

This privileged communication
is the property of the
Committee on the Accreditation of Canadian Medical Schools
and the Liaison Committee on Medical Education

**TEAM REPORT
OF THE
FULL SURVEY OF THE**

**UNIVERSITY OF TORONTO
FACULTY OF MEDICINE**

Toronto, Ontario

May 13-16, 2012

**PREPARED BY AN *AD HOC* SURVEY TEAM
FOR THE
COMMITTEE ON THE ACCREDITATION OF
CANADIAN MEDICAL SCHOOLS
AND THE
LIAISON COMMITTEE ON MEDICAL EDUCATION**

TABLE OF CONTENTS

	Page
COVERING MEMORANDUM FROM TEAM SECRETARY TO CACMS/LCME	3
INTRODUCTION AND COMPOSITION OF SURVEY TEAM	4
SUMMARY OF SURVEY TEAM FINDINGS	5
PRIOR FULL ACCREDITATION SURVEY	7
VISITS/STATUS REPORTS	10
THE MEDICAL EDUCATION DATABASE AND INSTITUTIONAL SELF-STUDY	11
HISTORY AND SETTING OF THE SCHOOL	12
I. INSTITUTIONAL SETTING	13
A. Governance and Administration	14
B. Academic Environment.....	15
II. EDUCATIONAL PROGRAM FOR THE MD DEGREE.....	18
A. Educational Program Objectives.....	18
B. Structure of the Educational Program	19
C. Teaching and Assessment	30
D. Curriculum Management	36
E. Evaluation of Program Effectiveness	40
III. MEDICAL STUDENTS	41
A. Admissions.....	41
B. Student Services	44
C. The Learning Environment	47
D. Student Perspective	50
IV. FACULTY	50
A. Number, Qualifications, and Functions	50
B. Personnel Policies	52
C. Governance	52
V. EDUCATIONAL RESOURCES	53
A. Finances	54
B. General Facilities	54
C. Clinical Teaching Facilities.....	55
D. Library Services and Information Resources	55
APPENDICES	57

APPENDICES

	Page
A. Schedule of the visit.....	58
B. Summary of self-study findings; composition of self-study task force and committees	76
C. Maps	155
D. Summary of strategic plan	157
E. Current entry in the AAMC Directory of American Medical Education	159
F. Dean’s Office Organizational chart	161
G. Resume and biography of the dean.....	162
H. UME organizational chart.....	197
I. Graduate student enrolment	198
J. Resident enrolment	199
K. Table on institutional diversity	200
L. Curriculum schematic.....	201
M. Educational program objectives	202
N. Required clinical experiences	209
O. Inventory of required subjects	222
P. Organizational chart to manage curriculum.....	226
Q. Outcomes used to verify program effectiveness.....	227
R. MCCQE Part I results.....	262
S. CaRMS data (Residency match results)	276
T. Student enrolment	276
U. Mean pre-medical GPAs for the past eight years	278
V. Table of number of students who left school, had academic difficulty or took a leave of absence.....	279
W. Sample Medical Student Performance Record	280
X. Information on pipeline programs	284
Y. Financial aid support.....	287
Z. Narrative from student analysis	288
AA. CGQ data	324
BB. Faculty numbers / Faculty teaching responsibilities.....	371
CC. Table on faculty scholarly productivity	380
DD. Faculty committees.....	382
EE. Revenue/expenditures.....	386
FF. Facilities.....	388
GG. Master affiliation agreement.....	391
HH. Library holdings	464

MEMORANDUM

TO: Committee on the Accreditation of Canadian Medical Schools
Liaison Committee on Medical Education

FROM: The Secretary of the *ad hoc* Survey Team That Visited the University of Toronto Faculty
of Medicine on May 13-16, 2012

RE: Report of the Survey Team

On behalf of the *ad hoc* CACMS/LCME survey team that visited the University of Toronto, Faculty of
Medicine on May 13-16, 2012, the following report of the team's findings and conclusions is provided.

Respectfully,

Donald W. McKay, Team Secretary

INTRODUCTION

A survey of the University of Toronto, Faculty of Medicine was conducted on May 13-16, 2012 by the following *ad hoc* team representing the Committee on the Accreditation of Canadian Medical Schools (CACMS) and the Liaison Committee on Medical Education (LCME):

Chair:	Tom Feasby, MD Dean of Medicine University of Calgary Calgary AB Canada T2N 4N1	Neurology
Secretary:	Donald W. McKay, PhD Associate Dean, UGME Memorial University of Newfoundland St. John's NL Canada A1B 3V6	Physiology
LCME-appointed Member:	Warren P. Newton, MD, MPH Vice Dean for Medical Education University of North Carolina School of Medicine Chapel Hill NC USA 27599-7595	Family Medicine
CACMS-appointed Member	Susan Andrew, PhD Associate Professor University of Alberta Faculty of Medicine and Dentistry Edmonton AB Canada T6G 2H7	Medical Genetics
CACMS Observer:	Charmaine Roy, MD 221 Brant Avenue Brantford, ON Canada N3T 3J2	Obstetrics/Gynecology

The team expresses its appreciation to Dean Catharine Whiteside, faculty, students, staff and representatives of affiliated agencies for their engagement and candor during the survey visit. Everyone was helpful and accommodating. Dr. Martin Schreiber, Vice-Dean Jay Rosenfield and Ms. Jennifer Anderson deserve special commendation for their helpfulness, preparation and fine attention to detail.

A copy of the survey visit schedule is included in Appendix A.

SUMMARY OF SURVEY TEAM FINDINGS

DISCLAIMER: This report summarizes the findings and professional judgments of the *ad hoc* survey team that visited the University of Toronto, Faculty of Medicine on May 13-16, 2012, based on the information provided by the school and its representatives before and during the full survey visit, and by the CACMS and the LCME. The CACMS and the LCME may come to differing conclusions when they review the team's report and any related information.

I. Institutional Setting

Areas of 'Strength'

- Institutional support for education is demonstrated by effective leadership at all levels, notably in the dean's office, and extending to leadership of the affiliated partners.
- Substantial financial investment and a commitment to collaborative work across many jurisdictions combine to create a supportive culture for excellence in education across all sites.

Areas of 'In Compliance with Monitoring'

IS-16. An institution that offers a medical education program must have policies and practices to achieve appropriate diversity among its students, faculty, staff, and other members of its academic community, and must engage in ongoing, systematic, and focused efforts to attract and retain students, faculty, staff, and others from demographically diverse backgrounds.

Finding: The school created a new definition of diversity and developed interventions to achieve appropriate diversity for medical students. The school is developing a strategy for other learners and faculty. Monitoring of program effectiveness is ongoing.

Areas of 'Noncompliance'

None

II. Educational Program for the MD Degree

Areas of 'Strength'

- The academy structure provides an educational home base for smaller groups of students and aligns undergraduate medical education, post-graduate medical education and hospital practice. Broad support from the leaders of all hospitals underpins this success.

Areas of 'In Compliance with Monitoring'

ED-30. The directors of all courses and clerkship rotations in a medical education program must design and implement a system of fair and timely formative and summative assessment of medical student achievement in each course and clerkship rotation.

Finding: The school recently enhanced its system for the timely reporting of clerkship grades. The school and faculty report 100% success in timely grade reporting over the past three clerkship rotations.

Areas of 'Noncompliance'

ED-27. A medical education program must include ongoing assessment activities that ensure that medical students have acquired and can demonstrate on direct observation the core clinical skills, behaviors, and attitudes that have been specified in the program's educational objectives.

Finding: A system for ensuring direct observation of history and physical examinations was not consistent across all core clerkship rotations. The CGQ, independent student analysis, institutional self-study and comments from residents identified some continuing issues, especially in Surgery. Processes to correct these deficiencies were initiated but are not yet fully effective.

ED-38. The committee responsible for the curriculum at a medical education program, along with program's administration and leadership, must develop and implement policies regarding the amount of time medical students spend in required activities, including the total number of hours medical students are required to spend in clinical and educational activities during clinical clerkship rotations.

Finding: A policy limiting daytime duty hours for clerks was recently implemented. Some students are not following this policy. Furthermore, some students, supervising residents and junior faculty are unaware of this new policy.

III. Medical Students

Areas of 'Strength'

None

Areas of 'In Compliance with Monitoring'

MS-8. A medical education program must develop programs or partnerships aimed at broadening diversity among qualified applicants for medical school admission.

Finding: Partnerships to enhance the diversity of applicants to the medical school are in place. Evaluation of these programs is underway.

MS-19. A medical education program must have an effective system in place to assist medical students in choosing elective courses, evaluating career options, and applying to residency programs.

Finding: An inclusive system to assist medical students in choosing elective courses, evaluating career options, and applying to residency programs was enhanced to encourage the participation of all medical students. Preliminary feedback and high participation rates from 4th year clerks are positive, but results are not yet available for more junior students.

MS-23. A medical education program must provide its medical students with effective financial aid and debt management counseling.

Finding: Financial aid and debt management counseling were enhanced with new programs and more staffing. Data regarding program effectiveness are currently being collected.

MS-31-A: A medical education program must ensure that its learning environment promotes the development of explicit and appropriate professional attributes in its medical students (i.e., attitudes, behaviors, and identity).

Finding: Regarding the learning environment, the recent introduction of the 'Red Button' web-based initiative seems positive and appears to be widely known among those who were interviewed. Continued observation will determine its effectiveness.

Areas of 'Noncompliance'

None

IV. Faculty

Areas of 'Strength'

- The faculty members are talented, committed and productive. They showed evidence of cohesion, partnership and strong adherence to the Faculty's mission.

Areas of 'In Compliance with Monitoring'

None

Areas of 'Noncompliance'

None

V. Educational Resources

Areas of 'Strength'

- The medical school uniquely serves the City of Toronto with its population of 6 million people. It has effectively harnessed 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.

Areas of 'In Compliance with Monitoring'

None

Areas of 'Noncompliance'

None

PRIOR FULL ACCREDITATION SURVEY

The last full survey of the University of Toronto, Faculty of Medicine occurred on May 16-19, 2004.

The CACMS and the LCME identified the following institutional strengths:

- The Faculty of Medicine's planning processes are highly effective and have enabled the institution to manage a large and complex organization while fostering continued improvement of its academic programs.
- The Faculty continued to be remarkably successful in providing a sound medical education program for its students, and maintaining its pre-eminent stature in research.

- The institutional objectives for medical student learning are skillfully crafted and offer a practical framework for guiding curriculum management and evaluation, establishing relevant and measurable outcomes, and aligning undergraduate medical education with later stages of the continuum of physician education.
- The students have strong academic credentials, invest substantial effort in ongoing improvement of the curriculum, and engage in frequent and abundant extracurricular activities.
- As a defining element of the educational program, the Academy system facilitates close relationship between students and faculty members, provides a strongly supportive environment for learning and fosters synergy between the teaching hospitals and the Faculty of Medicine.
- The Donald R. Wilson Centre for Research in Education and the Faculty of Medicine Centre for Faculty Development at St. Michael's Hospital mutually enhance the substantial existing resources that support teaching and learning, and elevate both the quality and prominence of teaching.
- Large and well-supported library and information services systems effectively meet the information needs of student and faculty, and are acknowledged by students as an ongoing institutional strength.
- The aggregate clinical enterprise, including the Faculty's practice plans, the primary and partially affiliated hospitals, and the Alternative Funding Plans, brings impressive support for undergraduate medical education in terms of funding, faculty, house staff, and a large and diverse patient base.
- The Faculty has carefully shepherded the financial resources from its highly productive research and clinical enterprise to sustain the high quality of its academic program and services.

The CACMS and the LCME identified the following areas of partial or substantial noncompliance:

ED-30: The directors of all courses and clerkships must design and implement a system of formative and summative evaluation of student achievement in each course and clerkship.

Finding: Although the Faculty maintains an expectation that formal mid-rotation feedback will be provided, the database indicates that some clerkships employ informal strategies that may not reach students who would most benefit from a structured review of their performance. The student survey notes that mid-term in evaluation in clerkships “would be more meaningful if it was conducted as a formal feedback session and contained specific information that could add dimension to a student's marks.”

MS-4: The final responsibility for selecting students to be admitted for medical study must reside with a duly constituted faculty committee.

Finding: The database notes, and the survey team confirms, that the principal functions of the Admissions Committee are to advise on admissions policies and processes and to review applicant files as requested. The final authority for selection of students, however, is vested exclusively in the Director of Admissions. The survey team recognizes that this problem is one of organizational structure relative to the accreditation standard, and does not reflect on the unquestioned integrity of the person who serves as admissions director or the equity of admissions practices.

MS-19: There must be a system to assist student in career choice and application to residency programs, and to guide students in choosing elective courses.

Finding: The self-study notes that while extensive career counseling is available, “typically only those students who are self-motivated seek it.” Less than half of the respondents to the most recent Graduation Questionnaire express satisfaction with career counseling activities. Efforts to provide appropriate guidance for students in elective choices appear to be fragmentary and inconsistent.

CACMS identified the following additional areas of partial or substantial noncompliance:

ED-11: It (the curriculum) must include the contemporary content of those disciplines that have been traditionally titled anatomy, biochemistry, genetics, physiology, microbiology and immunology, pathology, pharmacology and therapeutics, and end-of-life care.

ED-13: Clinical instruction must cover all organ systems and include the important aspects of preventive, acute, chronic, continuing, rehabilitative, and end-of-life care.

Finding: The self-study process revealed or confirmed deficiencies in the delivery of several content areas in the curriculum, including pharmacology, nutrition, genetic counseling and palliative and end-of-life care. Educational program leadership has initiated measures to address these deficiencies but full implementation has not yet occurred.

MS-23: A medical school must provide students with effective financial aid and debt management counseling.

Finding: Recent escalation in tuition and fees makes the medical education program the most expensive in Canada, and financial aid to students has not risen commensurately to minimize the economic impact on students. The situation has been ameliorated by a temporary freeze on further increases, and the Faculty is negotiating with central administration to capture and return a larger portion of student fees to financial aid programs but it is too early to determine if these efforts or others being contemplated will fully address the problem.

Counseling about financial aid resources and debt management has been hampered by the lack of a dedicated faculty advisor capable of informing students about alternative sources of financial support and strategies for managing their debt burdens. A planned initiative to strengthen the financial aid counseling system, including the hiring of a full-time faculty financial aid advisor, should resolve this problem when fully implemented.

The LCME identified the following additional area of partial or substantial noncompliance:

IS-14: Student should have the opportunity to participate in research other scholarly activities of the faculty.

Many students choose the medical education program because of its scientific reputation, and the survey report notes that they receive extensive grounding in research methods during the longitudinal Determinants of Community Health courses that spans the four years of the undergraduate medical curriculum. However, both the student survey and the institutional self-study indicate that the availability of research opportunities within the curriculum is insufficient for this research-oriented student population.

The CACMS and the LCME identified the following areas in transition:

- Deployment of recently developed institutional learning objectives has initially concentrated on assuring adequate linkages with objectives at the course and clerkship level, but has not yet focused on the effectiveness of evaluation strategies for measuring and achieving the objectives.
- Some courses are beginning to experience some difficulty in the recruitment and preparation of an adequate pool of tutors.

- The Faculty is in the process of updating its affiliation agreements to address changes in the healthcare environment, clarify expectations regarding practice plans and strengthen the commitment to undergraduate medical education.

The LCME identified the following additional areas in transition (which CACMS considered to be areas of noncompliance):

- Measure to address deficiencies that the self-study identified in the delivery of specific content areas of the curriculum, including pharmacology, nutrition, genetic counseling and palliative and end-of-life care have not been fully implemented.
- Recent escalation in tuition and fees has outpaced increases in student financial aid, and it is too early to determine whether efforts to ameliorate the economic impact on students will fully address the problem.
- Plans to strengthen the financial aid counseling system, including the hiring of a full-time financial aid advisor, have not been fully implemented.

VISITS/STATUS REPORTS

Progress report – 22 August 2006

The Faculty of Medicine responded to CACMS and the LCME regarding their respective letters dated 31 January 2005 and 14 October 2004, in which specific concerns were raised about the MD program at the University of Toronto. The faculty's report outlined the progress made by the Faculty of Medicine with respect to: 1) student research opportunities; 2) formative feedback in clerkships; 3) faculty responsibility for admissions decisions; 4) career counseling; 5) content deficiencies in the curriculum; 6) deployment and use of institutional learning objectives; 7) student indebtedness; 8) financial aid counseling; 9) availability of faculty tutors for small-group learning; and 10) clinical affiliation agreements. The LCME at its meeting of 3-5 October 2006 reviewed and accepted the 22 August 2006 report and determined that the noncompliance issues and areas in transition discussed in the 22 August 2006 report were fully resolved. CACMS, however, in its meeting of 6 October 2006 required additional follow-up on ED-13, ED-30, MS-23 and a transition issue related to evaluation strategies and outcomes. CACMS required a progress report by 1 April 2008.

In the same letter, the LCME also discussed its review of the faculty's 23 August 2006 plan to create a new academy in Mississauga to accommodate an increase of 26 students in the entering class size. The LCME requested two progress reports, one in 2008 addressing issues related to space, curriculum and student support services, whereas the second report was to address progress on facilities and preparations for clerkship training in Mississauga.

Notification of increased enrolment - January 17, 2007

The University of Toronto informed CACMS and LCME of its intent to postpone by one year, its planned creation of the new academy in Mississauga. LCME, at its 6-8 February meeting, agreed to postpone the submission dates for the aforementioned progress reports until 1 May of 2009 and 2010.

Progress report – March 17, 2008

At their respective May and June meetings in 2008, CACMS and LCME discussed the University of Toronto's 24 March 2008 report on the Mississauga expansion that announced a planned start date of September 2010 for its initial cohort of 36 first year students. LCME and CACMS requested by 1 May 2009, a status report and a completed copy of the *Template for Reporting New/Expanded Branch Campuses*. In addition, they requested a Secretariat Consultation. CACMS also considered a progress

report submitted on 17 March 2008 and determined that the school was in compliance with standards ED-13, ED-30 and MS-23, however further follow-up was required regarding the transition item relating evaluation strategies and outcome objectives.

Secretariat Consultation – 24-25 February 2010

In two separate e-mail messages dated 5 January 2009 and 27 July 2009, respectively, the University of Toronto notified LCME and CACMS of its intent to postpone the opening of the Mississauga Academy until fall 2011 and to increase the planned class size from 36 to 54 first year students. Resulting from this postponement, the Secretariat Consultation was scheduled for 24-25 February 2010. During the visit, the *Template for Reporting New/Expanded Branch Campuses* was discussed as were plans to ensure the review the Mississauga Academy during the next full survey visit scheduled for the 2011-2012 academic year.

Status Report and New Branch Campus Template - April 14, 2010

The University of Toronto, in a letter dated 14 April 2010 supplied CACMS and the LCME with a follow-up report on the remaining transition item and a status report on the Mississauga Academy, the latter of which, included a completed *Template for Reporting New/Expanded Branch Campuses*. At the 17 May 2010 meeting of CACMS and the 1-3 June 2010 meeting of LCME, the remaining transition item was considered, and both committees determined that no further reports were required on this matter.

Resources reported in the *Template for Reporting New/Expanded Branch Campuses* appeared adequate to the permit the initiation of the Mississauga Academy in 2011. The committees agreed to direct the team conducting the next full survey visit during the 2011-2012 academic year to review the Mississauga Academy and to consider the comparability of the curriculum between Mississauga and Toronto, financing of the new academy, faculty participation, student satisfaction and student performance.

Letter of Notification of Change of Curriculum – 5 October 2010

CACMS on 24 January 2011 and the LCME on 1-3 February 2011 considered the University of Toronto's notification to change its curriculum. The LCME and CACMS asked that the curricular changes be identified to the survey team for review during the full survey scheduled for the 2011-2012 academic year.

THE MEDICAL EDUCATION DATABASE AND INSTITUTIONAL SELF-STUDY

The medical education database and its related appendices provided by the University of Toronto were organized, complete, and internally consistent. The quantitative data presented were, in virtually all cases, updated for the 2010-2011 academic year, the most recent complete year, and where appropriate, in reporting data on admissions and tuition fees, for example, data from the 2011-2012 academic year were given.

The Institutional Self-Study was guided by a task force comprised of students and members of faculty. Outside of the chair and senior leaders on the task force, the faculty members served as chairpersons of committees tasked with the study of the areas covered by accreditation standards. Matters related to the institutional setting were covered by two committees, with one committee studying governance and administration and the other examining the academic environment. Each of the committees reporting to the task force was comprised of members from faculty, the student body and staff. The structure of the committee and the breadth of its membership can be found in greater detail in Appendix B. This mix of individuals may explain why the Institutional Self-Study was able to examine so critically the various operations of the medical school. The conclusions (see Appendix B) of the Institutional Self-Study

identified numerous potential issues, to the extent that each issue raised in this survey team report was also identified in the Institutional Self-Study.

Methods used in the Independent Student Analysis were based on consideration of past practice at the University of Toronto, methods used at other Canadian medical schools, and model survey instruments of the Canadian Federation of Medical Students. Data were collected by the end of February 2011 either through electronic or paper surveys, one survey version for preclerkship students and another version for clerks. Appropriate security arrangements were in place to prevent duplicate submissions. Representatives from each class (2011 – 2014) participated on the student accreditation task force. Some professional technical assistance on data analysis was used in the preparation of the student report. The response rate overall was high, ranging from an 85% response from Year 3 students to a 73% rate for Year 4 students. No incentives were used to achieve those rates. In addition to the surveys, five focus groups were held in the spring of 2011. Clerks who participated in focus groups were given an incentive with a value of \$50. Results of the surveys and focus groups were incorporated into the narrative portion of the Independent Student Analysis (see Appendix Z). Given the timing of the data collection and report writing, no students from the Mississauga Academy participated in the survey. In reaching its conclusions, the survey team considered the student analysis as well as the results of the AAMC Canadian Graduation Questionnaire (see Appendix AA). Respondents in 2011 numbered 185 out of the 224 students in Year 4, a considerably higher number of students than participated in the recent past.

HISTORY AND SETTING OF THE SCHOOL

The Faculty of Medicine was founded in 1843 as an academic program of King's College, becoming part of the University of Toronto in 1887. In 1910, the Flexner Report recognized the Faculty of Medicine for its excellence. The Faculty of Medicine along with its affiliated hospitals forms one of the largest health science complexes in North America. Headquartered on the University of Toronto's St. George campus and with a new campus in Mississauga the Faculty offers undergraduate, postgraduate and graduate programs in medicine and medical sciences, as well as educational programs in a variety of health science professions. It is fully affiliated with nine teaching hospitals in the area and maintains partial affiliations with another sixteen community hospitals, four community health centres and the City of Toronto Board of Health. Total enrollment in Faculty of Medicine programs includes approximately 4,200 full-time undergraduate students and over 2,800 full-time graduate students. The Faculty of Medicine has a history of internationally recognized achievement in health research, patient care and education, partially exemplified by accomplishments including the discovery of insulin, production of clinically safe heparin, identification of the T-cell receptor gene, isolation of the gene responsible for cystic fibrosis, early development of coronary care units, the first successful long-term lung transplant, Canada's first MD/PhD program and more.

The University of Toronto was founded in 1827 as King's College and is the largest university in Canada. Its Faculties and Colleges provide educational programs for almost 58,000 full-time students located on three campuses. Its library system has over 20 million holdings making it the largest in Canada and one of the largest in North America. The university's annual operating fund revenues are over \$1.6 billion. Research revenue from the university and its partner hospitals exceeds \$900 million.

The city of Toronto took root in 1788 with the purchase of land from the indigenous people of Mississauga. A military garrison was established at the site in 1793 and the town was named York in honor of the Duke of York. The name was changed to Toronto when the city was formally incorporated in 1834. Toronto is the major commercial centre and capital city of Ontario. The culturally diverse population of the Greater Toronto Area is approximately 6 million people making it the largest urban centre in Canada and one of the largest metropolitan areas in North America.

The tables below compare selected data for the reference years used in the databases compiled for the previous and current full accreditation surveys.

	2004 Previous survey year ⁺	2012 Current survey year [‡]
Entering class size	199	250
Total enrollment	766	927
Residents & fellows	1832	3004
Full-time basic science faculty	231	120*
Full-time clinical faculty (GFT)	1655	2467
Full-time community health sector faculty	Not provided	66
Full-time rehabilitation sector faculty	Not provided	36

	(\$ in Millions Canadian)	(\$ in Millions Canadian)
Tuition and Fees (excludes domestic tuition)	3.1	12.1
Parent University and provincial appropriations	77.0	120.7
Research / training grants, direct	124.5	169.5
Indirect cost recoveries	1.2	9.7
Professional fee income		
Revenue from clinical affiliates	21.4	19.8
Gifts and endowments	18.8	25.6
Other revenues	25.2	56.4
Total revenues	272.2	414.1

⁺ As reported in 2004 survey, data are from database years 2002-03.

[‡] Data from 2010-11 database.

* The apparent decrease from the previous survey year reflects a change in how faculty members were counted as 'full-time' and does not reflect an actual decrease in numbers of full-time basic science faculty members.

I. INSTITUTIONAL SETTING

See Appendices for the following documents:

- Summary of self-study findings; composition of self-study task force and committees
- Maps: Campus and hospitals
- Summary of strategic plan (IS-1)
- Current entry in AAMC Directory of American Medical Education
- Organizational chart - Dean's Office (IS-8, IS-9)
- Résumé and biography of the Dean (IS-10)
- UME office organizational charts (IS-11)
- Enrollment in graduate programs (IS-12)
- Number of residents by specialty (IS-12)
- Diversity policy and diversity tables (IS-16)

Medical School Mission and Planning

The Faculty of Medicine has a mission of social responsibility that it seeks to accomplish by developing leaders, contributing to communities, and improving the health of individuals and populations through the discovery, application and communication of knowledge. Its vision is to provide international leadership in improving health through innovation in research and education. These concepts served as the foundation for its five-year Strategic Academic Plan 2011 – 2016 that was implemented in early 2011 following major review and broad consultative process that took into account such documents as the

Institutional Self-Study, results of an external review and the University of Toronto's strategic plan (see Appendix D). The strategic plan embodies a sophisticated infrastructure to facilitate an evaluation and annual reporting process.

A. Governance and Administration

The University of Toronto is a public institution funded by the Government of Ontario (See Appendix E). The unicameral governing body of the University is the Governing Council. The academic authority for governance in Medicine is delegated by the Governing Council through its Academic Board to the Faculty Council of the Faculty of Medicine. The Faculty Council is responsible for elaboration of all relevant University policies and approval of all Faculty of Medicine policies. The Faculty Council must approve all major modifications to the existing degree, diploma and certificate programs. More significant decisions, such as the creation of new degree offerings, major restructuring of programs and departments, and budgetary allocations for capital projects require approval of the Boards and Committees of the Governing Council.

The Dean of Medicine, Dr. Catharine Whiteside, who is now in her second term, reports to the provost of the University. She is a highly-qualified and respected clinician-scientist, educator and leader (See Appendix G). The dean serves on the Provost's Executive Committee. She also holds the title of vice-provost relations with healthcare institutions, a very important role, given the many partner healthcare institutions in the University's sphere of operations. The dean or her vice-deans sit on the boards of nine of these partner organizations. The dean is also a member of the University of Toronto Council of Health Sciences, along with the deans of the other health science faculties.

The decanal team in the Faculty of Medicine includes the deputy dean, six vice-deans, a number of associate deans and the department heads (See Appendix F and Appendix H). These senior leaders and the senior professional management team, consisting of the chief Administrative Officer, the Executive Director of Advancement, the Executive Director of the Office of Strategy, Communications and External Relations, the Assistant Dean and Counsel, and the Director of the Office of the Dean, as well as the Faculty Comptroller/Chief Financial officer and the Directors of Information Technology, Human Resources, Facilities Management and Space Planning, and Logistics Services, comprise the Dean's Executive Committee which meets every two weeks. In addition, the Deputy Dean, Vice-Deans, and the Associate Dean Equity and Professionalism also serve on the All Chairs', Basic Science Chairs', and the Clinical Science Chairs' Committees, to ensure frequent communication between the departments and the management portfolios. The education vice-deans also have a separate working committee. The regular interaction that occurs through the Dean's Executive Committee and through collaboration on projects within the various portfolios supports both the effective day-to-day functioning and long-range planning of all aspects of the Faculty. The associate deans and department heads provide leadership continuity. All administrative positions are filled. In the Independent Student Analysis, students (90%) identify the ease with which they can access and contact members of the faculty, teaching staff, course directors, and Academy directors as a strength of the program.

Department chairs are appointed for fixed terms of 5 years with the possibility of one-term renewal. Further renewals beyond two terms may occur, if in the opinion of the university president, circumstances warrant. At the time of the survey visit, the Dalla Lana School of Public Health was without a permanent director, but the new director was scheduled to take office in July 2012. All other department chairs were filled, although in the case of four departments, current chairpersons had their respective terms extended for approximately one year each. Chairs submit an annual performance report to the dean. Departmental chairs have budgetary authority over department specific funds that are derived from a variety of sources including, but not limited to an annual allocation from the dean. No issues with respect to departmental budgets were raised either in the Institutional Self-Study or by department chairs in their meetings with the survey team.

The nine affiliated hospitals and four major community-affiliated hospitals form the Toronto Academic Health Science Network (TAHSN). This group facilitates the educational and research missions of the Faculty. The TAHSN CEO group focuses on the collaborative integration of clinical care, education and research across the organizations. Decisions about the joint academic mission are tabled by TAHSN members and implemented through the standing committees where the University of Toronto is represented by the vice-president of research, the dean and the deputy dean and several vice-deans and the full affiliates and the major community affiliates are represented by their CEOs and VPs. The standing committees meet on a scheduled basis to manage harmonization of policies and procedures and to promote strategic planning and implementation relevant to the academic collective. Based on the survey team's interviews with the senior hospital and Faculty leaders, this network appears to be highly effective.

The clerkship and other hospital-based training are delivered in partnership with the affiliated teaching hospitals and community affiliates, organized into four 'academies', the FitzGerald, Peters-Boyd, Wightman-Berris and Mississauga Academies. Each academy comprises several teaching hospitals and other ambulatory care teaching sites. An esprit is apparent in each of the academies and was demonstrated by enthusiastic comments from students, educators and administrative leaders in the academies. In meetings with the survey team, the vice-presidents of education from affiliated hospitals made it clear that their respective hospital organizations take their educational responsibilities seriously. Their pride in their students and attentiveness to feedback was obvious to the survey team during meetings and on tours.

The Mississauga Academy was launched in 2011 and is based primarily at the Credit Valley Hospital and the Trillium Health Centre. Administratively and for most preclerkship teaching, it is based at the University's Mississauga campus. The team met with leaders and students of the Mississauga Academy and found that the commitment from the leaders was clear.

B. Academic Environment

The Faculty of Medicine offers graduate programs in 11 Professional Masters programs (871 students), MSc programs (888 students) and PhD programs (1,173 students) for a total of close to 3,000 graduate students (see Appendix I). The Professional masters programs include Health Administration, Public Health, Occupational Therapy, Physical Therapy and Speech-Language Pathology. Graduate enrolment has increased by 26% since 2004 as a result of increased investment in base funding by the Ontario government. Graduate students generate health and biomedical knowledge in keeping with the mission of the Faculty of Medicine. Graduate students receive stipends and 'top-ups' are given for those who win major competitive external awards. Graduate funding is available from external agencies, university scholarships and departmental funding.

The MD/PhD program has a total enrolment of 43 students for 2011/12. This number has been relatively consistent over the past few years. Five students are chosen annually from a pool of 40-50 applicants. Overall, 65% of the MD/PhD program's graduates pursue a physician-scientist career. Funding for the MD/PhD program comes from the Canadian Institutes of Health Research, other external graduate studentship agencies and several MD/PhD endowments as well as funding from the UME Access to Excellence fundraising campaign.

Until January 2011, all graduate programs were reviewed every seven years. The review included a graduate program self-study and an external review by two or three independent reviewers. This process classified all of the faculty's graduate programs as 'Good Quality', the highest level of appraisal. Now, graduate programs are reviewed by the Institutional Quality Assurance Process (UTQAP), which reviews graduate programs as part of the departmental review. This process arose to be in keeping with the new Ontario Universities Council on Quality Assurance (Quality Council). Reviews of ongoing programs

must occur no less frequently than once every eight years. The process involves a self-study, an external evaluation, a university evaluation of both studies, implementation of recommendations and monitoring implementation as well as follow-up. UTQAP also outlines reviews for programs undergoing extensive modifications and new programs. The framework for the internal review is outlined in the University of Toronto Policy for Approval and Review of Academic Programs and Units. The majority (60-70%) of graduate students are located and supervised in hospital research institutes.

The medical students have an opportunity to learn alongside graduate students through mandatory participation of medical students in inter-professional (IPE) core curricular activities with students from many health professional Master's degree programs including Dentistry, Medical Radiation Sciences, Nursing, Occupational Therapy, Pharmacy and others. The IPE curriculum is managed under the Centre for Inter-professional Education and consists of four mandatory activities carried out over four years of the medical school curriculum as well as in two required elective experiences.

Oversight and coordination of residency programs are provided by the Postgraduate Medical Education Advisory Committee (PGMEAC). The Faculty of Medicine has 74 residency programs certified by the Royal College of Physicians and Surgeons of Canada (RCPSC) and four programs certified by the College of Family Physicians of Canada (CFPC) with 3,239 residents and clinical fellows overall (See Appendix J). The RCPSC/CFPC assessed the postgraduate programs in 2007. The core Family Medicine Program and the Family Medicine Enhanced Skills Program were approved. Of the specialty programs, 60/67 programs received full approval, six programs were given provisional approval and one program was given Notice of Intent to Withdraw Accreditation. All programs have since received full approval. Oversight and coordination of residents and fellows at the University are provided by the Postgraduate Medical Education Advisory Committee. Residents are present at the majority (67/95 or 70%) of all sites where medical students are doing core rotations. At the moment, only first year medical students are assigned to Mississauga Academy. A roll-out for 86 residents is planned for 2013/14 when the Mississauga Academy will host a full roster of clinical clerks. Time permitting, medical students are welcome to attend any of the over 100 one-hour grand rounds-type continuing education activities that occur every week in various affiliated hospitals. Clinical teachers discuss their personal continuing professional development with students as a way of 'role modeling' best practices in life-long learning.

Research is an integral part of the vision and mission statements of the Faculty. The University of Toronto released a new research strategy in spring 2012. The Faculty created a parallel research plan and identified key thematic areas and research priorities, performance deliverables and outcome timelines. Thus strategies are in place to determine specific research directions.

The Faculty has over 125 Canada Research Chairs (one third of the all the CRCs in Health and Biomedical Science across Canada). The Faculty has received over \$150 million from the Canada Foundation for Innovation to support space and equipment for research and scholarly activity. In 2010-11, 1,613 researchers in the Faculty generated 8,317 successfully funded research grants. This brought in \$792 million last year from external research grants (an 18% increase from the previous year). There are no departmental or individual research incentives.

The Faculty administers ongoing research in a large number of research institutes, hospitals, and academic departments. Quality of available space is variable, however the Master Space and Facilities Plan exists to assist in reassigning current space and accommodating new research space as needed.

As well as a robust MD/PhD program discussed above, medical students also participate in the Comprehensive Research Experience for Medical Students (CREMS) and the summer research program where they are supervised by faculty members in the School of Graduate Studies. The required Determinants of Community Health 2 (DOCH-2) course (discussed below) also provides research opportunities. Research electives in Clerkship as well as research experiences offered outside of the

curriculum provide abundant additional research opportunities for medical students. The Independent Student Analysis suggested that students wanted more information about research opportunities outside of CREMS. These opportunities are now consolidated on one website at:

(<http://www.md.utoronto.ca/program/research/additionalresearch.htm>) that lists all the departments, centres, institutes, hospitals and student-run organizations that offer research opportunities for students. According to CGQ data, over 80% of medical students participated in a research project during their respective programs. Through interviews with students the survey team found that students are now satisfied with the abundance and variety of research opportunities available to enhance their medical training and that students are making good use of the new website. This site also includes information on summer awards and studentships for medical students interested in research. Of the awards presented at the Canadian National Medical Student Research Symposium last year, one-third of those were claimed by medical students from the University of Toronto.

The curriculum includes two required service-learning experiences. Determinants of Community Health 1 (DOCH-1) is a first year course and DOCH-2 is a second year course which is highly research focused and requires a research project. In the recent past, these courses received criticisms from students. In the Independent Student Analysis students reported that student comments and suggestions were not being taken into consideration. The Faculty recently revised the DOCH curriculum, taking into account student suggestions. New course leadership was confirmed and faculty appointments were made for 2011/2012 as well. Pre-clerkship students interviewed still have some concerns about the course, but recognize the considerable improvements that were made this past year. When graduands were given the opportunity to tell the survey team about the aspect of the curriculum that they most would like to see retained, the most common element mentioned was the DOCH courses. These senior students reported that although they did not appreciate the DOCH courses at the time, upon reflection they came to value the knowledge gained from both courses.

The student medical society (MedSOC), in cooperation with the Office of Health Professions Student Affairs (OHPSA) offers 22 optional student-led community affairs outreach programs. The programs involve mentoring and tutoring opportunities, health promotion and services offered to inner-city, at-risk neighbourhoods and service to disadvantaged and marginalized groups. In 2010/11, participation from over 750 volunteers from the Faculty's health professional programs (half are undergraduate medical students) served over 2,800 clients in total. Students are informed of activities starting in the first week via brochures, posters, email invites, and information is also available on the respective MedSOC and the OHPSA websites.

The University of Toronto has policies regarding employment equity and diversity. The Faculty recently approved a diversity statement that expresses a commitment to recruit and retain students, faculty and staff as diverse as the population of Canada. The goals of the statement are consistent with university policies but allow the Faculty to develop specific programs to attract and recruit individuals from specific backgrounds. The diversity statement specifically prioritizes indigenous peoples, individuals of African ancestry (Black) and the economically disadvantaged, all three of which are groups for which the Faculty falls short in population comparisons. Although 43% of medical students self-identify as members of a visible minority, the number of MD students of African and indigenous background is lower than that of the Canadian population (See table on institutional diversity in Appendix K in which data for staff are reported on a university-wide basis). Students, while satisfied with the ethnic diversity of the class, suggest that improvements are needed with respect to socioeconomic diversity within the student body. Programs are in place to address these concerns and appear to be effective, as an increasing number of economically disadvantaged students and students of African ancestry are now entering the medical school. The same cannot be said of indigenous students. The new Indigenous Student Admissions Pathway (ISAP) is a modified admissions process instituted to double the number of indigenous applicants, the number of offers to indigenous applicants and the number of accepted indigenous

applicants within five years. In 2011/12 the number of indigenous applicants reached a high of 11, up from a range of 4-8 in previous years.

Faculty of Medicine policies led to implementation of pipeline programs for indigenous students, increased African student recruitment and enhanced awareness efforts during interview weekends to demonstrate openness for all minority groups. The Faculty of Medicine through its Office of Financial Services operates a grants program, an enhanced bursary program and a high needs admissions bursary to provide needs-based financial assistance. The curriculum addresses diversity through didactic teaching (pre-clerkship) in 26 different sessions. Although there is no formal structure addressing diversity in the clinical years, training takes place in ethnically diverse Toronto ensuring that students interact with individuals and communities of considerable diversity.

Faculty and staff recruitment advertisements outline the commitment to diversity, and 12 different offices within the University are available to address equity concerns of faculty and staff. A Faculty of Medicine Hiring Practices Steering Group was recently established to ensure that diversity was considered when recruiting clinical faculty and for academic administrative positions. In comparison to addressing diversity issues with student and faculty recruitment, diversity is not addressed in Faculty Development within the Faculty of Medicine. The Faculty of Medicine recently increased its liaison activities with respect to Indigenous students. The Associate Dean Undergraduate Medicine Admissions and Student Finances serves on several councils and boards related to indigenous initiatives, and works closely with the Aboriginal Studies Program and the First Nations House. In addition, a curricular lead position in indigenous health and an indigenous programs coordinator were created to assist indigenous applicants and students and support community liaisons. In summary, the school created a new definition of diversity and developed interventions to achieve appropriate diversity for medical students. The school is developing a strategy for other learners and faculty. Monitoring of program effectiveness is ongoing.

II. EDUCATIONAL PROGRAM FOR THE MD DEGREE

See Appendices for the following documents:

- Curriculum schematic (ED-5)
- Educational program objectives linked to competencies expected of a physician (ED-1, ED-1A)
- Required clinical experiences expected of students (ED-2)
- Inventory of required subjects (ED-10)
- Organizational chart for management of the curriculum (ED-33)
- Outcomes used to determine educational program effectiveness (ED-46)
- MCCQE Part I performance for first-time takers (ED-46)

A. Educational Program Objectives

The University of Toronto's undergraduate medical curriculum is organized around the seven Canadian Medical Education Directions for Specialists (CanMEDS) competencies related to: medical expertise, communication, collaboration, management, health advocacy, scholarship and professionalism.

A set of educational program objectives and outcome measures is in place for each competency (See Appendix M). For many of the outcome measures, the summative judgment regarding performance is made via the clerkship ward/clinical skills evaluation forms, which consist of a series of ratings of each student's level of achievement in relation to 18 competencies, with several ratings for each category of objectives. If a student scores either 'below expectations' or 'unsatisfactory' on any of these assessments, an alert is sent from the online Medical Student Information System (MedSIS) to the rotation director and to the clerkship director, and students with such a rating are required to meet with the rotation director and determine an appropriate course of action to ensure they have at least met expectations for each of these domains. This procedure is formalized in the standards for monitoring student performance and

completion of course requirements, which notes that "...the course director must monitor each student's assessed performance in every competency relevant to these [CanMEDS] roles in order to ensure that the student has achieved a satisfactory level of competence in all domains".

The current educational program learning objectives were adopted in 2003 and last revised in 2007. The UME Curriculum Evaluation Committee regularly reviews all the courses to ensure alignment of all courses' objectives and content with the overall program objectives. Each of the educational program objectives has been mapped to one or more outcome measures. The results for each measure are compiled periodically (approximately every two years) to determine overall program quality and effectiveness. This exercise was previously undertaken by the Undergraduate Medical Education Program Effectiveness Committee (UMEPEC), and as of 2011 is now the responsibility of the Undergraduate Medical Education Curriculum Evaluation Committee. As of 2011-12, the UMECEC has determined that there is evidence of achievement program-wide of all of the objectives.

The Faculty has a system in place to ensure that students experience the appropriate types of patients and clinical conditions and setting required. For each experience, the level of student responsibility is specified as is the requirement whether the clinical experience is to be had with a real patient (see Appendix N). In each discipline, a minimum of 80% of the experiences must be with real patients. The list of conditions has been reviewed and modified over the years, but a major review and update occurred in 2010 and was piloted in 2010-11 in conjunction with the introduction of an on-line logging system for students (T-Res). The list is reviewed annually by each course committee. Students are provided with pocket cards listing the required experiences in each rotation. Logged experiences are reviewed at the mid-rotation assessments and corrective plans are made if needed. The remedies for likely gaps identified at the mid-rotation assessment vary by discipline, and may in some cases use on-line cases or simulation, or in others, the site director arranges for actual clinical experiences. When a student achieves fewer than 100% of required clinical experiences by the end of a rotation, an individualized plan is created by the relevant clerkship director so that all experiences are gained within the subsequent six weeks. Completion is monitored centrally. Credit for the rotation is not given unless 100% of experiences are achieved.

Medical students are informed of the CanMEDS objectives of the course in various ways, including the student handbook and the website. This is reinforced through the objectives presented for each course. The students interviewed by the survey team appeared to be well aware of the objectives.

Teachers are informed about the objectives through the UME Teacher Handbook and the website. They are also informed through MedEmail, the Faculty's bi-weekly newsletter. The course directors are also obligated, by policy, to disseminate the objectives to all teachers in their jurisdiction annually and the teachers are obligated to familiarize themselves with the program objectives. Residents who teach medical students have similar resources and are instructed in the objectives during their teaching modules. The faculty members and residents with whom the survey team met were well informed about the program objectives and how to use them.

B. Structure of the Educational Program

1. General Design

The Toronto curriculum has a total of 149 weeks, and follows a traditional pattern, in which the first year is devoted to foundational basic sciences, the second to pathophysiology, the third to required clinical clerkships and the fourth to electives and transition to residency. Year 1 has a total of 879 scheduled hours of instruction, and year 2 has 816 scheduled hours. Not counting lunch hours, students have 10 and 12 hours per week of unscheduled time in years 1 and 2 respectively. A recent curriculum revision adjusted lengths of clerkships in the third year, moving anesthesia and emergency medicine, to the third

year and restructured the fourth year as electives and transition to residency. The schematic diagram of the curriculum (see in Appendix L) shows the layout of courses and includes the number of weeks of scheduled instruction in each year.

Students have numerous required experiences in active learning and independent study and receive frequent assessments of these skills. In the first year of preclerkship, active learning and independent study are promoted in the 'two session' problem-based tutorials, of which there are 10 in the first year and 24 in the second year along with three 'one session' tutorials. In the first session of a typical problem-based learning (PBL) case, the clinical case is described in detail, and, with faculty facilitation, students identify the learning objectives that need to be addressed. In the second session, the students teach each other about the objectives they have identified and discuss the information sources consulted. Students are assessed and receive feedback on the collection of the data necessary to solve clinical problems and the synthesis of information for clinical problem solving. Students also receive training in assessing the credibility of information sources, beginning in the first year and regularly throughout the curriculum. As a part of the required research project in the Determinants of Community Health 2 course, students identify the gaps in their research plan and receive feedback from peers and faculty. Other time is available for independent study or active learning, as entire half-days are available for activities such as shadowing or research involvement. In addition to lunch periods, preclerkship students have approximately 10 hours of unscheduled time during standard 'work hours' on Monday through Friday.

Several clerkships require substantial independent projects. For example, the Family and Community Medicine clerkship requires each student to identify a clinical question, research the evidence and then write a paper and give an oral presentation to his or her peers. Somewhat similarly, the ambulatory component of the Internal Medicine clerkship requires each student to identify a gap in knowledge and to give an oral presentation on the topic to the faculty and his or her peers. In addition to these required projects, students in all required clerkships are assessed on their skills in self-directed learning. Finally, even in required clerkships, students are given choices about where they want to work in keeping with their individual learning needs. For example, students can elect to work in a pediatric emergency department as a part of the pediatric core clerkship.

With respect to development of critical judgment and clinical problem solving, in addition to the PBL tutorials and training in literature searching and research described above, the Art and Science of Clinical Medicine (ASCM) courses in the first and second years provide one half day a week of instruction in clinical skills and reasoning. Determinants of Community Health 1 and 2 meet regularly throughout the first and second years. The first year is focused on the determinants of health, the Canadian health care system, population health and global health; the second year builds on this foundation with the development of a research project within a community agency. Preclinical courses also provide opportunities for application of the scientific method and observation of biomedical phenomena. For example, in a Structure and Function lab, students examine how blood pressure changes in response to changes in position and other maneuvers.

For preclerkship courses, the majority of lectures are given on the St. George campus with a few presented from the Mississauga campus. The auditoria are linked by interactive two-way AV connections that allow students on each campus to interact and ask questions. All lectures and audiovisuals are recorded and available on-line after the live class. For preclerkship small group teaching, required clerkships and electives/selectives, Toronto uses a well-developed system of 'academies'. Each of the four academies includes a principal major teaching hospital, associate teaching hospitals, a research institute as well as many clinical faculty across all clinical disciplines. All students are assigned to an academy on entry to the school; all small group teaching and core clinical clerkships are typically done within that academy. It is possible for students to change academies, though few are interested in doing so. Students may sign up for electives or selectives anywhere in the system. Of note, in recent years, Toronto has developed the Mississauga academy in a suburban community. There is regular bus service

to the St. George campus, and Mississauga students have appropriate access to electives throughout the system.

The curriculum is comparable across sites. Courses and clerkships have common objectives across all academies. The school has developed common assessment forms for use in all courses and clerkships. In core clinical rotations, key diagnoses are monitored across sites; there is a system for reviewing clinical experience at mid-clerkship review, and faculty ensure comparable experience. Standards for grading are identical across all sites. Course committees are drawn from all sites and meet regularly to review curriculum and evaluations. A curriculum evaluation committee, the clerkship and preclerkship committees, the curriculum committee and the office of the vice-dean of undergraduate medical education regularly review grade distributions and all evaluations of courses, clerkships and teachers. All aspects of the program appear to be comparable across academies.

The University of Toronto offers the MD/PhD program. The objective of the program is to educate a new generation of physician-scientists who will become leaders in the academic sciences. Approximately five students per year are enrolled. Most of these students pursue their PhD after the first year of medical school and then return after the PhD to the second year medical school, but program flexibility allows for other options. All MD/PhD students, however, are required to finish all requirements of the PhD before starting clinical clerkships.

2. Content

Below are tabular summaries of the curriculum (also see Appendix O for listing of required subjects). In general, the curriculum covers core basic science subjects, gives appropriate exposure to multi-disciplinary clinical disciplines, primary care, and translational research. The curriculum provides experience in prevention, chronic care, rehabilitative care and end-of-life care. Course objectives are linked to institutional objectives and provided to students on a website, in an email communication to the students and by course directors in the context of the overviews of the course.

Years One and Two

YEAR ONE/ACADEMIC PERIOD ONE

Course title	Formal instructional hours					
	Lecture	Lab	Small groups*	Patient contact	Other†	Total
Art & Science of Community Medicine-1 (ASCM-1)	4		54	54	8	120
Brain & Behaviour (BRB)	80	17	30	6		133
Clinical Pharmacology & Therapeutics (CPT)	26		8			34
Determinants of Community Health-1 (DOCH-1)	54		30		40	124
Metabolism & Nutrition (MNU)	90		54			144
Structure & Function (STF)	184	102	49		4	339
TOTAL	438	119	225	60	52	894

* Includes case-based or problem-solving sessions

†Other:

ASCM-1: Other time: Shadowing experience with a doctor

There are 108 hours of small-group sessions (54 hours under the “Small groups” heading and likewise under the “Patient contact” heading). Small-group sessions consist of a group discussion related to a

clinical skill (e.g., interviewing techniques), followed by practice with patients. Approximately one-half of each session is devoted to practice, although there is flexibility depending on the length of the group discussion.

DOCH-1: Other time: 12 hours school visits

- 12 hours home visits through Community Care Access Centres (CCAC)
- 16 hours agency visits

STF: Other time: Field visit to pulmonary function laboratories

YEAR ONE

Course	Objectives (Y/N) ¹	Formative Assessment (Y/N) ²	Narrative Assessment (Y/N) ³	Students' Rating(s) of Course (national comparison) ⁴	Residents/graduate Students used as Teachers / Supervisors ((Y/N) ⁵
Art & Science of Community Medicine-1 (ASCM-1)	Y	Y	Y	4.3 of 5.0 overall 4.6 of 5.0 for teacher effectiveness	Y- Residents
Brain & Behaviour (BRB)	Y	Y	Y	4.0 of 5.0 for lectures	Y- Residents & Graduate Students
Clinical Pharmacology & Therapeutics (CPT)	Y	Y	N	3.96 of 5.0 overall	Y – Residents, Graduate Students & Clinical Fellows
Determinants of Community Health-1 (DOCH-1)	Y	Y	Y	3.2 of 5.0 for positive learning experience 4.4 of 5.0 for teacher effectiveness	N
Metabolism & Nutrition (MNU)	Y	Y	Y	4.2 of 5.0 overall	N
Structure & Function (STF)	Y	Y	Y	4.4 of 5.0 for positive learning experience	Y – Residents, Grad Students, & Post docs

1. Objectives for the course are provided to students (Y/N).
2. Students have opportunities for formative assessment to test their knowledge / skills (Y/N).
3. Students receive a narrative assessment for either formative or summative purposes (Y/N).
4. Data source: ISA
5. Residents and/or graduate students used as teachers/supervisors (Y/N).

YEAR TWO/ACADEMIC PERIOD TWO

Course title	Formal instructional hours					
	Lecture	Lab	Small groups*	Patient contact [‡]	Other [†]	Total
Art & Science of Clinical Medicine-2 (ASCM-2)	2		89	45		136
Determinants of Community Health-2 (DOCH-2)	15		12		106	133
Family Medicine Longitudinal Experience (FMLE)				24		24
Mechanisms, Manifestations, & Management of Disease (MMMD)	392		224			616
TOTAL	409		325	69	106	909

* Includes case-based or problem-solving sessions

‡ FMLE: Patient contact teaching is 1:1 student: preceptor in community-based clinical environment

† DOCH-2: Other time:

- 86 hours of project-related field work: guided by research supervisor, but a significant proportion completed independently by student
- 10 hours of team-based learning sessions
- 10 hours self-study of online modules/lectures

YEAR TWO

Course	Objectives (Y/N)1	Formative Assessment (Y/N)2	Narrative Assessment (Y/N)3	Students' Rating(s) of Course (national comparison)4	Residents/graduate Students used as Teachers / Supervisors (Y/N)5
Art & Science of Clinical Medicine-2 (ASCM-2)	Y	Y	Y	4.7 of 5.0 overall for appraisal of subject matter, 3.8 of 5.0 for teacher effectiveness	Y - Residents
Determinants of Community Health-2 (DOCH-2)	Y	Y	Y	3.4 of 5.0 overall for research, 3.1 for teaching & resources, 2.9 for learning	N
Family Medicine Longitudinal Experience (FMLE)	Y	N	Y	4.2 of 5.0 for positive learning experience, 4.2 of 5.0 for subject matter importance, 4.0 of 5.0 for delivery of the teaching	Y - Residents
Mechanisms, Manifestations, & Management of Disease (MMMD)	Y	Y	Y	4.0 of 5.0 for successful course, 4.3 of 5.0 for subject matter importance, 4.0 of 5.0 TES score for teachers, 3.8 of 5.0 for effectiveness	Y-Residents Y-Graduates Y-Postdoctoral

1. Objectives for the course are provided to students (Y/N)
2. Student have opportunities for formative assessment to test their knowledge / skills (Y/N)
3. Students receive a narrative assessment for either formative or summative purposes (Y/N).
4. Data source: ISA.
5. Residents and/or graduate students are used as teachers/supervisors (Y/N)

Formal formative assessment opportunities occur in all preclerkship courses. In accordance with university rules, all students have access to prior exams with answers, a practice that allows self-assessment. All courses have relatively low weight early summative assessments accounting for no more than 30% of the final grade. In addition, all courses have small group interactive components, which provide formative feedback. Student comments suggested that formative feedback was not occurring in the Structure and Function course. The course implemented changes that were in place for the 2011-2012 academic year. The survey team carefully examined the course materials and questioned the course leader and confirmed that a formal system of formative feedback was in place and functioning.

Students receive formative narrative feedback in all year 1 and year 2 courses. Narrative feedback must be used in both ASCM courses when an examiner believes that a student has failed an OSCE station. Narrative feedback is also used as supplemental information in instances where there is a possibility of an

adverse judgment regarding a student or when there is doubt about the severity of his/her learning issues. In addition to other narrative assessment, a professionalism assessment form is completed for each student in all small group sessions

In the Independent Student Analysis, students reported concern about lack of unscheduled time in preclerkship years and duty hours in clerkships. In response, the institution has set policy for duty hours for students through all four years. In preclinical years, the full effect of the policy change will be seen in 2012-13, but free time in the first year of studies increased by 2.0 hours per week in the recent past.

Residents, clinical fellows and graduate students are used selectively as teachers for components of many courses in the preclinical years. Course objectives are provided to them via the school's teacher handbook, in each course syllabus and via e-mail. Individual courses provide orientation with the faculty leaders (Structure and Function, Cardiovascular and Pharmacology seminar, BRB) or residents attend faculty development seminars (ASCM 1 and 2, DOCH 2, MMMD PBLs). As detailed later, residents receive teacher training both institutionally and in their home departments.

Years Three and Four

YEAR THREE/ACADEMIC PERIOD THREE

Clerkship rotation title	Total wks.	% Amb.	# Sites used*	Typical hrs/week of formal instruction**	Clinical encounter criteria† (Y/N)	Patient log (Y/N)
Anesthesia (ANS)	2	0	7/0	6	Y	Y
Dermatology (DERM)	3 half-days	100%	0 / 4 / 20	Online lectures and interactive exercises	Y	Y
Emergency Medicine (EM)	4	100%	0 / 10	4	Y	Y
Family & Community Medicine (FCM)	6	100%	0 / 11 / 111 + 5 rural sites through ROMP	4	Y	Y
Medicine (MED)	8	7.5%	5/8	8	Y	Y
Obstetrics & Gynaecology (OBGYN)	6	30%	7 / 7 / 120	4	Y	Y
Ophthalmology (OPT)	1	100%	0 / 4 / 32	3	Y	Y
Otolaryngology (OTO)	1	100%	0 / 4	5	Y	Y
Paediatrics (PAEDS) (See note for explanations about category A (“Cat. A”) and category B (“Cat. B”))	6	For Cat. A: 50% (or 100% if on Paed emerg.) For Cat. B: Varies by site ~70%	12/ 12 / 34	6	Y	Y
Psychiatry (PSYCH)	6	50%	5 / 5 + 3 child/adol. sites for 2 half-days	8	Y	Y
Surgery (SURG)	8	50	9 / 9	5	Y	Y

*The number of sites used for inpatient teaching and the number of sites used for outpatient teaching in the clerkship rotation in the following format: # inpatient / # outpatient / private office for Dermatology, Family & Community Medicine, Obstetrics & Gynaecology, Ophthalmology, Paediatrics.

PAEDS: Two categories of experience for students. Category A: Students spend 3 weeks in one of 32 general paediatrics offices in the community, and 3 weeks at the Hospital for Sick Children (on one of ward, adolescent medicine, Emergency Department)

Category B: Students spend all 6 weeks in community hospital (on a combination of neonatology, wards, and outpatient clinics)

PSYCH: Clerks are distributed to five main sites that offer both inpatient and outpatient experience; they also spend two-half days each at one of three satellite sites specializing in Child & Adolescent psychiatry.

**Sum of lectures, conferences, and teaching rounds; show the range of hours if there is significant variation across sites;

† Have criteria for the required kinds of patients, clinical conditions, or procedural skills been defined?

Course title	Formal instructional hours					
	Lecture	Lab	Small groups*	Patient contact	Other†	Total
Transition to Clerkship (TTC/DOCH-3)	44.5		12.5		26	83
Portfolio Year 3 (PFL-3)			12			12
Integrated OSCE (iOSCE)‡						N/A

* Includes case-based or problem-solving sessions

† Other hours: TTC/DOCH-3

3 hours simulation

2 hours independent work on IHI modules

21 hours hospital orientation for clerks (organized by each Academy)

‡ The Integrated OSCE has no instructional component.

YEARS THREE AND FOUR

Clerkship	Objectives ¹ (Y/N)	% Observed/ History ² (National %)	% Observed/ Physical ² (National %)	Mid- Clerkship Feedback ³ (Y/N)	Average Timing of Grades ⁴	Student Satisfaction (National Norm) ⁵
Year 3						
TTC	Y			Y	21 weeks	
Anesthesia ⁶	Y	-	-	Y	4-6 weeks	3.2 (3.5)
Dermatology ⁶	Y	-	-	N ⁷	>10 weeks	2.4 (2.4)
Emergency Medicine	Y	22.6 (42.3)	40.4 (55.5)	Y	6-8 weeks	4.3 (4.2)
Family Medicine	Y	88.8 (77.6)	87.2 (82.3)	Y	5-7 weeks	3.7 (4.0)
Internal Medicine	Y	83.0 (62.6)	88.5 (78.5)	Y	6-8 weeks	4.3 (3.9)
Obstetrics & Gynaecology	Y	43.7 (49.0)	NR (NR)	Y	3-5 weeks	Obs = 3.7 (3.6) Gyne = 3.4 (3.4)
Ophthalmology ⁶	Y	-	-	N ⁷	5-7 weeks	2.2 (2.4)
Otolaryngology ⁶	Y	-	-	N ⁷	1-3 weeks	2.4 (2.6)
Pediatrics	Y	77.6 (74.6)	78.9 (82.4)	Y	5-7 weeks	3.8 (3.7)
Psychiatry	Y	90.0 (86.6)	88.3 (85.9)	Y	4-6 weeks	3.9 (3.9)
Surgery	Y	20.5 (40.4)	27.9 (49.7)	Y	5-7 weeks	Gen. Surg= 3.3 (3.5) Ortho Surg= 3.4 (3.1)
Year 4						
New course in 2011-12: Transition to Residency	Y	N/A	N/A	N/A	N/A	N/A

New course in 2011-12: Portfolio Year 4	Y	N/A	N/A	N/A	N/A	N/A
--	---	-----	-----	-----	-----	-----

1. Objectives for the clerkship? (Y/N)
2. CGQ data on the percent of students who report being observed performing a history and physical examination (national normative data)
3. Receipt of mid-clerkship feedback? (Y/N)
4. Average time for students to receive their grades.
5. CGQ data on student satisfaction with the quality of the clerkship (national normative data). The scale is from 1 – 5.
6. No CGQ data available for history and physical.
7. Course is ≤ 2 weeks in length.

Core clerkship objectives are linked to the institutional objectives, available on line, and distributed to students at the beginning of every course. Each clerkship rotation is responsible for students receiving specific clinical exposures. Student clinical encounters are monitored via T-res, a web-based electronic log. All required clinical encounters must be completed by shortly after the clerkship or the clerkship is not passed. Students, faculty and the Office of Medical Education report that this is effective in documenting clinical experience.

With respect to direct observation of clinical skills, data from the 2011 CGQ indicate direct observation rates of over 85% for history taking in Family Medicine and Psychiatry and for physical examination for Family Medicine, Internal Medicine and Psychiatry. For most major rotations, students report higher numbers of direct observation than the Canadian national average. In Surgery, however, 20.5% and 27.9% of students report direct observation of history taking and physical examination, respectively, compared to 40.4% and 49.7% nationally. In response to these data, all clerkships have put in place systems to ensure direct observation of clinical skills. At the time of the site visit, however, students, residents and junior faculty acknowledged that students' clinical skills were not routinely observed on the Surgery clerkship.

The Institutional Self-Study reported that mid-clerkship feedback was documented for at least 95% of students in core clerkships in the current academic year (2010-11). Mid-clerkship feedback sessions include a review of the clinical log. If specific clinical encounters have not been experienced by then, plans are made to help students gain the experiences or find appropriate substitute clinical experiences. At the survey visit, students and faculty confirmed the information in the Institutional Self-Study in terms of both mid-course review and review of clinical log.

As noted above, in the independent student assessment students reported concern about duty hours in clerkships. In response, the institution has set policy for duty hours for clerkship students. During the survey visit, however, some students, residents and faculty were unaware of the new policy and clerkship students reported that the policy was not being followed.

According to the Institutional Self-Study, students reported that the average time for receipt of grades was greater than six weeks in Dermatology, Emergency Medicine, Family Medicine, Medicine, Ophthalmology, Paediatrics and Surgery and the new Transition to Clerkship (TTC) course in 2010-11. In response to these data, the institution put in place a system that includes progressive email reminders and administrative escalation of requests from the course/clerkship director to the local chief to the chair of the department. In the institutional self-study, the school reported that, as of February 2012, all 17 clerkships reported publication of grades by 42 days. At the time of the site visit, faculty and medical education staff reported that 100% of recent grades were received in within six weeks. It should be noted that the citation of ED-30 in the last full survey was an error. The prior citation was about lack of mid-clerkship feedback, which is ED-31.

Six rotations—Family Medicine, Medicine, Paediatrics, Surgery, Obstetrics and Gynecology and Psychiatry—involve residents extensively as teachers. In addition to emailed introduction to course objectives, the *UME Teachers Handbook* and orientation by the clerkship director, all residents are required to complete an online introduction to teaching, including passing scores on post tests and quizzes. Records are kept centrally, and all residents must finish by the end of their PGY 2 year, with reports of progress routinely sent to residency directors. As of January 2012, students evaluate all residents who serve as teachers, and their evaluations are shared with the residents and their residency program director. In addition, each department has their own teaching development programs which are well appreciated by the residents.

Regarding student satisfaction with the clerkships, as noted above, there has been a recent shift in the curriculum, with increase in length of the family medicine clerkship and reorganization of the third and fourth years. CGQ results from 2011 date from before the curriculum reorganization. For current required third year clerkships, compared to national averages, student satisfaction with clerkship education is above average in emergency medicine, internal medicine, obstetrics, and paediatrics, whereas family medicine, ophthalmology, otolaryngology and surgery are below average and psychiatry and gynecology are at the national average (see right hand column in table above). Via the Independent Student Analysis, students reported substantial satisfaction with non-surgical specialties. For example, internal medicine and paediatrics clerkships achieved 85-100% satisfaction in each category of the ISA questionnaire. Relative to these high ratings, satisfaction was lower with respect to the amount of service required in the obstetrics and gynecology clerkship (67% satisfaction) and the adequacy of teaching in the surgery clerkship (51% satisfaction).

Elective courses

The medical school recently instituted a significant change in the structure of third and fourth year rotations. Academic year 2010-11 saw the changes in the third year with roll out of the fourth year changes in 2011-12. The new structure places electives and selectives in year 4. In year 4, students have 12 weeks of electives and 10 weeks of clinical selectives related to the students' future specialties. All electives can be taken at another institution; in 2010-11, 37% of electives were taken outside of the University of Toronto. Students are required to have electives or selectives in three different disciplines. The survey team, during its visit, documented considerable positive feedback about the new elective fourth year system.

Summary of Curriculum Structure

Resources are ample to support courses, clerkships, electives and selectives across all the academies. The number of faculty available to teach is substantial; the institution effectively takes advantage of the many faculty members in the Toronto area who are interested in teaching. With the exception of minor localized issues, information technology and other educational infrastructure are robust.

In general, the curriculum is well designed to meet the objectives of the school; recent changes allow more student choice and more opportunities for electives and a focused transition to residency. As noted above, there is appropriate treatment of basic sciences, exposure to multidisciplinary subjects, balance between inpatient and outpatient settings, balance between primary and specialty care, strong exposure to translational research and care across the continuum. CGQ results document overall satisfaction with the quality of education similar to national average (75.8% very good/excellent vs. 75.4% nationally) and a similar level of confidence in clinical skills (88.1 vs. 88.9% nationally). The Independent Student Analysis results are consistent with this finding. Students are pleased with their education overall, and appreciate the continued efforts to revise specific curricular components (e.g., Determinants of Community Health, and the surgery clerkship).

C. Teaching and Assessment

Of 114 undergraduate site directors, 111 have faculty appointments, and the remaining few are in the process of getting appointments. All of the faculty members on most of the clerkships have faculty appointments. The exception is a small proportion (<5%) of community based preceptors mostly at the Mississauga campus, which has expanded rapidly in the last year. A streamlined appointment process is in place for those teachers.

All learning experiences are supervised appropriately. In preclerkship courses, faculty direct all courses and supervise residents, clinical fellows and graduate students closely. In clinical rotations, students either work directly with attending physicians or work as part of a multi-level team under the leadership of faculty members.

Graduate students, residents and clinical fellows teaching in preclerkship courses receive course/clerkship objectives, the Undergraduate Medical Education Teacher Handbook and an orientation to the course by the course director. Residents teaching in the PBL tutorials and the ASCM courses participate in the faculty development series. Residents and fellows teaching in the clerkships receive the course objectives, the teacher handbook and orientation seminars. There are many institutional opportunities for development of teaching skills. All residents must complete successfully an online module on Teaching and Learning skills by the end of their PGY2 year; their participation is tracked centrally. Chief residents undergo additional training as teachers. In addition, all departments in which residents play a significant teaching role provide ongoing training as teachers (See table below). As of January 2012, clinical clerks began to evaluate all residents and these evaluations are sent to the residents and the residency directors.

Clerkship	Objectives provided to Residents (yes or no)	Departmental programs for teaching & assessment skills ¹ (yes or no and summarize)	Resident participation monitored ² (yes or no)
Family & Community Medicine	Yes	Yes. The Teaching Residents to Teach Program (TRT) was established by the Department of Family and Community Medicine at the University of Toronto in 2002. One of its goals is to provide residents with teaching skills appropriate for supervision of medical students in a variety of settings. It consists of a series of seven half-day modules during the academic year, of which each PGY1 resident must attend at least four in order to complete the program.	Yes
Medicine	Yes	Yes. On the Medicine rotation, the students are assigned to a clinical teaching unit. Resident teaching is primarily delivered by PGY2 trainees. <i>PGY1 Development Day (at the end of the PGY1 year):</i> Residents receive a one-hour session on the Internal Medicine clerkship curriculum and objectives, and suggestions and tips on how to teach and supervise clinical clerks. Residents also receive a one-hour session on how to deliver feedback to clinical clerks and junior trainees. <i>PGY2 Teaching Residents to Teach Annual Retreat</i> Over a two-day weekend early in their PGY-2 year, residents receive seven to eight hours of instruction on a variety of topics relevant to teaching clinical clerks. These include control of teaching sessions,	Yes

		communication of learning goals, and instruction on techniques to promote understanding and retention.	
Obstetrics & Gynaecology	Yes	Yes. Two residents per year receive an award that sponsors them to attend the Council on Resident Education in Obstetrics & Gynaecology “Residents as Teachers” Conference. Under the terms of this award, the two residents selected to attend the conference subsequently deliver a teaching session to all other residents in the Department on the information they learned at the conference; attendance at this peer teaching session is mandatory for all residents. The focus of this teaching session has generally been on teaching clinical clerks, and this has been made the explicit focus from 2011-12 onward.	Yes
Paediatrics	Yes	Yes. Residents in their second and third year receive workshops on clinical teaching models, including how to teach under the time-pressures of residency. Residents have also received teaching about giving presentations. Every cycle of Paediatric Medicine fellows (every two years) participate in a seminar about bedside teaching, delivering feedback, how to give effective PowerPoint presentations, and evaluation methods. Beginning in 2011-12, a new session for all PGY3s has been introduced on the roles, responsibilities, objectives, and clerkship curriculum for medical students on their Paediatric rotation.	Yes
Psychiatry	Yes	Yes. The Department of Psychiatry has developed the “Teaching to Teach” seminar series for residents, which consists of two half-days covering the undergraduate curriculum and how to teach undergraduate clerks, with a focus on one-to-one teaching, the one-minute clinical preceptor model, challenging teaching scenarios, and providing effective feedback.	Yes
Surgery	Yes	Yes. All surgical residents are informed about their role in teaching clerks during the “Orientation Day” in PGY1. This is followed by a mandatory full-day workshop entitled “Residents as Teachers Day” that is conducted for all residents at the PGY1 and PGY3 levels. Thus each resident receives two full days of teacher-training sessions in the course of his or her residency.	Yes

¹ Departmental programs that are offered in addition to a Faculty-wide training program required of all postgraduate students.

² All postgraduate students must complete a four hour ‘Resident as Learner and Teacher’ module that is part of the postgraduate educational core curriculum (PGCorEd). Participation in this module is monitored centrally.

The University of Toronto grading policy requires that there must be at least two assessments for each course, with neither constituting more than 80% of the grade. Since 2009, the medical school has reported final grades as credit/no credit. Guidelines require that a result below 60% and/or unsatisfactory professional conduct will lead to a grade of no credit, whereas in most courses a result of over 70% along with satisfactory professional conduct are sufficient to merit credit and a result between 60 and 70% is borderline. Within this context, faculty course committees set specific requirements and grade thresholds,

define what constitutes borderline and appropriate remediation within the curriculum governance structure.

The following tables summarize assessment methods across all of the courses and clerkships. Note that, in addition to these assessments, all courses require an assessment of professionalism in one or more venues. This assessment must be satisfactory for the course to be completed.

YEAR ONE/ACADEMIC PERIOD ONE

Course title	# of exams	Contribute to Grade (Check all that apply) [‡]						
		Internal exams	Lab or practical exams	NBME subject exams	Faculty/resident rating*	OSCE/SP exam	Paper or oral pres.	Other [†]
Art & Science of Community Medicine-1 (ASCM-1)	2		√		√	√	√	
Brain & Behaviour (BRB)	3	√	√					
Clinical Pharmacology & Therapeutics (CPT) ⁺	1	√						
Determinants of Community Health-1 (DOCH-1)	2	√					√	
Metabolism & Nutrition (MNU)	3	√	√					
Structure & Function (STF)	5	√	√					

* Include assessments by faculty members or residents in clinical experiences and also in small group sessions (for example, a facilitator assessment in small group or case-based teaching)

† Describe the specifics in the report narrative

‡ All courses have one or more professionalism evaluations of students. These assessments must be satisfactory, but do not contribute to the calculation of the final grade.

⁺ Grading in the CPT unit is part of the BRB, as CPT does not have separate course status in the official registry.

YEAR TWO/ACADEMIC PERIOD TWO

Course title	# of exams	Contribute to Grade (Check all that apply) [‡]						
		Internal exams	Lab or practical exams	NBME subject exams	Faculty/resident rating*	OSCE/SP exam	Paper or oral pres.	Other [†]
Art & Science of Clinical Medicine-2 (ASCM-2)	2		√			√	√	
Determinants of Community Health-2 (DOCH-2)	1	√			√		√	√
Family Medicine Longitudinal Experience (FMLE)	0						√	
Mechanisms, Manifestations, & Management of Disease (MMMD)	7	√						

* Include assessments by faculty members or residents in clinical experiences and also in small group sessions (for example, a facilitator assessment in small group or case-based teaching)

† Describe the specifics in the report narrative

‡ All courses have one or more professionalism evaluations of students. These assessments must be satisfactory, but do not contribute to the calculation of the final grade.

YEARS/ACADEMIC PERIODS THREE AND FOUR

Course or clerkship rotation title	Contribute to Grade (Check all that apply) ‡						Clinical skills observed (Y/N) †	Formal mid-course feedback (Y/N)
	Internal Written exams	NBME subject exams	Oral exam or pres.	Faculty/resident rating	OSCE/SP exams	Other*		
Year 3								
Transition to Clerkship (TTC/DOCH-3)	√					√	N/A	N/A
Anesthesia (ANS)	√			√			Y	Y
Dermatology (DERM)	√			√		√	Y	N
Emergency Medicine (EM)	√			√			Y	Y
Family & Community Medicine (FCM)	√		√	√		√	Y	Y
Medicine (MED)	√		√	√		√	Y	Y
Obstetrics & Gynaecology (OBGYN)	√		√	√		√	Y	Y
Ophthalmology (OPT)	√			√			Y	N
Otolaryngology (OTO)	√			√			Y	N
Paediatrics (PAEDS)	√		√	√			Y	Y
Psychiatry (PSYCH)	√		√	√	√	√	Y	Y
Surgery (SURG)		√						Y
Portfolio Year 3 (PFL-3)				√		√	N/A	N/A
Integrated OSCE (iOSCE)					√		Y	N/A
Year 4								
New course in 2011-12: Transition to Residence (TTR)	√			√		√	Y	N
New course in 2011-12: Portfolio Year 4 (PFL-4)				√		√	N/A	N/A

Course or clerkship rotation title	Internal Written exams	NBME subject exams	Oral exam or pres.	Faculty/resident rating	OSCE/S P exams	Other *	Clinical skills observed (Y/N)†	Formal mid-course feedback (Y/N)
Former clerkship rotation: Ambulatory Community Experience (ACE)				√		√		
Former clerkship rotation: Anesthesia (ANS)	√			√			Y	Y
Former course: Dermatology (DERM)	√			√		√	Y	N
Former clerkship rotation: Emergency Medicine (EM)	√			√			Variable	Y
Former clerkship rotation: Medicine Phase II (MED II)	√			√	√	√	Y	Y
Former clerkship rotation: Surgery Phase II (SURG II)	√			√	√	√		
Former course: Determinants of Community Health-4 (DOCH-4)	√						N/A	N/A

‡ All courses have one or more professionalism evaluations of students. These assessments must be satisfactory, but do not contribute to the calculation of the final grade.

† Students observed performing core clinical skills? (Yes or No)

* Other assessments:

TTC: Written assignments on evidence-based medicine and relevance of diversity categories in individual patient care

DERM: Online seminar score

FCM: Academic project (written assignment)

MED: Self-directed written assignment on evidence-based medicine

OBGYN: Written assignment (not used in 2011-12)

PAEDS: Students are required to complete CLIPP cases in order to receive credit in the course, but the cases do not contribute to the calculation of the final grade.

PSYCH: Continuous Patient Profile (CPP) – a short written report outlining the care of a patient over the course of the rotation, giving the clerk a longitudinal perspective to psychiatric care.

PFL-3: Written assignments of reflections on their clinical experiences vis-à-vis the CanMEDS roles

iOSCE: Two integrated OSCEs for all students, at the midway and endpoint of Year 3. A remedial OSCE is conducted in Year 4 for students who are not successful in achieving credit on the first two.

As the tables document, Toronto uses an appropriate variety of methods of assessment, including multiple choice questions, papers, problem sets, laboratory exercises, simulated patients, OSCEs, oral exams, peer assessment and feedback on projects and PBL tutorial work. All preclinical courses and clerkships include an assessment of professionalism for every student; in addition, narrative feedback is provided in all courses. Peers provide assessment at many times during the curriculum. Students receive formative assessment in all preclerkship courses and mid-rotation feedback in all clerkships.

Clinical problem solving, communication and other skills necessary for clinical practice are assessed continuously by direct observation by preceptors in small groups in PBL and ASCM tutorials, written exam questions in MMD, all of the 11 core clerkship written examinations, oral examinations in Medicine, Surgery, Obstetrics and Gynecology, Paediatrics and Psychiatry, OSCEs at the end of the Psychiatry and Family and Community Medicine clerkship and in the integrated OSCEs midway and at the end of the third year.

With regard to observation of core clinical skills, ASCM provides ongoing observation and assessments, as well as formative OSCEs in both ASCM 1 and 2. In clinical clerkships, students receive formative feedback on clinical skills in Medicine, Emergency Medicine, OSCEs in Paediatrics, Psychiatry, Family Medicine and oral examinations in Medicine, Surgery, Obstetrics and Gynaecology. Students must pass these to receive credit. Finally, there are summative OSCEs at the end of year 1, year 2 and in each half of year 3. Successful completion of each of these tests is necessary for promotion.

Preclerkship grades are published in a timely fashion; a recently developed system has enabled all clerkship grades to date for 2012 to be published within 6 weeks.

D. Curriculum Management

1. Roles and Responsibilities

The curriculum management structure is shown in Appendix P. Functionally, all undergraduate medical education responsibilities are administered through the office of the vice-dean undergraduate medical education, who also chairs the curriculum committee. The curriculum committee has three standing committees; one for the preclerkship, a second for the clerkship and the third is the curriculum evaluation committee. The preclerkship and clerkship committee communicate directly with appropriate course and theme committees, whereas the evaluation committee further communicates with the examination and student assessment committee. The membership of the curriculum committee is comprised of members who bring appropriate representation of administration, faculty, students and staff, but also is comprised of members who hold advanced degrees or diplomas in pedagogy or other fields that provide the required expertise for an effective curriculum committee. The terms of reference state that the curriculum committee has final management authority in setting the curriculum, this was confirmed during the survey visit, and was verified by different members of faculty who described experiences with curricular change and management as well as the survey team's inspection of records of the curriculum committee.

Mechanisms for curricular management are appropriate for the task. The curriculum committee works closely with the standing committees, the structure of the preclerkship and clerkship committees are designed to promote horizontal and vertical integration and continuity of the curriculum and the evaluation committee identifies curricular gaps and provides information with respect to program effectiveness. A major feature of the curricular structure that assures a coherent and coordinated curriculum is the use of curricular 'themes' in addition to more traditional courses. Interprofessional education sessions, for example, run in each year of the curriculum. Professionalism is another theme that runs a continuous thread throughout each preclerkship course and every core rotation. Further coherence and coordination are assured by theme leads and preclerkship and clerkship coordinators sitting on both the clerkship and preclerkship committees. The *Guidelines and protocol for making*

curricular changes were formalized in 2011 and describe the processes whereby faculty members could contribute to curricular change. Comments made to the survey team from various levels of faculty members suggest that this process was understood and effective.

The curriculum evaluation committee was renamed and reformulated in 2011 to replace an earlier committee. In addition to examining data to ensure program effectiveness, the evaluation committee annually reviews each course/rotation in considerable detail. The committee uses CMap, an in-house developed curriculum database and mapping tool, which can be used, among other purposes, to search for curricular content and identify gaps/redundancies. The preclerkship and clerkship committees respond to needs identified from the annual reviews. The Institutional Self-Study, however, suggested that overall program objectives would benefit from regular review, and the curriculum committee agreed. Recently, a 5-year plan for overall curriculum review was adopted. Overall curricular reviews have occurred in the past. The review in 2003 led to the adoption of the CanMEDS framework, and another overall review occurred during 2007-08 with a major focus on innovation and pedagogical trends in curriculum. A highlight of the 2007-08 review was the inclusion of a student-written report and a major retreat in which reports were widely considered. In addition, major reviews occurred for the preclerkship in 2006 and for the clerkship in 2007.

The curriculum evaluation committee, by analyzing program effectiveness data and reporting this to the curriculum committee and the preclerkship and clerkship committees ensures that issues are identified. The curriculum committee ensures gaps/redundancies are eliminated and solutions implemented. Sometimes the curriculum committee will task either the preclerkship or clerkship committee to identify a solution; on other occasions an *ad hoc* committee or task force would be constituted to make recommendations.

The curricular mapping tool, CMap, is a major innovation to ensure appropriate curricular coverage of clinical objectives. Expert faculty reviewed Medical Council of Canada objectives and assigned them as either Category A (either more frequent or more dangerous) or Category B (less frequent and less dangerous). Category A objectives must match with a specified number of teaching activities and Category B activities with fewer activities. All of these objectives are then mapped and the curriculum committee tasks either the clerkship or preclerkship committee to resolve any identified issues. CMap is updated annually based on course reports.

In their Independent Student Analysis, students identified a need for a formal limit on the number of class or duty hours to leave time for personal study, research, career development and more. The Faculty responded in 2011 with the adoption of appropriate policies in preclerkship and another for the clerkship. Assigned class time in the preclerkship is monitored. The policy in clerkship states that required clinical and didactic time shall not exceed 10 hours per day averaged across the duration of the rotation and that every site director has the responsibility to monitor this. Survey team interviews with junior faculty, residents and clerks found that some are unaware of the policy in clerkship and that as a result, some students are not following the policy.

The vice-dean responsible for undergraduate medical education has an appropriate authority, budget, staff and other resources to support and manage the medical school program. In addition, the vice-dean enjoys tremendous collegial support partly due to the large size of the faculty, but also due to the advanced education of many team leaders and their obvious enthusiasm for the program's success. The organizational structure available to the vice-dean contribute to this success as well, for example, in addition to the curriculum committee and its standing and course/theme committees, the vice-dean receives operational advice from three additional committees: an executive committee, an academy director's committee and a committee dealing with the medical information system (MedSIS).

2. Geographically Separate Campus²

The medical school has two geographically separate campuses, as described in the following chart:

Campus	Location	Name and Title of Principal Academic Officer
Toronto / St. George (Downtown Toronto)	Downtown Toronto (based primarily at the Medical Sciences Building and Toronto teaching hospitals)	Dr. Jay Rosenfield, Vice-Dean UME <i>Academy Directors:</i> <ul style="list-style-type: none"> • Dr. Molly Zirkle, FitzGerald Academy • Dr. Mary Anne Cooper, Peters-Boyd Academy • Dr. Jackie James, Wightman-Berris Academy
<i>As of 2011-12:</i> Mississauga Academy of Medicine (City of Mississauga, 30 km west of downtown Toronto)	Mississauga, Ontario (based primarily at the University of Toronto- Mississauga campus and at The Credit Valley Hospital and Trillium Health Centre)	Dr. Jay Rosenfield, Vice-Dean UME <i>Academy Director:</i> <ul style="list-style-type: none"> • Dr. Pam Coates, Mississauga Academy of Medicine

The Mississauga Academy of Medicine (MAM) is associated with Credit Valley Hospital and Trillium Health Centre. Considerable facilities and its administration are located on the Mississauga Campus of the University of Toronto. MAM opened with 54 first year students in 2011-12; as shown in the following charts, the plan is that MAM will develop into an academy for all four years, providing small group teaching for all preclerkship courses, all clinical clerkships and a full selection of fourth year electives and selectives. A steady state of 216 (54 students per year) medical students is planned for the foreseeable future and this will comprise approximately 1/5 of the total student medical school population.

ACADEMY ENROLLMENT IN 2011-12

Campus	# of Students in Year One	# of Students in Year Two	# of Students in Year Three	# of Students in Year Four
St. George (downtown)	205	250	224	224
• FitzGerald Academy	54	72	60	60
• Peters-Boyd Academy	60	68	66	66
• Wightman-Berris Academy	91	110	98	98
Mississauga Academy of Medicine	54	N/A*	N/A*	N/A*
Total	259	250	224	224

*Some students beyond Year 1 participated in certain learning activities at the Mississauga hospitals in 2011-12, in one or more courses. However, these placements are course- and rotation-dependent, and are not different from the practice of placements at other community sites.

As is the case for the other academies, the vice-dean for undergraduate medical education directly supervises the Mississauga Academy director, who is responsible for the education of Mississauga

medical students. Administrative leaders at the Mississauga campus and affiliated hospitals were enthusiastic in their support of the MAM.

The curriculum at the MAM is the same as other campuses, with the same courses, objectives, evaluation system and ongoing monitoring, and the structure of the academy program is such that this will continue to be the case. The lecture curriculum is common across both campuses, using the two way interactive AV system described above, and Mississauga faculty deliver some of the core lectures. Small group sessions are taught as in the other academies, with local site course directors working with the course directors and the Academy director to recruit, develop and manage local faculty. Exam scoring, OSCEs and final grading are done centrally. As with students in other academies, Mississauga students will have the option to participate in clinical clerkships and other academic opportunities and programs across all academies. During the survey visit, students had no concerns about their courses, were developing local service initiatives and were taking advantage of educational opportunities across Toronto. A regular bus service connects the Mississauga and St. George Campus.

Mississauga faculty and curriculum are closely integrated functionally with the school and the overall curriculum. Faculty must be approved by their departmental chairs and have appointments with their respective departments. As with faculty in other academies, Mississauga faculty are built into the usual structure of course and clerkship administration. Lecturers work directly with the course director or unit coordinator. ASCM, DOCH and PBL tutors are recruited by and report to the Mississauga Academy Director. Highly detailed, centrally prepared teaching materials are disseminated through the central Medical Education Office. The Academy Director works in collaboration with course directors to prepare tutors for their roles in teaching and assessment, and participates in the Academy Director's Committee, the UME Curriculum Committee and the Preclerkship Committee. Of note, Mississauga faculty can take on leadership roles in the larger UT School of Medicine system. For example, the Deputy Course Director of ASCM1 is a Mississauga-based clinician. The Mississauga Academy has its own director of faculty development, who works closely with the new faculty members, the course and curriculum directors and the main campus Centre for Faculty Development. She is extremely active in orienting the new faculty. Mississauga will not be home to clerkship students until 2013-14. Faculty members are being recruited and will be organized as in the other Academies.

As for the process of assignment to Mississauga, all applicants to the medical school are asked their campus preference. In the first year, 22/54 selected Mississauga or had no preference; the rest were randomly assigned to the campus. Overall, applicant acceptance of the offer of admission was similar to other academies. There is a formal process of appeal of the assignment of campus; students were aware of this possibility, although no student has pursued this option so far. During the survey visit, the morale of the students, including those who had been randomly assigned to the campus, was very high.

Student services are comparable to those on the main campus. Of note, Mississauga has its own full time student support coordinator, who is greatly appreciated by the students. Health care is organized through the UT-Mississauga Health and Counseling Centre, and is private and confidential. None of the clinicians is involved in teaching the students. Personal counseling is offered through the UT-Mississauga campus, but most medical students will use the services of the Office of Health Professions Student Affairs downtown. There are opportunities for email psychotherapy, video conferenced meetings with counselors or counselors can travel to Mississauga for scheduled appointments. Career counseling is done with a combination of group meetings on site and at St George's via AV link, with individual meetings available and schedulable on site. Academic support in terms of learning skills is also organized through the Office of Health Professions Student Affairs office; the specialist organizes group sessions and is available for face-to-face meetings at Mississauga or video-conferenced appointments. Students with a suspected or confirmed condition requiring accommodation can be referred to the UT-Mississauga Access-Ability Resource Center. Financial aid decisions are made centrally with a common set of eligibility rules. Financial counseling is done through a combination of meetings on campus or via AV and on-line

webinars; personal appointments can be arranged on the Mississauga campus. At the site visit, students expressed no concerns about services.

E. Evaluation of Program Effectiveness

The Faculty uses a number of measures to evaluate the medical school's program effectiveness. Some measures relate to student performance in courses (e.g., OSCE scores, course examination scores and student advancement and graduation rates). A second group of measures provides an external comparison (e.g., Results of Medical Council of Canada (MCCQE) Part I and Part II examinations, Canadian Residency Matching Service [CaRMS] match rates), and a third group of measures considers student evaluations and student choices (e.g., Student responses on the AAMC Canadian Graduation Questionnaire (CGQ), student evaluation of courses and clerkship rotations, specialty choice of graduates, and a recently introduced survey of graduates during early postgraduate training years). Some of these results are reviewed directly by the curriculum committee, but in most cases, the results are reviewed and interpreted by the curriculum evaluation committee and then reported to the curriculum committee.

Every learning activity in the medical school program is evaluated by students. The evaluations are course/content specific, such that an evaluation form for a lecture course may be quite different from a course with a high degree of small group or active learning sessions. Student evaluations are centrally captured via a computerized medical information system. At the conclusion of a course, student evaluations are reviewed by the course director and course committee and are summarized in an annual report that is provided to the preclerkship or clerkship director and the curriculum evaluation committee. For all but one course in the preclerkship, student evaluation response rates were greater than 60%. The Independent Student Analysis and the Institutional Self-Study data suggested that more student evaluation of residents as teachers was appropriate. A system was implemented in consultation with the post graduate program and appears to be successful. The CGQ is another means by which student evaluation is gathered. Although in 2011 the response rate exceeded 82%, in preceding years the response rate was 50% or lower.

Although these reports are often initially and routinely analyzed and interpreted by the curriculum evaluation committee, ultimately they are seen by the curriculum committee when agreed upon targets are not met or results suggest that improvement is needed. The review system is impressive and effective. During the site visit, the survey team asked to see how the Faculty responded to a particular subject (i.e., of end-of-life care, geriatrics and long-term care) that was identified by low scores in the CGQ. Curriculum committee minutes documented the issue and the process used to achieve improvement. This process included the establishment of an *ad hoc* working group that produced a report, the recommendations of which, ultimately led to significant curricular change. The Institutional Self-Study provides more examples of program effectiveness monitoring to maintain and improve the curriculum (e.g., initiation of central core seminars in Psychiatry in 2010-11 to address concerns students had expressed about variable seminar quality at multiple teaching sites and the introduction of key-feature questions in written examinations in multiple clerkship rotations in part to address program concerns with student performance on the problem-solving portion of the MCCQE-Part I).

The school has a sophisticated system to review program effectiveness. A 2010 evaluation of the program effectiveness looked at performance on 49 components of the 40 program objectives. In the initial analysis, before any intervention, only one component failed to meet the benchmark outright, whereas 84% met the mark and in another 15% of cases, further data were needed before making a determination. Follow-up in 2012 suggests that program effectiveness is being met in all categories, and the earlier problem identified in 2010 was isolated and not indicative of a negative trend.

On the 2011 MCCQE Part I exam, University of Toronto graduates had a 99% pass rate. The overall mean score for Toronto medical students was 560 vs. the Canadian medical graduate average of 543. Furthermore, the Toronto average was higher than the Canadian medical graduate average in all subcategories. With respect to MCCQE Part II results (2010 data), Toronto graduates had a 95% pass rate. Their rank was number 1 in the nation for total score, and Toronto graduates on average scored above the average scores of all Canadian medical graduates in all of the major subcategories.

III. MEDICAL STUDENTS

See Appendices for the following documents:

- Student enrolment by year (Appendix T)
- Mean premedical GPAs for the past eight entering classes (MS-5, MS-6) (Appendix U)
- Number of students who left school, exhibited academic difficulty, or took a leave of absence (Appendix V)
- Sample Medical Student Performance Records (Appendix W)
- Information on pipeline programs (Appendix X)
- Financial aid support for student (MS-24) (Appendix Y)
- Narrative section of the student analysis and data from the student-administered survey (Appendix Z)

A. Admissions

Admission requirements for undergraduate applicants include a minimum of three years of undergraduate education (candidates educated outside Canada must complete the equivalent of a Canadian four-year university bachelor's degree). Specific course requirements include two full-course equivalents in life sciences and one full-course equivalent in the humanities, social sciences or languages. Undergraduate candidates must have a minimum GPA of 3.6 out of 4.0 and a minimum MCAT score of 9 in each section and N on the writing sample (See Appendix U). The faculty recommends, but does not require, that applicants complete a university-level course in statistics and at least two full-course equivalents in courses that require expository writing. Graduate applicants must have completed all graduate program requirements including successful defense of the thesis and must have a minimum GPA of 3.0 out of 4. Graduate candidates must also have a minimum MCAT score of 9 in each section and N on the writing sample.

All applicants apply to the University of Toronto through the Ontario Medical School Application Service (OMSAS). OMSAS receives and verifies all application components prior to forwarding applications to the schools. Upon receipt from OMSAS, applicant files go through an initial screening by admissions staff who verify the prerequisites on the applicants' transcripts and determine whether candidates meet the threshold requirements of either the undergraduate or graduate category, as applicable.

Applicants' files that are confirmed as meeting the minimum criteria are then reviewed in full by a 'file review committee' for undergraduate applicants, or a 'graduate review committee' for graduate applicants. An academic score is given based on GPA, the rigour of the course of study and the coherence of the program. The score also takes into account other academic accomplishments such as research, publications, grants and teaching. Non-academic excellence, particularly in terms of leadership and contributions to one's community, is assessed by review of the personal statement, the autobiographical sketch and letters of reference. The admissions process identifies candidates for medical school through assessing each applicant's overall achievements, including those in academic and non-academic areas. The selection criteria are in keeping with the vision statement of the school that states that the Faculty will provide international leadership in improving health through innovation in

research and education. The admissions overview, criteria and selection process are readily available on-line (<http://www.md.utoronto.ca/admissions.htm>).

Once academic and non-academic scores are assigned, the review committee provides a recommendation on whether a candidate should be interviewed. Applicants whose GPA and/or MCAT results are only slightly below the screening thresholds are personally reviewed by the Associate Dean and/or Admissions Coordinator for unique and outstanding attributes that in fact warrant a full review. This full review may be completed by a review committee or by the Associate Dean and/or Coordinator. After all committee reviews are complete, the top candidates are invited for a personal interview at the University of Toronto. To ensure the broad based education of applicants, academic and non-academic scores from the file review are weighted 60% academic and 40% non-academic, and the file review as a whole is weighted 80% versus 20% for the interview. In 2011/12 more structure was incorporated into the interview process through a series of 'best practices' questions selected from experienced faculty interviewers.

Academy selection/assignment begins with the interview process (St. George, MAM or no preference). Upon completion of admissions rank-order list, it is merged with the campus preference list. A second survey to St. George students in the summer assists in assignments to the three Toronto-based academies. Strong academic credentials are required for admission to the program. The grade point average for accepted applicants over the past five years is 3.89 of 4.0. There are over 11 applicants for each position in the first year class. Since 2004, over 99.5% of admitted students graduate from the program (See Appendix V).

Application materials, including selection criteria, are available online and in booklet form. Consistent with Web 2.0, a variety of social media are also being used to communicate with potential applicants.

The Admissions Committee is largely a committee of faculty members and is comprised of two student members (one year term, non-renewing); nine general members from different constituencies and six *ex officio* members. The associate dean undergraduate medicine admissions and student finances serves as the committee chair. Other than the student members, all but two of the committee members are members of faculty. The committee implemented a new annual conflict of interest procedure.

Admissions Committee members receive training. For 'file reviewers', further training sessions are provided every year, and a 'booster' training session also takes place on file review day. Final authority for admissions rests with the Admissions Committee. In the years since the last full survey visit, no committee decisions were rejected or over-ruled.

A number of resources are available to support programs and partnerships aimed at enhancing the applicant pool. In addition to existing officers and program coordinators, new positions were created to support increased participation of Indigenous people in the applicant pool. Specific program supports include financial aid, collaborations between faculty administrators and outreach program leaders as well as the Summer Mentorship Program (SMP) and Medicine Youth Summer Program scholarship initiative (See Appendix X).

The Summer Mentorship Program began in 1994 with seven or eight high school students per year. As the Faculty's major pipeline program to support Indigenous and African-descent individuals in considering careers in healthcare, it now accepts close to 50 students per year. Tracking data show that 98% of participants graduated from high school and went on to post-secondary education. Comments from participants suggest that the program has positively influenced consideration of careers in health sciences. More formal tracking systems are in place to determine the long-term success of this program. The Medicine Youth Summer Program was created in 2008. This additional pipeline program accepts high school students with financial need and was created in 2008 as a collaboration between the Faculty of Medicine and New College at the University of Toronto. Two years ago, the Toronto School Board

joined as an additional partner. The program offers 25 scholarships per year. Efforts to track the success of this new program are underway.

The University of Toronto undergraduate medical education program adheres to the Council of Ontario Faculties of Medicine (COFM) policy document on *Essential Skills and Abilities Required for the Study of Medicine*. This technical standards policy is disseminated to all applicants through the OMSAS website where it is posted prominently on the application page. The policy is also available to students, faculty and staff and the general public on the undergraduate medical education website, which can be accessed through multiple paths, including through the admissions, student and policies sections of the site. Newly admitted students are specifically advised to review this policy before signing their offer of admission. The policy is also included in the online UME Student Handbook and UME Teacher Handbook, both of which were launched and heavily publicized in 2011-12.

The school catalogue is no longer produced in hard copy as all information is available online. The Admissions overview, requirements and selection process are available online (<http://www.md.utoronto.ca/admissions.htm>) and accurately reflect the school process as outlined in the database. The student handbook gathers much of the important information about the program in one online document. Admissions information is also disseminated at recruitment initiatives at high school and university levels. Recruitment also occurs at other universities such as McMaster and UBC and at career centre-sponsored graduate and professional school fairs on all three University of Toronto campuses.

The number of medical students admitted each year has grown from 198 in 2001 to 259 in 2011. The number of students registered in the MD-PhD program is 43 in total (See Appendix T). There were 10 new MD-PhD students accepted in 2011/12. As the learner population increased significantly in the past eight years, concomitant growth in teaching sites, faculty, administrative staff and learning space also occurred. Full-time clinical faculty numbers increased by 29% since 2004, while all other categories (clinical part-time and adjunct, and non-clinical part-time, adjunct and status-only) have grown by 60%, including 589 new community-based clinical faculty appointed in 2011. The number of post-graduate trainees increased by 46% since 2004. Administrative and infrastructure resources have expanded to meet the needs of the growing student and faculty populations. Since 2004 central staffing for the medical education program increased by approximately two-thirds, including a full staff complement located at the Mississauga campus in support of Mississauga Academy of Medicine. This increase does not include the additional growth in staff numbers at hospital sites or within the university departments that contribute to the clinical clerkships. In particular, a substantial investment in professional counseling staffing in the Office of Health Professions Student Affairs has greatly increased the program's capacity to meet students' needs and support their well-being: Since 2004, two career counselor (1.6 FTE), three personal counselor (2.0 FTE) and one learning skills counselor (1.0 FTE) positions were added. The Office of Financial Services has two staff dedicated to financial services counseling.

The Faculty of Medicine does not accept transfer students to its MD program.

The Faculty of Medicine has several regulations in place to ensure that visiting students do not diminish the resources available for enrolled students. Visiting students are not accepted for core rotations. Canadian and foreign visiting students are accepted into appropriate non-core rotations. Other checks include: 1) a policy that University of Toronto students have priority and must be accommodated, 2) a 'black-out' period for visiting students from September to November when University of Toronto students can register for electives, but visiting students cannot 3) a limitation on foreign students so that they are only allowed to register in electives (four weeks max per elective; two electives max) between January and June, and the number of students is capped at 300. In 2010/11, 1,600 Canadian students registered for visiting electives. The demand for electives by visiting students is monitored. The electives office and committee evaluate any reports from Toronto students that suggest that adequate or

timely access to an elective was affected by visiting students. The visiting electives officer maintains a complete roster of each visiting student including health records, immunization information, insurance and liability protection. The visiting electives officer grants approval of each application. Visiting elective students are assessed by their University of Toronto electives supervisor using the evaluation form supplied by their home schools.

B. Student services

1. Academic and Career Counseling

Academic advising/academic assistance is provided through multiple mechanisms. Faculty-led group tutorial and review sessions as well as peer tutoring and review sessions led by upper-year students are in place for subject-related difficulties. For larger issues, the associate dean health professions student affairs (HPSA) in the Office of Health Professions Student Affairs (OHPSA) provides confidential academic advising and support for students in academic difficulty. This position has no evaluative role for any student. For clinical skills assistance, the Clinical Skills, Competency, Observation, Reflection and Evaluations (SCORE) program assists in a short term tutoring plan to improve students' skills as necessary. Other services at the University offer learning skills support and services for students with suspected or diagnosed learning disabilities. CGQ data show that 67% of students are satisfied or very satisfied with academic counseling and this is an identical percentage to the national norm.

The Independent Student Analysis reported that students were initially unhappy with the adequacy and accessibility of career counseling. Over 80% of the students reported feeling stressed regarding CaRMS and career planning and balancing medical education with personal life. However, students who did make use of the career and personal counseling were extremely pleased with these services. In 2011, all fourth year students were offered a career counseling appointment and had the option of attending or declining. Most students accepted the appointment, and those students interviewed by the survey team found the sessions very helpful. Results, however, are not yet available for more junior students. A Faculty Career Advising Program was implemented so that all students will have access to reliable, standardized advice on career choice from faculty members who are trained as career advisors. The Faculty also added optional career choice presentations and workshops that are available to the Mississauga campus by video conference. Weekly lunch hour presentations feature practicing physicians from different specialties. Career nights are also offered and recorded so that they can be available to all students. Online career resources have also been expanded (<http://portal.utoronto.ca>).

Preparation of the MSPR (See Appendix W) is the responsibility of the Faculty Registrar. The MSPR is essentially a tabular summary of a student's achievement of CanMEDS competencies in the core clerkship rotations. The MSPRs and transcripts are submitted directly to the Canadian Residency Matching Service (CaRMS). The process for applying for residency programs does not disrupt the medical education of the medical students as the medical school provides for a three week CaRMS interview period in January during which 4th year students have no other scheduled activities.

University of Toronto students are allowed to take electives elsewhere. When students are approved for electives at other LCME/CACMS accredited medical schools in Canada and the USA, the level of diligence and quality assurance provided by that school is accepted as sufficient. Electives taken in other countries must be co-supervised by a University of Toronto faculty member. To obtain approval, registration must be completed by the University of Toronto co-supervisor and additional information is required of the host country co-supervisor. Once approved by the electives office, students are required to meet with the electives officer to review the requirements of the elective and complete necessary documentation. The electives officer provides reminders to the student and co-supervisor regarding the need for a completed performance assessment at the end of an elective. In cases where a timely return of the form does not occur, the director of electives becomes involved until the matter is resolved.

2. Financial Aid Counseling and Resources

The Financial Aid Director is a .5 FTE decanal position, the associate dean undergraduate medicine admissions and student finances. The Office of Student Financial Services is also staffed by the associate registrar student financial services (1 FTE), the financial aid counselor, the coordinator of admissions and awards and two support staff for a total of 2.75 FTE. Currently, they are based in the main medical school building and are accessible to all students at the St. George campus. The St. George campus office staff also book appointments at the Mississauga Academy when requested by students. Financial aid can also be arranged outside of normal office hours to accommodate student schedules. The offices also serve students enrolled in Medical Radiation Sciences and Physicians' Assistant programs however, students from these small programs use less than 5% of staff time. The Office of Student Financial Services provides assistance from Faculty, government, and external (Ontario Medical Association) funds.

Data from the Independent Student Analysis suggested that the cost of education has a negative impact on the health and well-being of students. Thirty-three percent of students reported that debt load may influence their choice of residency or location. Although only 36% of students agreed that financial counseling resources were adequate, the experiences of the relatively few students who actually made use of financial counseling were uniformly positive. The financial counseling staff are praised as a valuable source of information and advice. Financial aid information is provided to all students during the orientation week. For 2011/12 academic year, the Faculty instituted a pre-scheduled appointment with financial services staff for every first year student. This service was well received by students who were interviewed by the survey team. Data regarding program effectiveness are currently being collected. Newly designed webinars on financial aid were broadcast in May and are now available on the website. Data suggest that these sites are widely visited.

Independent Student Analysis results suggest that only 15% of students report that the cost of their education is affordable. Medical school tuition for 2011/12 is \$18,977 and the total payable amount including various mandatory fees is \$20,413, approximately \$3,000 higher than the amount required during the last full survey visit eight years ago. Annual increases in tuition fees were limited to 2-4% since 2006/7, less than the permitted maximum of 5%. The refund policy is readily available on the Faculty's website. The policy provides details and dates for fee refunds when medical students withdraw or are dismissed from the program.

According to the Independent Student Analysis, only 40% of students felt that scholarships and bursaries were adequate. The Faculty of Medicine provides non-repayable grants to the majority of medical students (70.5% of students), and the average grant received is \$6,288 (See Appendix Y). Ontario students can also access loans through the Ontario Student Assistance Program (OSAP). Over 70% of students receive OSAP aid. OSAP provides a student with up to \$68,236 over 4 years and the maximum repayable amount is \$32,850. The Government of Ontario through its Ontario Medical Student Bursary program funds a \$750/month (\$9,000/year) stipend to each fourth year clinical clerk.

The Faculty of Medicine Grants Program provides funding equivalent to 45% of a student's unmet financial need. The Faculty of Medicine Enhanced Bursary Program disburses approximately \$500,000 per year to assist 66 high needs students through non-repayable assistance that is equal to or higher than the cost of tuition. As well, new admissions bursaries introduced in 2011/12 provide six incoming students with \$50,000 over the course of the program in addition to any other funding for which they are eligible. The University of Toronto offers students a higher level of non-repayable grant support averaging \$6,288 in needs-based payment per student compared to other Ontario medical schools (\$4,313 to \$6,022). The Faculty's policy is that no student who is accepted into the program will be unable to enter due to lack of financial means.

CGQ data for 2011 suggest that the average student indebtedness at graduation is \$78,707, which is about \$2,000 more than the Canadian all school average for those who report having debt, but reported non-educational debt is approximately \$1,000 less than the national average. In terms of inflation-adjusted dollars, the Office of Student Financial Services calculations suggest that the average debt load of students receiving assistance has gone down since 2005/6 (\$86,200 vs. \$76,941 in 2010/11).

Fundraising is a high priority as evidenced by a couple of the recent campaigns. ‘Access to Excellence: The Campaign for Medical Students’ is an ongoing fundraising initiative to provide needs-based financial support for medical students. With its goal of \$15M recently met, the campaign is continuing, and a new higher target will be set to enhance medical student support especially for high needs bursaries. The dean has set student support as a top priority for funds raised through the university’s recently launched ‘Boundless’ fundraising campaign. In addition, the dean annually negotiates to return a portion of the tuition-derived income to Student Financial Services Office specifically for student financial aid. Recently, 30% of funds from medical student tuition increases have been rerouted back to provide financial aid to medical students.

3. Personal Counseling and Health Services

Personal counseling falls under the portfolio of Health Professions Student Affairs. Personal counselors (1 FTE manager and 2 X 0.5 FTE) have offices in a building connected to the main medical science building that is close for convenience, but sufficiently private for student appointments. At the Mississauga Academy, two dedicated private rooms exist for counseling in a location adjacent to the Terrence Donnelly Health Sciences Complex. Appointments are available everyday with extended hours until 6 or 7pm every night. Requests for appointments are triaged and students receive an appointment either within one week, within 3 days or within 24 hours for cases assigned a high priority. Counselors provide group as well as individual workshops/sessions. Ten group presentations were given in 2010/11 on topics related to the adjustment of students to medical school.

Counselors are bound to strict confidentiality. Furthermore, the medical school policy entitled *Procedure for conflicts of clinical and education roles* specifically outlines how the conflict is managed when a teacher is assigned to teach or assess medical student who is or was a patient or when a teacher is asked to provide care for a student or former student. The Office of Health Professional Student Affairs has several practices in place to prevent conflict of interest roles. The counseling staff and the Associate Dean of Health Professional Student Affairs in no way participate in the assessment of students, student advancement, preparation of the MSPR, graduation or disciplinary action.

In the Independent Student Analysis, almost 80% of students reported feeling the stress of balancing medical education with personal life throughout the program, but approximately 70% report that they can successfully manage this stress. Relatively few students report using the available services to help manage stress, but students who availed of personal counseling were extremely pleased with the services.

In 2011/12 an annual program “Check your Pulse” has been instituted to assess the well-being of first year students. The goals are to be proactive and address any concerns, and to introduce students to OHPSA services. All first year students are encouraged to make an introductory appointment with a counselor during their first year during which they complete a questionnaire on well-being. Referrals and services are organized as indicated.

The counselors in the Office of Health Professional Student Affairs work closely with the leaders of the student run Student Affairs Liaison Team (SALT). SALT has expanded its role to provide workshops and presentations on wellness.

Health services are available through University Health Service on the St. George campus and Mississauga campus. Hours of operation are from Monday – Friday, 0900h to 1700h (1630h in summer) with late hours until 1900h on Tuesdays and Wednesdays. In addition, agreements with four downtown family practice units and one Mississauga practice provide additional options. Access to near-by walk in clinics, hospital ERs, is also available. Telehealth Ontario operates a hotline 24 hours a day, every day of the year. All information about available health services is provided via a statement on access to preventive, diagnostic and therapeutic health services for medical students online, in the student handbook as well as under the recently implemented ‘Red Button’ on the program’s web site. (The ‘Red Button’ is described in greater detail in the Learning Environment section below).

Residents of Ontario are entitled to free health services under the provincial health insurance plan (OHIP). Students from other Canadian provinces are covered by their respective provincial plans. Enrolled students from other countries are required to purchase University Health Insurance (UHIP) which provides comparable coverage to OHIP. Extended health insurance beyond provincial coverage is provided to all students as members of the University of Toronto Students’ Union. All students who receive financial aid from the medical school must obtain disability insurance.

Immunization requirements are guided by the Immunization Policy of the Council of Ontario Faculties of Medicine (COFM). Ontario law specifies that all students must be fully immunized prior to entering the clinical setting. Required immunizations include: TB, varicella/zoster, mumps, measles, rubella, hepatitis B, polio, tetanus/diphtheria and acellular pertussis. Immunization against influenza is strongly recommended. First time registrants must present a completed immunization form. Returning students must submit the requested evidence of immunization otherwise clinical privileges will be suspended.

Similar to data from all Canadian schools, CGQ data for Toronto suggest that over 90% of students consider themselves adequately informed regarding infection control and occupational hazards. A protocol is in place that addresses student exposure to infectious and environmental hazards. The protocol is accessible through multiple sources including the student handbook and the Red Button feature on the school web page. The protocol has three main sections dealing respectively with financial responsibility, administrative responsibility and then detailed responsibilities including a flow chart for the student with descriptions of the required follow-through for responsible supervisors, offices and administrators.

C. The Learning Environment

The medical school is governed by three levels of anti-discrimination policy – those of the Faculty of Medicine, the University of Toronto and the Province of Ontario. In 2011, the Faculty of Medicine adopted a Diversity Statement that commits the faculty to maintaining an environment of fairness and respect, free of discrimination. The medical school uses the CanMEDS seventh role on Professionalism to outline the professional attributes that medical students are expected to develop. A Task Force on Professionalism and the school’s Professionalism Committee worked to outline learning objectives that appear as a major theme in all 4 years of the curriculum.

Professional attributes are disseminated to faculty and students via the student and teacher handbooks. Professionalism is a formal theme of the curriculum under the faculty lead for ethics and professionalism and is woven into multiple courses throughout the curriculum. Teachers are made aware of expectations related to professionalism as part of their orientation to their teaching roles. Professionalism is the joint responsibility between the hospitals and the University and this is clearly outlined in affiliation agreements. The school works with its affiliates to evaluate and improve the learning environment through the Hospital University Education Committee (HUEC) which is advisory to the Dean. The HUEC meets regularly, and from these meetings has produced or approved several policies and guidelines related to improving the learning environment. Examples include: *Guidelines for Ethics and*

Professionalism in Clinical Training and Teaching; the Standards of Professional Practice Behaviour for all Health Professional Students; the Standards of Professional Behaviour for Medical Clinical Faculty; and the Principles and Responsibilities Regarding Access to Professional Program Students and Residents as Research Subjects.

Evaluation of professional behaviour is governed by the University policy entitled: *Standards of Professional Practice Behaviour for all Health Professional Students*. This policy outlines expected behaviours. Student conduct is assessed in altruism, duty, excellence, respect for others and honour and integrity. Online forms are completed in all courses throughout the program – completed in pre-clerkship by PBL tutors and anatomy demonstrators for example, and in clerkship by the preceptor or site coordinator. Students must be successful in passing the professionalism component of each course in order to pass the course as a whole. Students evaluate teachers' professionalism on teacher evaluation forms and on learning environment surveys added to each clerkship rotation's evaluation form.

The University and Faculty have various policies in place to deal with discrimination, sexual harassment, conflict of interest and close personal relations as does the Faculty. According to CGQ results however, only 63.6% of students reported awareness of the existence of a mistreatment policy, which is lower than the national average of 74.9%. An accreditation-related faculty survey (provided in a May 1, 2012 update) showed that only 60% of faculty knew who to contact if a student informed them of an incident of mistreatment or unprofessionalism by a faculty member or student. The Independent Student Analysis reported the absence of a clear communication strategy to report mistreatment, and this concern led to the development and implementation of a new protocol for students to report mistreatment and other types of unprofessional behavior. The protocol, entitled: *Protocol for UME students to report mistreatment and other kinds of unprofessional behaviour* defines the standards of conduct and outlines a procedure for medical students to report without fear of retaliation. The protocol is included in the teacher and student handbooks. As well, the relatively new 'Red Button' feature on the school webpage (<http://www.md.utoronto.ca/redbutton.htm>) directs students to a flowchart of how to report incidents and a confidential online reporting form. The Red Button makes available information that students might need quickly. It was accessed 2,500 times by 816 unique visitors in the first three months it was available. Discussions with staff and faculty confirmed that the Red Button is well known, understood, used and appreciated as a source of information. Continued observation will determine its effectiveness.

According to CGQ data, 34.1% students reported having witnessed mistreatment of another learner, patient or health care professional. This percentage is slightly lower than the national level of 37.9%. Student reports of having been personally mistreated are lower than the national average (19.3% v. 24.2%). From the Independent Student Analysis, respondents report that 13.4-25.7% of students personally witnessed or experienced discrimination of some kind from fellow students, whereas 8.4-29.7% of respondents witnessed faculty or staff contributing to a disrespectful learning environment. Through the use of student evaluations and personal reports, the school continues to identify issues and respond accordingly to all incidents of mistreatment. Students interviewed by the survey team have confidence in the administration's approach and follow through.

All medical school policies are now consolidated and located on the school's website and they can be found in the student handbook and the teacher handbook. Many policies that are needed to deal with matters of an urgent nature can also be reached via the Red Button. Faculty, residents and staff know this, so the policy communications issues identified earlier appear to be resolved.

Examination, assessment and promotion policies for students can be found from a single web page and in the policies section of the student handbook. Overall grading follows University policy, i.e., 'University Grading Practices Policy'. Courses in all four years of the program are reported in the student transcripts as Credit or No Credit. The school has appropriate policies for grading and promotion, and according to

interviews with faculty and students, these policies are understood and work well. The recent change to Credit/No Credit appears to be especially popular with students.

All decisions about graduation, promotion, remediation and dismissal are made by the Board of Examiners and whose terms of reference can be found at the aforementioned web site and in the student and teacher handbooks. The committee is comprised of two student members (elected by their peers) and the others are members of faculty, mostly selected by the faculty council. A quorum at all meetings must include at least one student member. In reaching their decisions the board is guided by appropriate policies including those specifically aimed at learners in academic difficulty and codes of student behavior (e.g., professionalism). Decisions of the board are binding on the Faculty, but may be appealed by the student.

A student who is identified by the board as being in difficulty meets with the medical school preclerkship or clerkship director, as appropriate. The student is informed of the process that will be followed as per program and Faculty regulations and of the student's rights to process and appeal and may also be referred to the associate dean, health professions student affairs to consider reasons for the poor performance or to suggest appropriate student supports. An appeal can be made to the Appeals Committee of Faculty Council on three grounds: breach of procedure, insufficient attention paid to relevant evidence, or decisions that are not founded on appropriate evidence. Students who wish to make an appeal must submit a notice within two weeks of being informed of the Board's decision. A sophisticated appeals process is available to the student, and in the event that the student is not satisfied with the result, a further appeal can be made with the University's Academic Appeals Committee.

The paper portions of students' academic records are stored by the Office of the Registrar in secured locked filing cabinets in a locked room. The electronic versions are found in the Repository of Student Information (ROSI) and in MedSIS, a custom developed product for the medical school. ROSI is a student registration information system used by the entire University and student data are inaccessible to staff and faculty outside the Office of the Registrar. ROSI user accounts provide access to only the features required for an individual's role. Privacy statements on the login screen remind users that the data are confidential.

Students routinely receive all their grades and evaluation forms automatically through MedSIS and have access to their grades at any time via computer accounts. The official student files are securely stored in the registrar's office. A student may access his/her official student file (with the exception of the admissions file) upon request via the associate dean, health professions student affairs. The associate dean will meet with the student and review the documentation together.

Normally, assessments are to be challenged within five business days of the release of the results to the student. A feature within MedSIS alerts any course director any time a student opts to challenge. The course director then conducts a review and informs the student in writing of the outcome of the review. An opportunity also exists for formal review for final grades via submission to the faculty registrar.

The Independent Student Analysis (55-60% students) suggested that study space was insufficient on the St. George's campus. The Faculty secured additional space immediately across the street from the main medical school building. This new study space became available early in 2012 and has 24-hour security and private access for 150 students. In addition to desks, computers and tables, the space has kitchen facilities and clinical skills practice rooms. The students interviewed by the survey team were unanimously positive about the new space. An additional 20-seat computer lab is available after hours in the Discovery Commons. Hours at the Gerstein Science Information Centre were extended before exam time and students are satisfied with these changes in hours. Study space at the Mississauga Academy is sufficient as is locker space.

D. Student Perspective

Overall, the students find the educational program to be well-organized, well-taught, with clear, achievable objectives and provides an appropriate preparation for clerkship, residency and career (See Appendix Z). Their education takes place within a university with excellent athletic facilities, library resources and a safe learning environment. The students state that strengths of the school are the number and variety of opportunities available and the wealth of available research experiences.

The students feel that the accessibility and approachability of the teaching faculty and administration are strengths of the institution. Students value communication from the administration and appreciate having more updates on the work of the ongoing faculty committees to inform students of relevant issues and developments.

The majority of students agreed that the accessibility and services provided by the Office of Student Affairs was sufficient. Career stress and personal stress were reported in the ISA as burdensome to a large fraction of students (80% and 77% respectively). Students admitted to the survey team that their stress is largely self-imposed as they all strive for excellence in all aspects of their life. Increased counseling opportunities have been instituted to help students manage career and personal stress. In the Independent Student Analysis, fewer than 15% of students thought that the cost of education was affordable, only 40% of students agreed that the scholarships, bursaries were adequate, and 36% of students agreed that the medical school provided adequate financial counseling. Since then, new programs have been implemented that appear to be effective in helping students manage their financial stress (e.g., a scheduled appointment for financial counseling and provision of more programs such as financial Webinars). Students who had used the financial counseling services at the time of the survey visit were uniformly pleased with their experience, however only a minority of students had utilized these new services.

Students said that they were very pleased with the responsiveness of the Faculty. When they outlined their complaint of a shortage of study space, the Faculty responded quickly by renovating and providing accessible, quiet and sufficient study space in a nearby building. Students expressed that they felt they had sufficient representation on various committees directly related to their education. For example, the DOCH-1 and 2 steering committees had large student representation. As a result, students felt that they were able to express their concerns and play a role in the modifications to the course.

IV. FACULTY

See Appendices for the following documents:

- Faculty numbers (FA-2)
- Teaching responsibilities in departments (FA-2)
- Faculty scholarly productivity (FA-5)
- Major faculty committees (FA-12)

A. Number, Qualifications and Functions

Since the last survey visit in 2004-2005, numbers of faculty members have increased 35% to more than 6,800 full-time and 'not full-time' members. Numbers of faculty are up in all major categories. Although a cursory glance at the data tables (see Appendix BB), may suggest some loss of basic science faculty, the numbers are actually increased. This paradox is explained by administrative changes implemented in 2009 that validated the actual numbers of faculty and re-classified faculty as either 'full-time' or 'not full-time'. At the time of the previous survey visit, some concern was expressed over the numbers of faculty available to tutor clinical skills. An Alternate Funding Plan was introduced in 2006-2007, and since its

implementation recruitment of tutors has not been an issue. Junior faculty with whom the team met are eager to engage in teaching and no significant number of retirements is foreseen. The data provided in the Institutional Self-Study indicate that the current size, composition, and qualifications of the faculty are appropriate for the educational and other missions of the school.

Every teaching session is evaluated, thus every teacher is evaluated by medical students using forms that are customized for the purpose depending on the course or the activity. For the most part, these formal evaluations are completed on-line via the Faculty's medical information system. In clerkship rotations, informal focus groups are often used to review aspects of the course, and this method may be used in other courses when teaching evaluation data suggests the need for prompt intervention. The formal teaching evaluation data are first evaluated by course directors, and then individual teachers and their respective department heads receive reports. Once notified of low teaching scores or specific critical comments about teaching performance, the teacher will meet with the course director. For minor teaching issues, common solutions include advice from the course director or assignment of a teaching mentor. For more serious issues a system is in place whereby the teacher will be invited to participate in more formal faculty development sessions offered through either the Centre for Faculty Development or the Centre for Teaching Support and Innovation. In the event that evaluations do not improve despite these remedial efforts, then the teacher will no longer participate in that teaching activity.

In addition to the teacher development opportunities that are offered by the University, through the Faculty, some of the most popular are offered by specific departments for their members. Many development opportunities for research skills are coordinated by the Faculty of Medicine Research Office. Annual group sessions include a faculty orientation workshop and a grant-writing workshop. The former workshop deals with a broad range of topics of importance for faculty members, including research health and safety, research ethics and conflict of interest as well as a variety of practical operational issues and procedures. The Research Office also offers one-on-one consultation and a grant editing service that is especially encouraged for those faculty who scored well on grants but were not funded. In addition to these Faculty-wide resources, many departments offer research assistance, and many of the affiliated hospitals have well-developed development systems to support researchers. The University also coordinates a number of activities and information sessions, especially those relating to the Canada's three major national research funding agencies. The Faculty support for faculty development is underlined by its recent adoption of a specific statement on the importance of faculty development. The Institutional Self-Study confirms this commitment as do comments from junior faculty suggesting faculty development resources for teaching and research are abundant. The survey team concurs. The Institutional Self-Study identified the need for a consolidated source of information on the medical school program. A faculty handbook was developed in response to this concern and widely disseminated. Faculty members are aware of this resource and are satisfied with it.

The scope of research development activities mentioned above demonstrates the high value that is placed on scholarship. Educational scholarship is further enhanced by the University's Wilson Centre for Research in Education, a centre of excellence for education research in health professions and the existence of internal competitive research funding that is available for matching with departmental funds. Numbers and types of publications by faculty members are shown in Appendix CC. Scholarship is celebrated at the Faculty of Medicine and the Faculty actively communicates scholarly achievement and successes by various means. Furthermore, scholarly achievement is required for advancement, and is a major subject of each faculty member's review. Individual departments develop their own mentorship programs. The Institutional Self-Study comments and those of students and faculty members with whom the survey team met confirm that scholarship is inherent within the Faculty of Medicine and the reason that many junior faculty members and medical students chose this University.

B. Personnel Policies

The system of faculty appointments was revised in 2005 with the adoption of the Policy for Clinical Faculty. This policy covers appointments of MD's who are appointed in clinical departments. All other members of faculty are appointed under the terms of the *University of Toronto Faculty Association Memorandum of Agreement*. With respect to promotion, the Faculty has uniform standards independent of the document under which a faculty member was appointed. The Institutional Self-Study states and junior faculty agree that faculty members are mentored for promotion by their department chairs to the extent that during the current dean's tenure, no appeals of promotions decisions have occurred.

Conflict of interest is taken seriously at the University. The key conflict of interest policy document describes expectations and definitions in a broad range of conflict of interest, but a distinguishing feature of this policy is the requirement for annual reporting that is reviewed at the department and faculty level before reaching the president of the university. In addition to the overarching university policy, the medical school has in place additional procedures and policies in place regarding disclosure of conflicts, conflicts that may arise between educational and clinical roles of teachers and conflicts that may arise between medical school leaders and students or faculty because of personal information held by the medical school leader.

All faculty who are appointed under the 'memorandum of agreement' mentioned above must undergo regular annual performance reviews that include written formal feedback. During these meetings, responsibilities for the upcoming year are discussed. For Clinical MD faculty, formal review sessions are at the discretion of the department chair, but most faculty have annual meetings (except in one department that meets at least every 18 months) with their respective department heads where performance is discussed. In addition, as all clinical part-time faculty are appointed on an annual basis, each receives an appointment letter describing expectations. For those members of faculty eligible for promotion, a more intensive three-year review occurs regardless of the terms of appointment. As well, all teachers receive evaluations from students which are reviewed by department chairs. Faculty members who hold research grants must submit annual reports that are reviewed by department chairs and are discussed if issues arise. The Institutional Self-Study identified the need for timely feedback of student evaluations of teaching. A mechanism was instituted to ensure feedback within three months and clinical chairs are including teaching performance in the annual review process. According to junior faculty, this system is working well.

C. Governance

Medical school committees (see Appendix DD) provide adequate opportunity for faculty involvement and information exchange considering the layered levels of responsibility that exist within the medical school and the effective reporting relationships from lower level committees upwards, or in the case of select issues, such as budget, in the other direction. The Institutional Self-Study results suggest that the committee structures are effective and efficient. Faculty members who met with the survey team confirm this view. The dean receives information and general input through the major decision making bodies of the Faculty, which include Faculty Council and its standing committees, various management committees, and many medical school committees that report to the vice-dean. The Faculty has four different department chair's committees that report directly to the Dean.

The Institutional Self-Study reports satisfaction with the ability of faculty input into the system and the efficacy in which faculty-initiated changes are made. This view was echoed by faculty members with whom the survey team met. One junior faculty member described in detail the steps and the speed with which an innovative teaching idea made its way through the system and up to the curriculum committee for consideration and implementation. A number of faculty members echoed the sentiments regarding

accessibility of the vice-dean of medical education. The Institutional Self-Study suggests that governance processes are effective and open, and the survey team agrees with that conclusion.

The Faculty uses a variety of methods to stay in communication with its thousands of learners, faculty members and staff. A regular communication from the Dean's office to all members of the Faculty of Medicine has been in place since 1993. Since the last accreditation, the bi-weekly *MedEmail* is sent to all members of the Faculty of Medicine that now include approximately 17,000 faculty, staff and learners. The *MedEmail* contains a variety of information including news, notices, recognitions, job posting, links to Faculty Council agendas and minutes and more. For the past five years, the '*Dean's Report*' was distributed almost annually, and since 2003, the semi-annual '*UTMedicine*' magazine has been distributed to faculty, staff, alumni and friends of the Faculty. The Faculty website is also used as a communication's tool, and most of the Faculty home page is used as a portal to relevant news. Despite a majority of faculty agreeing that communication from the Faculty or their respective departments was good, the Institutional Self-Study identified communications as an area for improvement. The Faculty responded with the creation of a new Office of Strategic Communications and External Relations. Perhaps most importantly, the Faculty issued a new teacher handbook that contains information on organizational structures, key contact information, and key policies and protocols. During the survey visit, several members of faculty cited the handbook as an effective guide for policy and direction. Based on comments made by faculty during the visit and a review of the website, handbook and other communication media, the survey team considers that the communication strategies to and from the dean's office are effective.

Faculty members provide a genuine strength of this medical school. The data provided by the school show that its faculty members are qualified and productive. In addition to that, the survey team found the faculty in general to be talented and committed to the school and its program. They showed evidence of cohesion, partnership and strong adherence to the Faculty's mission. These qualities were observed on both campuses and in the faculty and leaders of all four academies.

V. EDUCATIONAL RESOURCES

See Appendices for the following documents:

- Four-year Revenue and Expenditure Summary and current Annual Financial Questionnaire (ER-2)
- Table(s) of teaching facilities and faculty offices/research laboratories (ER-4)
- Summary data and associated tables for each clinical teaching site (ER-6, ER-7)
- Instructional facilities at clinical sites
- Sample affiliation agreement
- Library and information technology facilities, library holdings, and library/IT staff (ER-11, ER-13)

The Faculty MD program increased its enrolment last year by nine students. There are no further plans to increase enrolment. A major change in the undergraduate medical education program in 2011 was the opening of the Mississauga Academy of Medicine.

A. Finances

MEDICAL SCHOOL REVENUE SOURCES[†]

	Revenue Source	2009 -2010 Total (\$000's)	% of total revenue	% of total revenues (all schools)
1.1	Total revenue from the university	\$78,760	21.1%	22.6%
1.2	Total revenue from provincial ministries	\$31,147	8.4%	9.5%
1.3	Total revenue from federal government	\$5,782	1.6%	0.4%
1.4	Total revenue from visa student and trainee fees	\$10,583	2.8%	1.2%
1.6	Hospital or health authority revenue	\$18,766	5.0%	3.8%
1.7	Non-endowed / restricted gifts or donations	\$0	0.0%	0.4%
1.8	Interest earned	\$2	0.0%	1.1%
1.9	Sales and services	\$11,670	3.1%	2.3%
1.10	Research grant overhead funds	\$2,336	0.6%	0.7%
1.11	Intellectual property, royalties, licensing and other fees	\$931	0.2%	0.1%
1.12	Application and application administration fees	\$1,831	0.5%	0.1%
1.13	Other contract revenue (non-research)	\$13,935	3.7%	1.0%
1.14	Other revenues	\$24,167	6.5%	1.3%
	Operating funds subtotal	\$199,910	53.6%	53.5%
2.2	Research Operating grants	\$94,015	25.2%	31.8%
2.4	Other research revenue	\$53,083	14.2%	5.4%
2.5	Total 2.1, 2.2, 2.3, 2.4 (excluding overhead report in 1.10)	\$172,866	46.4%	46.5%
	TOTAL REVENUES	\$372,776	100%	100.7%

[†]Data from AFMC's Office of Research and Information Services (ORIS)

The University requires the Faculty to have a balanced budget. Revenues have increased by over 50% in the last nine years, to \$388.2M in 2010-11, or \$414.1M when donations and investment income are included (not represented in the table above). Expenditures have increased to \$384.3M. (See revised Appendix EE). The revenue mix over the last 10 years has been 49% operating revenue, 45% university-administered research revenue and 6% donation revenue. The Faculty's endowment value was \$410.6M in 2010-11. The Dean of the Faculty has full authority over the budget including the undergraduate program and all other budget units.

The biggest current concern is an annual \$10M pension deficit for the next 15 years. The survey team is convinced that the Faculty has adequate margins and plans to accommodate this. The school identified several options for increased revenue, including funds from Post Graduate Medical Education visa trainees, fees for Continuing Medical Education courses, fees for increased numbers of graduate students and industry overheads. The Dalla Lana School of Public Health will also add \$800K to the revenue base this year. The Faculty has a modest long-term debt of \$9.3M but also has operating reserves of \$93.6M. The major unpredictable risk is that the University's primary funder, the Province of Ontario, is running a deficit budget. The Faculties of Medicine in Ontario have been assured, however, that there are no plans to reduce their funding, and the survey team saw and read a confidential document to this effect.

B. General Facilities

The Faculty has adequate facilities to deliver its curriculum (See Appendix FF). The Independent Student Analysis reports that over 75% of students agree or strongly agree that the main laboratory

facilities are adequate and further states that: “By and large, the facilities on the U of T Campus are excellent.” The main medical school building at the St. George’s campus is well-maintained and up-to-date. The \$37M Terrence Donnelly Health Sciences Complex opened in 2011 to house the Mississauga Academy of Medicine. Part of the survey team toured these facilities at the Mississauga campus, and rated them as outstanding. These combined facilities of both campuses easily accommodate the current classes for all required general classroom activities. The Independent Student Analysis identified concerns about the lack of student study space on the St George Campus. In addition to increasing library hours, the Faculty responded by creating new study space adjacent to the main medical school building. The survey team toured this space and was impressed by its capacity, design and convenience. Students interviewed by the survey team report a high degree of use of, and satisfaction with the new space.

Appropriate security systems and personnel are in place at all instructional sites. The Independent Student Analysis cites an “overwhelming majority” of students who feel safe and secure. Students record this as a ‘strength’ of the medical school.

C. Clinical Teaching Facilities

Clinical facilities are provided through its nine fully-affiliated teaching hospitals, other affiliated community sites and the four Academies (See Appendix FF). Over the past five years, the University has affiliated with eleven new clinical education sites, including six new community-affiliated acute care hospitals, two psychiatric specialty hospitals, one large public health unit (City of Toronto) and one agency (Public Health Ontario). The University has signed affiliation agreements with all its partners (See Appendix GG). The affiliates eagerly participate in educating medical students and take their responsibilities seriously. The educational programs at each site are supervised by Faculty members. The residents in the affiliated hospitals participate in teaching and are supported in their teaching roles.

In the Independent Student Analysis, fewer than 60% of students at the Peters-Boyd Academy thought that their learning facilities were adequate. These concerns were addressed and other enhancements made in 2011 through the provision of refurbished academic, lounge and on-call space and equipment, new furnishings, improvements to the wireless system, security enhancements and new computer work stations at Sunnybrook Hospital. The survey team toured the facilities and was convinced that the facilities are adequate for learning and that students are satisfied with the changes. In addition, major new capital projects that directly support medical education were completed at St. Michael’s Hospital and Mount Sinai Hospital.

D. Library Services and Information Resources

The Gerstein Science Information Centre on the St George Campus adjacent to the main medical school building is the major medical library for the students (See Appendix HH). The Independent Student Analysis describes the library resources provided by the Gerstein Science Information Centre as a ‘strength’ of the medical school. Also, a signed service agreement between the Mississauga Academy and the Hazel McCallion Academic Learning Centre (HMALC) formalizes the expectations and commitments between the Academy and the library at that location. All medical students are provided with a subscription to UpToDate, a clinical knowledge database that is available via the internet. There are also substantial library resources at the affiliated teaching hospital sites. These libraries and others in Toronto are linked together in the Health Science Information Consortium of Toronto (HSICT). Through the HSICT, students have access to all the online library resources. Librarians are engaged with the medical school program and have some teaching sessions in each of the years of the medical school curriculum. Librarians are available for consultation with course directors.

The Faculty’s IT support is managed through the Discovery Commons, and therefore, the Discovery Commons staff play many roles facilitating education in the Faculty ranging from videoconferencing,

meeting room/classroom support, on-line examinations, student evaluations and overall management of the learning management system (i.e., Blackboard) . Discovery Commons provides support and expertise for other software systems including the Medical Student Information System (MedSIS) and ‘T-Res’ a program that is used for clinical experience logging. The Medical Student Information System is used for registration, course scheduling, release of marks, student course and teacher evaluations and general messaging. The Director of Discovery Commons is a member on the MedSIS steering committee, and the director or appropriate staff members often attend curriculum committee meetings or clerkship or preclerkship meetings on an *ad hoc* basis. The Faculty has excellent video-conferencing facilities that the survey team observed on the St. George Campus and in two Academy sites. The Discovery Commons provides full-time monitoring of lectures and this service enables interactive discussion among sites. The students told us that video-conferencing works very well and the survey team observed it in use with students on the St. George Campus and simultaneously at the Mississauga campus. Lectures are now video-captured and posted for convenient student use. This is very popular with students as evidenced by our interviews with students, comments from Discovery Commons’ staff and comments from the Independent Student Analysis suggesting that 24 hour access to the Discovery Commons is welcomed. An earlier ongoing issue was the absence of a reliable photocopier in the Discovery Commons. The Independent Student Analysis reported that the problem was resolved, and this was confirmed by the survey team during the site visit. The Independent Student Analysis also identified deficiencies with the wireless system in the main medical sciences building. These services were upgraded during 2011 by the University and students interviewed by the survey team reported no issues.

The medical school uniquely serves the City of Toronto with its population of six million people. The school has effectively harnessed 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. This finding was apparent on both campuses and at all levels. The school makes good use of this cultural resource, and the survey team finds this to be a major strength of the medical school.

APPENDICES