T.C., Gold, W.L., Panisko, D.M., & Cavalcanti, R.B. (2012). Morning Report Blog: A Web-Based Tool to Enhance Case-Based Learning. *Teaching and Learning in Medicine*, 24(3), 238-41.

Borgman, R., Bajcar, J., Kennie, N., Fernandes, L., & Iglar, K. (2013). Program Description: A Curriculum to Enhance Pharmacotherapeutic Knowledge in Family Medicine: Interprofessional Co-Teaching and Web-based Learning. *Canadian Family Physician*, 59(11), e493-e498.

Chad, L., Dubinski, W., Hawkins, C., Pope, E., Bernstein, S., & Chiasson, D. (2012). Postmortem Vascular Pathology in PHACES Syndrome: A case report. *Pediatric and Developmental Pathology*, 15(6), 507-510.

Eskander, A., Shandling, M., & Hanson, M.D. Should the MCAT Be Used for Medical School Admissions in Canada? *Academic Medicine*, 88(5), 572-580.

Hanson, M.D., Kulasegaram, K.M., Coombs, D.L., & Herold, J. (2012). Admissions File Review: Application of Multiple, Independent Sampling (MIS) Methodology. *Academic Medicine*, 87, 1335-1340.

Hanson, M.D., Kulasegaram, K.M., Woods, N., & Fechtig L. (2012.) Resurrecting Reliable Personal Interviews for Admissions. *Academic Medicine*, 87, 1330-1334.

Jang, J.H., Alston, J., Tyler, I.V., Hau, M., Donovan, D., Johnson, I., Shore, B., & Shahin, M. (2013). Enhancement of Undergraduate Public Health Education through Public Health Interest Groups. *Academic Medicine*, 88, 1009-1014.

Madan, R., Hawa, R., Ballon, B., Silver, I., & Bernstein, S. (2012). Basic Essential Education Program (BEEP): A Brief Introductory Faculty Development Course for Medical Teachers. *Canadian Medical Education Journal*, 3(2), e159-e164.

Newsom, J., Estrada, C., Panisko, D.M., & Willett, L. (2012). Selecting the Best Clinical Vignettes for Academic Meetings: Should the Scoring Tool Criteria be Modified? *Journal of General Internal Medicine*, 27(2), 202-6.

Rosenfield, D., Etaki, M., & Bryden, P. (2013). Addressing Pediatric Mental Health Concerns. *Pediatric Child Health*, 18(6).

Tan, A., Hawa, R., Sockalingam, S., & Abbey, S. (2013). Disorientation of International Medical Graduates: An approach to Foster Teaching, Learning, and Collaboration. *Academic Psychiatry*, 37(2), 104-107.

Tracy, C.S., Bell, S.H., Nickell, L., Charles, J., & Upshur, R.E. (2013). The IMPACT clinic: innovative model of interprofessional primary care for elderly patients with complex health care needs. *Can Fam Physician*, 59(3), e148-55.

Young, M.E., Razack, S., Hanson, M.D., Slade, S., Varpio, L., Dore, K.L., & McKnight, D. (2012). Calling for a Broader Conceptualization of Diversity: Surface and Deep Diversity in Four Canadian Medical Schools. *Academic Medicine*, 87, 1501-1510.

## CONFERENCE POSTERS

Au, H. & Bernstein, S. (2012, October). *Mind the Gap! A Systematic Review of Pediatric Resident as Teacher Programs*. International Conference on Residency Education, Ottawa, Canada.

Au, H. & Bernstein, S. (2012, October). *Using Constructivism to Create a Teacher Education Curriculum for Pediatric Trainees*. International Conference on Residency Education, Ottawa, Canada.

Bajcar, J., Coates, P., Innes, L., & Leslie, K. (2013, April). *Development of a Faculty Development Program at a New Regional Expansion Campus: An innovative Integrated and Collaborative Approach*. Canadian Conference on Medical Education, Quebec City, Canada.

Bajcar, J., Coates, P., Innes, L., & Leslie, K. (2013, August). *Development of a Faculty Development Program at a New Regional Expansion Campus: An innovative Integrated and Collaborative Approach*. Association of Medical Education in Europe, Prague, Czech Republic.

Bisnath, C. & Dunlop, N. (2013, April). *Constructing a medical career: Building lifelong career management skills*. Canadian Conference on Medical Education, Quebec City, Canada.

Bisnath, C. & Dunlop, N. (2013, June). *Constructing a medical career: Building lifelong career management skills*. Careers in Medicine Professional Development Conference, San Diego, USA.

Hall, J., Woods, N., & Hanson, M.D. (2013, April). *What is the Admissions' Messaging to Medical School Applicants with Premedical Education in the Social Sciences/Humanities?* Canadian Conference on Medical Education, Quebec City, Canada.

Hudson, J., Sukerman, D., Gupta, R., Coates, P., & Bajcar, J. (2012, November). *Developing Confidence to Teach Clinical Skills to Medical Students: A just-in-time Faculty Development Strategy*. Annual Research in Medical Education Conference (AAMC), San Francisco, USA.

Hudson, J., Sukerman, D., Gupta, R., Coates, P., & Bajcar, J. (2013, August). *Developing Confidence to Teach Clinical Skills to Medical Students: A just-in-time Faculty Development Strategy*. Association of Medical Education in Europe. Prague, Czech Republic.

Kubasik, W., Abrahams, C., Muharuma, L., Chan, S., Rosenfield, J., Spadafora, S., & Verma, S. (2012, November). *An IT Solution for Measurement and Remuneration of University of Toronto Community Preceptor Activities*. Annual Research in Medical Education Conference, San Francisco, USA.

Kulman-Lipsey, S., Martin, C., & Nickell, L. (2013, February). *Enhancing Resilience in Medical School – Attention to Protective Factors*. Depression on College Campuses Conference, Staff of College Counselling Centres.

Murnaghan, M.L., Hanson, M.D., Yee, A., Nousiainen, M., Martimianakis, M.A., & Moulton, C.A. (2013, April). *Fellow Selection in Orthopaedics: A Qualitative Study*. Association for Surgical Education, Orlando, USA.

Murnaghan, M.L., Hanson, M.D., Yee, A., Nousiainen, M., Martimianakis, M.A., & Moulton, C.A. (2013, June). *Fellow Selection in Orthopaedics: A Qualitative Study*. Canadian Orthopaedic Association, Winnipeg, Canada.

Newman, P., Gao, L., Hudson, J., Law, M., Tyler, I., Wiley, M., & Nyhof-Young, J. (2013, April). *The "Heart" of Integration: Facilitating cross-course comprehension in preclerkship students using a virtual patient module and targeted assignment*. Canadian Conference on Medical Education, Quebec City, Canada.

Salvo, N., Hudson, J., Wong, D., Colapinto, M., & Nyhof-Young, J. (2012, April). *Let's Get Physical! A Needs Assessment and Development of a Merged Arts and Science of Clinical Medicine (ASCM) Handbook*. Canadian Conference on Medical Education, Quebec City, Canada.

Young, M., Razack, S., Hanson, M.D., Slade, S., Varpio, L., Herold, J., & McKnight, D. (2013, April). *The Diversity Sandbox: Curricular Implications for Medical Students' Self-Reported Pre-Medical Exposures to Persons from Diverse Groups*. Canadian Conference on Medical Education, Quebec City, Canada.

## CONFERENCE PRESENTATIONS

Bannister, S., Bernstein, S., & Moddemann, D. (2013, April). *Stop lecturing me – How to use interactive teaching techniques*. COMSEP Annual Meeting, Nashville, USA.

Bannister, S., Bernstein, S., & Moddemann, D. (2013, April). *Instilling Forms in your forms: Making competency-based assessment meaningful*. COMSEP Annual Meeting, Nashville, USA.

Brag, I., Verma, A., Fechtig, L., Hanson, M.D., & Anderson, G. (2013, April). *Perspectives on Leadership Development Among Medical Students Leaders*. Canadian Conference on Medical Education, Quebec City, Canada.

Bryden, P., Maadan, V., Dingle, A., Allen, A., & Dr. Wadekar, M. (2013, October). *Lessons in Ethics from Canada: More than the Maple Leaf*. Clinical Case Conference, American Academy for Child and Adolescent Psychiatry, Orlando, USA.

Devine, L., Stroud, L., Lorens, E., Panisko, D., & Robertson, S. (2012, August). *Numerical Transparency of component anchor values to examiners inflates clinical oral examination marks in an Internal Medicine clinical clerkship*. Association for Medical Education in Europe, Lyon, France.

Feldman, K., Keegan, D., Scott, I., & Goldstein, S. (2013, April). *Preclerkship Family Medicine Clinical Programs: The Canadian Experience*. Canadian Conference on Medical Education, Quebec City, Canada.

Fortin, Y., Hanson, M.D., Kealey, L., & Slade, S. (2013, April). *Does Age Matter in Medical School Admissions?* Canadian Conference on Medical Education, Quebec City, Canada.

Hanson, M.D., Young, M., Razack, S., Slade, S., Dore, K., Herold, J., Varpio, L., & McKnight, D. (2012, August). *Recruiting Top Medical School Applicants to Your School: Insight from a Student Opinion Survey*. Association for Medical Education in Europe (AMEE), Lyon, France.

Hanson, M.D., Kulasegaram, K.M., Coombs, D.L., & Herold, J. (2012, November). *Admissions File Review: Application of Multiple, Independent Sampling (MIS) Methodology*. Annual Research in Medical Education Conference (AAMC), San Francisco, USA.

Hanson, M.D., Kulasegaram, K.M., Woods, N., Fechtig, L., & Anderson, G. (2012, November). *Resurrecting Reliable Personal Interviews for Admissions*. Annual Research in Medical Education Conference (AAMC), San Francisco, USA.

Hanson, M.D., Young, M., Razack, S., Slade, S., Dore, K., Herold, J., Varpio, L., & McKnight, D. (2012, November). *Enhanced Recruitment Strategies for Top Medical School Applicants*. Annual Research in Medical Education Conference (AAMC), San Francisco, USA.

Hanson, M.D., Kealey, L., Fortin, Y., & Slade, S. (2013, April). *Medical Schools Competition for Applicants: Implications for Health Resource Planning*. Canadian Conference on Medical Education, Quebec City, Canada.

Holden, A., Salvo, N., Edell, H., Leung, F-H., Scott, F., & Tyler, I.V. (2013, April). *Integrating Online Resources into Public Health Teaching: A Blended Learning Approach*. Canadian Conference on Medical Education, Quebec City, Canada.

Hudson, J., Sukerman, D., Gupta, R., Coates, P., & Bajcar, J. (2013, April). *Developing Confidence to Teach Clinical Skills to Medical Students: A just-in-time Faculty Development Strategy*. Canadian Conference on Medical Education, Quebec City, Canada.

Hurst, C., Edwards, S., Martin, D., Nickell, L., & Muharuma, L. (2013, April). *"How am I going to make it through?" Exploring the adaptation experience of medical trainees who sought counselling supports during transition periods*. Canadian Conference on Medical Education, Quebec City, Canada.

Iglar, K., Law, M., Feldman, P., Grundland, J., Owen, J., & Skalenda, P. (2012, August). *Addressing Comprehensiveness in Experience and Assessment in a Competency-based Curriculum*. Association for Medical Education in Europe, Lyon, France.

Iglar, K., Law, M., & Skalenda, P. (2012, October). *Integrating Direct Observation into a Competency-based Curriculum*. International Conference on Residency Education, Ottawa, Canada.

Kulman-Lipsey, S., Martin, C., & Nickell, L. (2012, October). *Resilience and the myths of an Idyllic Childhood*. American College Counselling Association Conference, Orlando, USA.

Kulman-Lipsey, S., Martin, C., & Nickell, L. (2013, February). *Enhancing Resilience in Medical School – Attention to Protective Factors Poster Presentation*. Depression on College Campuses Conference. Staff of College Counselling Centres.

Law, M. & Mylopoulos, M. (2012, August). *Exploring Community Faculty Engagement in Education Scholarship*. Association for Medical Education in Europe, Lyon, France.

Law, M., Lulham, T., & Tait, G. (2012, October). *Virtual Interactive Case (VIC) System – A bridge between theory and practice*. First Montreal International Conference on Clinical Reasoning, Montreal, Canada.

Law, M. & Tait, G. (2013, April). *Virtual Interactive Case (VIC) System – A bridge between theory and practice*. Information Technology in Academic Medicine Conference, Ottawa, Canada.

Law, M., Shamji, D., Tannenbaum, E., & Leslie, K. (2013, June). *The Development of an E-Learning Faculty Development Resource through Faculty-Learner Partnership*. International Association of Medical Science Educators, St. Andrews, Scotland.

LeBlanc, V., Nickell, L., Brophy, K., & Rosenfeld, J. (2013, April). *Predictors of Stress and Trauma Symptoms in Medical Students*. Canadian Conference on Medical Education, Quebec City, Canada.

LeBlanc, V., Nickell, L., Brophy, K., & Rosenfeld, J. (2013, August). *Exploring Resilience to Stress and Trauma in Medical Students*. Association of Medical Education in Europe, Prague, Czech Republic.

Leslie, K., Onyura, B., Rosenfeld, J., Baker, L., Kitto, S., Legare, F., Silver, I., Armson, H., Hodges, B., & Reeves, S. (2013, April). *What's the Status of Knowledge Translation in Medical Education? A Preliminary Examination of Trends and Challenges in Canadian Medical Education*. Canadian Conference on Medical Education, Quebec City, Canada.

Loo, A., Leung, F.H., Scott, F., & Tyler, I. (2013, October). *In the Shoes: and experiential opportunity for medical students to learn about the determinants of health*. 8th Annual Teaching and Learning Symposium, Center for Teaching Support and Evaluation, Toronto, Canada.

Newman, P., Gao, L., Hudson, J., & Law, M. (2013, April). *The "Heart" of Integration: Facilitating cross-course comprehension in preclerkship students using a virtual patient module and targeted assignment*. Canadian Conference on Medical Education, Quebec City, Canada.

Ng, E., Bourque, D., Alli, D., Biderman, T., & Nickell, L. (2013, April). *Service Learning in Medical School: The University of Toronto Experience*. Canadian Conference on Medical Education, Quebec City, Canada.

Nickell, L. (2012, August). *Impact of Peer Facilitated Study Groups in Anatomy: An Innovative Model*. Association for Medical Education in Europe, Lyon, France.

Pittini, R., Bandiera, G., Spadafora, S., Pattern, A., Howard, F., Muharuma, L., Sharif, A., & Abrahams C. (2013, April). *Integrating web-based learner evaluation systems to enhance the evaluation of residents by clinical clerks*. Canadian Conference on Medical Education, Quebec City, Canada.

Rapoport, M.J., Seitz, D., Wiens, A., Horgan, S., & Law, M. (2013, March). *Online Continuing Medical Education in Geriatric Psychiatry: Preliminary evaluation of a national Canadian program*. Annual Scientific Meeting of the American Association for Geriatric Psychiatry, Los Angeles, USA.

Rapoport, M., Seitz, D., Wiens, A., Horgan, S., & Law, M. (2013, April). *Geriatric Psychiatry: Preparing experienced geriatric psychiatrists for the new Royal College Subspecialty Certification using blended learning methods*. Canadian Conference on Medical Education, Quebec City, Canada.

Rosenfeld, J. & Rungta, K. (2013, October). *Smoother transitions to and from Residency - Is a competency framework throughout medical education the solution?* International Conference on Residency Education, Calgary, Canada.

Shandling, M., Hanson, M.D. (2013, April). *Should the MCAT Be Used in Canada – a Debate*. AFMC Resource Group on Admissions Meeting, Canadian Conference on Medical Education, Quebec City, Canada.

Tait, G., Law, M., & Lulham, T. (2012, November). *Virtual Interactive Case (VIC) System – Online simulations providing a bridge between theory and practice*. Simulation Summit, Ottawa, Canada.

Tait, G., Lulham, T., & Law, M. (2013, April). *Virtual Interactive Case (VIC) System – A bridge between theory and practice*. MedBiquitous Annual Conference 2013, Baltimore, USA.

Tyler, I., Leung, F.H., Reeve, K.I., Rossier, K., & Scott, F. (2013, October). *The Last Straw*. 8th Annual Teaching and Learning Symposium, Center for Teaching Support and Evaluation, Toronto, Canada.

Wright, S. (2013, April). *Why is Medical Student Performance So Difficult to Predict?* Canadian Conference on Medical Education, Quebec City, Canada.

Young, M., Razack, S., Hanson, M.D., Slade, S., Varpio, L., Herold, J., & McKnight, D. (2013, April). *The Social Diversity of Applicants to Medical School: A Pilot Study from Two Canadian Schools*. Canadian Conference on Medical Education, Quebec City, Canada.

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## Undergraduate Medical Professions Education

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Annual Report  
2012-2013



UNIVERSITY OF TORONTO  
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