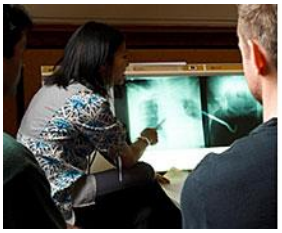





STUDENT HANDBOOK

2015-2016






Acknowledgements:

The land on which the Undergraduate Medical Education program operates has been a site of human activity for thousands of years. This land is the traditional territory of the Huron-Wendat and Petun First Nations, Seneca and most recently the Mississaugas of New Credit. The territory was the subject of the "Dish With One Spoon," Wampum Belt Covenant which is an agreement to peaceably share resources around the Great Lakes. Today Toronto is also home to many Indigenous people from across Turtle Island and we are grateful to have the opportunity to work in the community and on this important traditional territory and meeting place.

The Undergraduate Medical Education program is grateful to Jennifer Anderson, Marina Couchman, Joanie Fong, Bektu Abidta and Martin Schreiber for their development of this handbook. This publication represents the efforts of many individuals in UME who contributed and verified the content, and also provided feedback on the design of the publication.

Please direct any questions or comments about the handbook to m.schreiber@utoronto.ca.

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Introduction from the Vice Dean, MD Program

Dear medical student colleagues:

I am pleased to share with you this fifth edition of the *Undergraduate Medical Education (UME) Student Handbook*. Our program is dedicated to improving health care in Canada and around the world through the training of our medical students who will go on to be the physicians and health care leaders of tomorrow. Our leadership, teachers, and staff all strive to provide you with the best possible education and experience, and this reference handbook is part of that effort.

The handbook begins with the UME program's overall **Goals and Objectives**. These objectives underpin our entire curriculum, and are organized along the CanMEDS competencies and the Four Principles of Family Medicine – all fundamental roles of physicians. Each of our individual courses has its own set of objectives aligned with the overall objectives and the same seven "CanMEDS roles." All participants in UME – students and teachers alike – should be aware of this basic structure. The next sections of the handbook provide the **Organizational Structure** of the UME portfolio, some context on the **Academies,** and information on the model of **Integrated Medical Education** practised at the University of Toronto, followed by a description of the **Curriculum**, first at a high level and then with details about the individual courses and themes. We also provide important information on professionalism and assessment.

The section on **Student Information & Opportunities** covers everything from registration requirements to e-resources you will use in the course of the UME program, study space, research opportunities, career exploration, co-curricular activities, and getting involved in UME. In the **Services & Assistance** section, you can learn about the offices operated by UME, covering student affairs, financial aid services, and registrarial affairs, as well as the central University of Toronto health services. This section also includes a description of the student assistance section of the UME website which provide information and resources for students experiencing an urgent situation or crisis. This section also includes the ways in which students can report concerning behaviour that they have witnessed or experienced directly to the designated UME leader of their choosing through a confidential online tool.

One of the most important features of the handbook is the reference section on **key policies** that govern how UME implements its program and how members of the UME community – including students and teachers – are expected to conduct themselves. Please do take a few minutes to familiarize yourself with what is here. They are organized by theme for ease of use. We have also provided a summary of contact information for the key individuals and offices in UME. And last but not least, flip to the last page for a quick reference guide entitled "**How can I…?**"

On behalf of the entire medical school community, and in particular our senior leadership team of Associate Deans and Directors of the UME program, and administrative staff, thank you for choosing U of T. We wish you the greatest success throughout your training and encourage you to take these years in our program to learn about yourself – your interests, your priorities – as you also acquire the knowledge and skills to enter residency and ultimately the medical profession.

Best wishes,

Jay Rosenfield

Jay Rosenfield, MD, Med, FRCPC
Vice Dean, MD Program
Professor of Paediatrics

Undergraduate Medical Education 2015-16 Key Dates and Holidays

Key program dates are indicated in bold and indented. Statutory holidays are marked with an asterisk (*). Other holidays are indicated for information only. Students who observe these or other holidays may request permission for absence.

Year 3 begins	Monday, August 24, 2015
Years 1 and 2 begin	Monday, August 31, 2015
Year 4 begins	Monday, August 31, 2015
*Labour Day	Monday, September 7, 2015
Rosh Hashanah	Sunday, Sept. 13 (p.m.) – Tuesday, Sept. 15, 2015
Yom Kippur	Tuesday, Sept. 22 (p.m.) – Wednesday, Sept. 23, 2015
Eid-al-Adha	Tuesday, Sept. 22 (p.m.) – Saturday, Sept. 26, 2015
Sukkot	Sunday, Sept. 27 (p.m.) – Tuesday, Sept. 29, 2015
Shemini Atzeret/Simchat Torah	Sunday, October 4 (p.m.) – Tuesday, October 6, 2015
*Thanksgiving	Monday, October 12, 2015
Diwali	Wednesday, November 11, 2015
Hanukkah	Sunday, Dec. 6 (p.m.) – Monday, Dec. 14, 2015
Winter Break (Year 4)	Saturday, December. 12, 2015 – Sunday, January 3, 2016
Winter Break (Years 1, 2 and 3)	Saturday, December 19, 2015 – Sunday, January 3, 2016
Feast of the Nativity	Thursday, January 7, 2016
Christmas (Orthodox)	Thursday, January 7, 2016
CaRMS Interview Break (Year 4)	Saturday, January 16, 2016 – Sunday, February 7, 2016
Lunar New Year	Monday, February 8, 2016
*Family Day	Monday, February 15, 2016
March Break (Year 3)	Saturday, March 12 – Sunday, March 20, 2016
March Break (Year 1 and 2)	Monday, March 14 – Friday, March 18, 2016
PURIM	Wednesday, March 23, (p.m) - Thursday, March 24, 2016
*Good Friday	Friday, March 25, 2016
*Easter Sunday (Western)	Sunday, March 27, 2016
Easter Monday	Monday, March 28, 2016
Year 4 ends	Friday, April 15, 2016
First two days of Passover	Friday, April 22 (p.m.) – Sunday, April 24, 2016
Last two days of Passover	Thursday, April 28 (p.m.) – Saturday, April 30, 2016
Holy Friday (Orthodox)	Friday, April 29, 2016
Easter Sunday (Orthodox)	Sunday, May 1, 2016
*Victoria Day	Monday, May 23, 2016
Year 1 ends	Monday, May 30, 2016
Year 2 ends	Tuesday, May 31, 2016
Shavuot	Saturday, June 11 (p.m.) – Monday, June 13, 2016
Aboriginal Day of Prayer	Tuesday, June 21, 2016
Ramadan	Sunday, June 5 (p.m.) – Wednesday, July 6, 2016
*Canada Day	Friday, July 1, 2016
Summer Breather Weekend (Year 3)	Friday, July 1 – Monday, July 4, 2016

Table of Contents

TABLE OF CONTENTS

Undergraduate Medical Education

GOALS & OBJECTIVES

Introduction to the UME Goals and Objectives

The Undergraduate Medical Education program is governed by a set of Goals and Objectives that were adopted in February 2003 following extensive development and consultation. The UME program is currently revising these and the new version is expected to launch for August 2016.

CanMEDS
The Objectives, which are found on the following pages, are based on the seven Royal College of Physicians and Surgeons of Canada "CanMEDS roles" and on the College of Family Physicians of Canada's Four Principles of Family Medicine. Each of the courses in both the Preclerkship and Clerkship have adopted objectives that are explicitly aligned with these overall UME objectives, ensuring continuity throughout the program.

The seven categories – Medical Expert, Communicator, Collaborator, Health Advocate, Manager, Scholar, and Professional – each contain three to ten objectives that describe what abilities our students are expected to have achieved by the end of their medical school education. In total, there are 40 program objectives across all the categories.

For convenience, the full text of each objective is accompanied by a "summary" – a brief phrase that captures the essence of the expected outcome.

Goals

Recognizing

1. the continuum of medical education, and the compelling logic of linking medical student education to subsequent post-graduate training and continuing education, and
2. the scientific and humanistic foundations of Medicine*,

The University of Toronto, Faculty of Medicine has adopted the following goals for the undergraduate curriculum:

1. Graduates of the Undergraduate Medical Program will demonstrate the foundation of knowledge, skills and attitudes necessary to achieve the CanMeds competencies and the four principles of Family Medicine.
2. In keeping with the Faculty of Medicine's vision of International Leadership in Health Research and Education, the Undergraduate Medical Curriculum will encourage, support and promote the development of future academic health leaders, who will contribute to our communities, and improve the health of individuals and populations through the discovery, application and communication of knowledge.

Background

The competencies from CanMEDS and the four principles of Family Medicine have been merged for the purpose of defining the specific objectives that follow. The principle of "The Family Physician as a Skilled Clinician" is associated with the "Medical Expert/Skilled Clinical Decision Maker" CanMEDS competency. The second and third Family Medicine principles "...a resource to a defined practice population" and "community-based" expands the CanMEDS "Health Advocate" competency. Similarly, the CanMEDS "Communicator" competency adds depth to the "Doctor-Patient Relationship" Family Medicine principle. Based on this, curriculum objectives are organized into the following categories:

1. Medical Expert / Skilled Clinical Decision Maker
2. Communicator / Doctor-Patient Relationship
3. Collaborator
4. Manager
5. Health Advocate
6. Scholar
7. Professional

The competency descriptors are modified to acknowledge that graduates of the MD program are about to start their post-graduate residency programs.

* An example of this concept is contained in Dr. Edmund Pellegrino's definition of medicine as the most "humane of the sciences, the most scientific of the humanities and most empiric of the arts."

Objectives

Role	No.	Summary	Full objective
1. Medical expert / skilled clinical decision-maker	1.1	Understand the **scientific and humanistic foundations** of medicine	Demonstrate a knowledge of the scientific* and humanistic foundations of medicine and be able to apply that knowledge to the practice of medicine.
	1.2	Know about all aspects of **common and life-threatening illness and all MCC clinical presentations**	Demonstrate a thorough knowledge of the etiology, pathogenesis, clinical features, complications, principles of prevention and management of common and life-threatening illnesses presenting throughout the age spectrum, including all of the core clinical presentations outlined by the Medical Council of Canada.
	1.3a	Obtain and document a complete and focused **history**	Demonstrate the ability to obtain and document both a complete and a focused medical history, as the situation requires.
	1.3b	Perform and document a **physical examination**	Demonstrate the ability to perform and document both a complete and focused physical and mental status examination, as the situation requires.
	1.3c	Interpret **tests**	Demonstrate the ability to interpret commonly-employed laboratory tests, including tests of blood and other body fluids, various imaging modalities, and other specific tests such as electrocardiography.
	1.3d	Integrate clinical data into a **diagnostic formulation**	Demonstrate the ability to integrate the above history, physical and laboratory test findings into a meaningful diagnostic formulation.
	1.3e	Demonstrate **therapeutic and management skills**	Demonstrate therapeutic and on-going management skills with respect to health and disease.
	1.4	Retrieve and apply best **evidence**	Retrieve, analyze, and synthesize relevant and current data and literature, using information technologies and library resources, in order to help solve a clinical problem.
	1.5	**Integrate best evidence with patient values and clinical expertise**	Propose clinical decisions utilizing methods which integrate the best research evidence with clinical expertise and patient values.

*Scientific foundations include among others, the contemporary content of those disciplines that have been traditionally titled anatomy, behavioural science, biochemistry, genetics, immunology, microbiology, pathology, pharmacology and therapeutics, physiology, and preventive medicine.

(Objectives, continued)

Role	No.	Summary	Full objective
2. Communicator / Doctor-Patient Relationship	2.1	**Communicate effectively** in multiple ways with patients and families	Communicate effectively with patients, their families and the community through verbal, written and other non-verbal means of communication, respecting the differences in beliefs and backgrounds among patients and students.
	2.2	Establish **professional relationships** with patients and others	Establish professional relationships with patients, their families (when appropriate) and community that are characterized by understanding, trust, respect, empathy and confidentiality.
	2.3	**Deliver information** effectively	Deliver information to the patient and family (as appropriate) in a humane manner, and in such a way that it is easily understood, encourages discussion and promotes the patient's participation in decision-making.
	2.4	**Gather information** and be cognizant of factors which influence this process	Gather information, negotiate a common agenda, and develop and interpret a treatment plan, while considering the influence of factors such as the patient's age, gender, ethnicity, cultural and spiritual values, socioeconomic background, medical conditions, and communication challenges.
	2.5	**Cooperate and communicate with team members**	Demonstrate the importance of cooperation and communication among health professionals so as to maximize the benefits to patient care and outcomes, and minimize the risk of errors.

Role	No.	Summary	Full objective
3. Collaborator	3.1	Understand the **roles of interdisciplinary team members**	Describe the roles and expertise of all members of an interdisciplinary team that are required to optimally achieve a goal related to patient care, a research problem, an educational task, or an administrative responsibility.
	3.2	Develop a **collaborative multidisciplinary care plan**	Develop a care plan for a patient he/she has assessed, including investigation, treatment and continuing care, in collaboration with the members of the interdisciplinary team.
	3.3	Participate effectively in **team discussions**	Participate in interdisciplinary team discussions, demonstrating the ability to accept, consider and respect the opinions of other team members, while contributing an appropriate level of expertise to patient care.

(Objectives, continued)

Role	No.	Summary	Full objective
4. Manager	4.1	Participate in **health-care organizations**	Participate effectively in health care organizations, ranging from individual clinical practices to Academic Health Sciences Centres, exerting a positive influence on clinical practice and policy-making in one's professional community.
	4.2	Understand the **health care system**	Describe the governance, structure, financing, and operation of the health care system and its facilities and how this influences patient care, research and educational activities at a local, provincial, regional, and national level.
	4.3	Apply a **broad base of information**	Apply a broad base of information to the care of patients in ambulatory care, hospitals and other health care settings.
	4.4	Use **health care resources** wisely	Describe the rationale for wise stewardship of available resources, appreciating the overall framework for resource allocation, and the absolute and relative levels of resources in various components of the health care system.
	4.5	Build better **teams**	Help to build better teams.
	4.6	Understand **population-based health care services**	Describe how population-based approaches to health care services can improve medical practice.
	4.7	Participate in developing a **patient care program**	Participate in planning, budgeting, evaluation and outcome of a patient care program.
	4.8	Help with **innovation in clinical care**	Participate in innovative approaches to clinical care.

Role	No.	Summary	Full objective
5. Health Advocate / Community Resources	5.1	Understand **determinants of health and principles of disease prevention**	Describe the determinants of health and principles of disease prevention and behaviour change appropriate for specific patient populations within a community and internationally, and apply these to patient care responsibilities and broader patient care initiatives.
	5.2	Understand **population health**	Define and describe a population, its demography, cultural and socioeconomic constitution, circumstances of living, and health status; and understand how to gather health information about this population in order to better serve its needs.
	5.3	Respect **diversity**, **collaboration**, and population health	Respect diversity, be willing to work through systems, collaborate with other members of the health care team, and accept appropriate responsibility for the health of populations
	5.4	Participate in **community-based interventions**	Participate in community activities directed at improving health, utilizing the best evidence, effective teamwork and communication skills.
	5.5	Understand the **physician-patient relationship** in the service of care	Describe the importance of the individual physician/patient relationship, and develop it appropriately, as a means to identify and implement individual health and disease management strategies on an individual basis.
	5.6	**Advocate for population health, challenge orthodoxy**	Be prepared to challenge clinical orthodoxy, or identify threats to population health and advocate for their amelioration.

(Objectives, continued)

Role	No.	Summary	Full objective
6. Scholar	6.1	Contribute to **research**	Contribute to Research: The medical graduate will be able to pose a research question, help develop a protocol, assist in carrying out the research, and disseminate the results. The medical graduate will demonstrate an understanding of ethics as it relates to medical research.
	6.2	Engage in **lifelong learning, teaching, mentoring**	Contribute to Education: The medical graduate will a) demonstrate the ability to engage in life-long, self-directed learning and critical inquiry. b) compare and contrast the diverse learning approaches of peers, patients and others, in order to effectively interact and collaborate. c) assist in teaching others and facilitating learning where appropriate d) understand the importance of being mentors to those less experienced members of the health care teams.
	6.3	Participate in **creative professional activity – innovations, leadership, organizations**	Contribute to Creative Professional Activity: The medical graduate will be able to describe the importance of, and contribute to professional innovations, creative excellence, and exemplary professional practice. The graduate will also demonstrate leadership potential by participating in the development of professional practices, such as practice guidelines or health policy development, and participation in professional organizations.

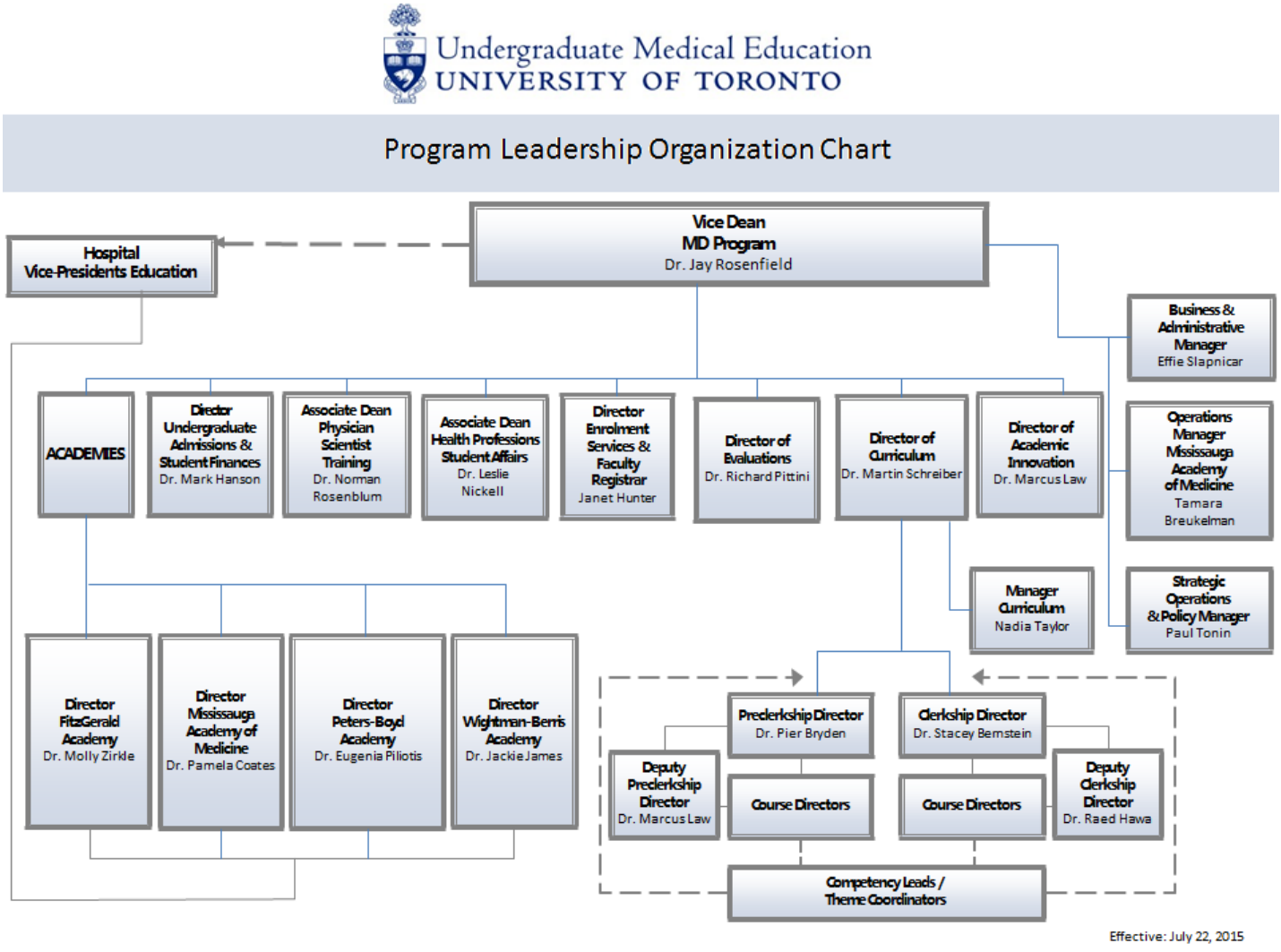
Role	No.	Summary	Full objective
7. Professional	7.1	Demonstrate **self-care, personal development**	Recognize and accept the need for self-care and personal development as necessary to fulfilling one's professional obligations and leadership role.
	7.2	Demonstrate **altruism, honesty, integrity**	Demonstrate altruism, honesty and integrity and respect in all interactions with patients, families, colleagues, and others with whom physicians must interact in their professional lives
	7.3	Demonstrate **compassion and respect** for patients	Demonstrate compassionate treatment of patients and respect for their privacy and dignity and beliefs
	7.4	Be **reliable and responsible**	Be reliable and responsible in fulfilling obligations.
	7.5	**Recognize one's limitations, strive for improvement**	Recognize and accept the limitations in his/her knowledge and clinical skills, and demonstrate a commitment to continuously improve his/her knowledge, ability and skills and leadership, always striving for excellence.
	7.6	**Abide by regulations**	Describe and abide by the University/Faculty codes of professional conduct, and the relevant professional regulatory requirements concerning medical practice.
	7.7	Understand **conflicts of interest**	Describe the threats to medical professionalism posed by the conflicts of interest which can occur in the practice of medicine.
	7.8	Use principles of **medical ethics**	Demonstrate a sound grasp of the theories and principles governing ethical decision-making, the major ethical dilemmas in medicine, and an approach to resolving these.
	7.9	Understand **law** as applied to medicine	Demonstrates an understanding of the principles and practice of law as they apply to the practice of medicine.
	7.10	Manage **medical error**	Develop the capacity to recognize common medical errors, report them to the required bodies, and discuss them appropriately with patients.

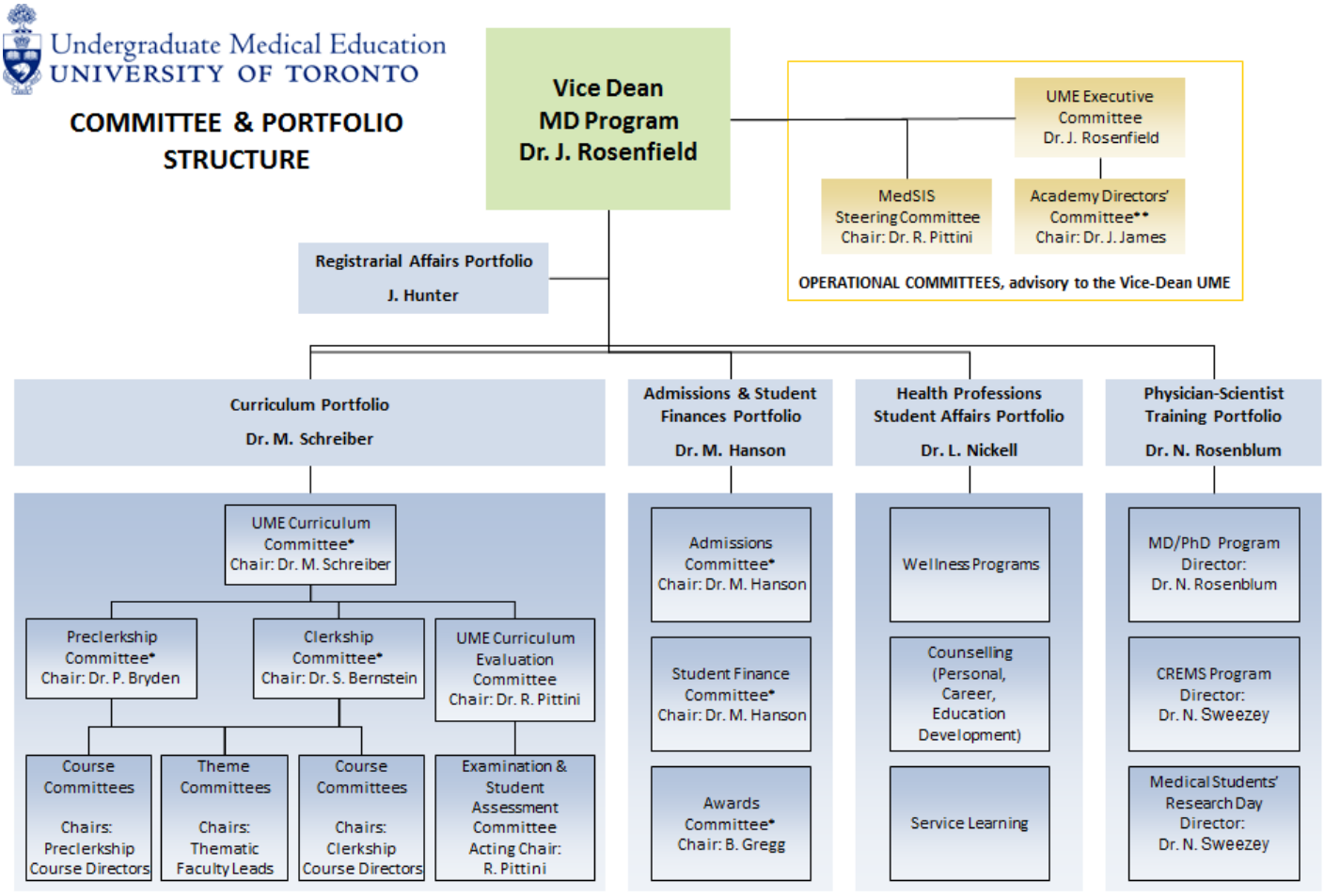
Undergraduate Medical Education
ORGANIZATION & LEADERSHIP

Undergraduate Medical Education Organizational Charts

There are two ways to understand the organization of the UME program: by leadership role and by portfolio/committee.

The organizational charts on this and the next page present both structures.





All Committees include one or more student members, with the exception of the Operational Committees. Student members are selected by their classmates and hold a position on the Medical Society Executive or their Class Council

*Denotes that the Chair serves on the UME Executive Committee

**Denotes that all members serve on the Executive Committee

Effective: July 22, 2015

Decision-Making in the Faculty of Medicine & UME

The Faculty of Medicine, and the UME portfolio within it, is a complex organization. The brief description below may be useful in helping students understand the functioning of the medical school and how they can contribute directly to it.

GOVERNANCE AND MANAGEMENT: SEPARATE BUT LINKED

The Faculty of Medicine – like the University of Toronto as a whole – is directed through paired **governance** and **management** structures.

In general terms, **governance** can be understood as the authority and responsibility to set appropriate principles and policies for an institution in order to establish the direction of its activities. By contrast, **management** is the authority and responsibility to run the day-to-day operations of an institution in accordance with the principles and policies that have been established by governance. For example, in corporations, including hospitals, the **governance structure** is represented by the Board of Directors or Trustees, and the **management structure** is the Senior Leadership Team.

In the Faculty of Medicine, governance is the purview of the Council of the Faculty of Medicine (commonly referred to as "**Faculty Council**"), while management is the purview of **Dean of Medicine Dr. Trevor Young, the Vice-Deans and Associate Deans (which together are referred to as the Decanal Team), the CAO, and the Senior Managers**. Both the governance and management structures work closely with the Faculty's Departments (via the Chairs), the Extra-Departmental Units (via the Directors), and programs (via the Vice-Deans Education).

FACULTY COUNCIL

Faculty Council is a large body consisting of approximately 125 members drawn from faculty, students, staff, and the leadership of the Faculty of Medicine, other Faculties, and the University. There are 23 student seats, including 12 reserved for students in the Undergraduate Medical Education program. The Dean and entire Decanal Team serve on Faculty Council to ensure cohesion with the management structure. Faculty Council is led by a Speaker, which is appointment drawn from among the faculty members of the Council.

Meetings of Faculty Council are held three times a year and are open to the general public. Meeting dates are posted, along with the minutes of previous meetings at: http://www.facmed.utoronto.ca/about-faculty-medicine/faculty-council.

The Faculty Council has a number of standing committees, the memberships of which are drawn from a combination of Council members and other individuals from the Faculty of Medicine. The standing committees are the Boards of Examiners for each of the health professional programs, an Appeals Committee, an Education, Graduate Education, Continuing Professional Development, a Research Committee, and two procedural bodies: an Executive Committee and Striking Committee. Some items approved by Faculty Council are then submitted to the Governing Council of the University of Toronto for final approval. The Governing Council is the senior governing body of the university that oversees the academic, student, and business affairs of the University (www.governingcouncil.utoronto.ca).

MANAGEMENT COMMITTEES OF THE DEAN

Several management committees are chaired by the Dean or report to him. Chief among these is the Dean's Executive, which consists of the entire Decanal Team, Chief Administrative Officer, Chief Financial Officer, Senior Managers (administrative directors), and four Department Chairs representing the clinical, basic

science, rehabilitation, and community health sectors. A Budget Committee representing the four sectors advises the Dean on faculty budget issues.

In addition, there are four committees of Department Chairs: the All Chairs' Committee, Basic Science Chairs' Committee, Clinical Science Chairs' Committee, and Rehabilitation Science Chairs' Committee. Together, the management committees serve as a forum for discussion and receive updates about procedural issues in the Faculty, and at the University. The committees ensure consistent operations among the portfolios.

Outside of the committees, members of the Faculty management structure work together on a daily basis in a variety of capacities, for instance with regard to finances, human resources, inter-departmental initiatives, space and infrastructure, etc.

MANAGEMENT OF THE UNDERGRADUATE MEDICAL EDUCATION PORTFOLIO

The UME program is led by the Vice-Dean MD Program, Dr. Jay Rosenfield. As described above, as a Vice Dean, Dr. Rosenfield contributes to both the management and governance of the Faculty.

The Vice Dean chairs the **UME Executive Committee**, which consists of the Associate Deans Health Professions Student Affairs (HPSA), the Director, Undergraduate Admissions & Student Finances (UASF), the Associate Dean Physician Scientist Training, the Curriculum Director, the Preclerkship and Clerkship Directors, the four Academy Directors, the Faculty Registrar, the Administrative Managers for the St. George and UTM campuses of UME, and the Special Projects and Policy Manager. This group addresses high-level management issues, many of which are brought forward by the committees chaired by the members, including the Preclerkship and Clerkship Committees (see below), the Admissions Committee, and the Academy Directors' Committee.

The **Undergraduate Medical Education Curriculum Committee (UMECC) is chaired by the UME Curriculum Director**. This Committee straddles management and governance functions, and has responsibility both for setting the direction of the curriculum and for making management decisions related to the curriculum. Updates from UMECC are reported to the Faculty-level Education Committee and occasionally to Faculty Council by the Vice-Dean. Besides the Curriculum Director, the membership of UMECC consists of the Vice Dean MD Program, the Preclerkship and Clerkship Directors, the Academy Directors, the Faculty Registrar, the Associate Dean HPSA and Director, UASF, two clinical and one basic science sector Chair, a representative from the Community Health Sector, a Wilson Centre representative, the Director of Evaluations, four student representatives, and a recent graduate of the program.

The **UME Curriculum Evaluation Committee (UMECEC)** and its subcommittee, the **Examination & Student Assessment Committee (ESAC)**, are responsible for evaluating all aspects of the design, delivery, and outcomes of the curriculum, and delivering their findings and recommendations to UMECC. UMECEC is chaired by the Director of UME Evaluations, while ESAC is chaired by a faculty member. Both include a mixture of course directors, teachers, students, and evaluation research scientists.

The **Preclerkship Committee** and **Clerkship Committee** consist primarily of course directors, as well as student representatives, Academy Directors, the Associate Dean HPSA, the Director of Evaluations, the thematic faculty leads, and several other members. These committees report to UMECC and are charged with proposing, deliberating, and implementing broad curriculum decisions. Like UMECC, their mandates meld governance and management aspects of their periods of the curriculum. Each course also has a **course committee** (sometimes known as a **course planning committee**, or CPC). Course committees bring together students and teachers from the course, particularly those who are heavily involved such as site directors, week managers, block coordinators, etc.

Student Representation and Student Government

STUDENT MEMBERSHIP ON UME COMMITTEES

Medical students are full voting members on almost every UME committee, as indicated in the Committee & Portfolio Organizational Chart. This includes UMECC, the Preclerkship and Clerkship Committees, all course committees, UMECEC, and ESAC. (The only exceptions are the three senior operational committees that are advisory to the Vice-Dean: the UME Executive Committee, the UME Academy Directors' Committee, and the MedSIS Steering Committee.)

Student representatives are elected by their peers to represent student views on the committees and to relay information from committee proceedings back to the student body. See the *Statement on Student Representation on UME Committees.*

In most cases, student representatives on UME committees also serve on either the Medical Society Executive Council or their class council. (See below.)

MEDSOC

The Medical Society, commonly known as "MedSoc," is the representative body of medical students at the University of Toronto. The Medical Society encompasses several types of membership, as outlined by its constitution:

- *General Members* are all students enrolled in the University of Toronto Faculty of Medicine Undergraduate Medical Education program, as well as MD/PhD students during the PhD phase of their program. Only General Members are voting members of the Medical Society.
- Upon graduation, students become *Alumni Members* of the Medical Society.
- Individuals who have made a significant contribution or long-standing support to the Medical Society may become *Honorary Members* as part of a voting process that is available every year to the students.

The Executive Council of the Medical Society consists of elected members who represent the views of all students. It consists of a President, a number of Vice-Presidents for a variety of portfolios, and two class presidents from every year of study and the MD/PhD program. The 34-member Executive Council meets regularly to conduct business arising in all aspects of medical student life. Each pair of class presidents is responsible for formulating and maintaining a council of representatives for the specific portfolios in their class.

The Medical Society also includes several Medical Society Affiliated Positions ("MSAP") that are selected by the previous year's position holders in conjunction with the Executive Council. These are key positions that require an application and interview process. Medical Society Associated Clubs ("MSAC") positions exist as well, and are selected annually by each club's previous directors.

All relevant information, including the most recent copy of the Medical Society Constitution and Bylaws, as well as all key student contacts can be found on the MedSoc website, www.uoftmeds.com, which also provides a forum for student discussion. If students have any questions or concerns, they may contact any of the Executive Council members.

Undergraduate Medical Education

ACADEMIES & TRAINING SITES

Teaching Locations

Medical education involves a number of different learning experiences, necessitating a variety of teaching sites. The basic distinction is between didactic (classroom) teaching, which takes place to a great extent – although not exclusively – on the University campuses, and clinical teaching, which occurs primarily – although not exclusively – in hospital settings as described below.

ON-CAMPUS TEACHING

Particularly in the first two years of the UME program, a significant amount of teaching is conducted at the University of Toronto, on both the St. George and UTM campuses. All lectures and many seminars take place in the Medical Sciences Building in Toronto and the Terrence Donnelly Health Sciences Complex in Mississauga, and problem-based learning tutorials as well as some clinical skills teaching sessions also take place at UTM. Whole-class lectures which originate on the St. George campus are videoconferenced to the UTM campus, and vice-versa.

In the Clerkship, students come together for on-campus teaching at the start of Year 3 (Transition to Clerkship) and at the end of Year 4 (Transition to Residency), again for both large-group small-group teaching.

CLINICAL TEACHING: INTEGRATED MEDICAL EDUCATION

"Integrated medical education" refers to the collaboration of a vast variety of hospitals and other clinical sites that are affiliated with the University of Toronto to provide UME students with a rich and diverse medical training experience.

The UME program places Clerkship students in approximately 20 inpatient facilities and a large number of ambulatory sites. For the most part, these sites are located in Toronto or Mississauga, but some are elsewhere in the Greater Toronto Area (GTA); students also have the opportunity to complete selectives, electives, and the Family & Community Medicine clerkship rotation outside of the GTA.

Most clinical teaching is provided in the academic health science centres (sometimes called "teaching hospitals"), but community hospitals – including Trillium Health Partners in Mississauga – are hosting an increasing proportion of students in both the Preclerkship and the Clerkship. The number and breadth of community sites is a strength of the UME program, as they offer students a different perspective on patient care and often a different patient mix.

The Academies

In a medical school of approximately 1,000 MD students and almost 30 affiliated hospitals, the program appreciates the value of a clinical "home" where students can get to know the teachers, staff, and other students around them. In addition, the Preclerkship curriculum is heavily based on small-group learning opportunities which require appropriate resources, rooms, and clinical teaching facilities. The Academies of the Undergraduate Medical Education program were created in 1992 for these reasons and have responded to the evolving needs of the undergraduate curriculum.

(The Academies, continued)

The four Academies, which consist of clusters of both fully-affiliated and community-affiliated hospitals, provide the hospital-based portions of the curriculum in a supportive, student-focused learning environment. Each Academy offers unique and diverse strengths of their constituent hospitals and clinical sites, while maintaining a consistent standard of excellence in their educational role. Students are associated with their Academy for the duration of their MD studies.

	FitzGerald Academy	Mississauga Academy of Medicine	Peters-Boyd Academy	Wightman-Berris Academy
Campus	St. George (Toronto)	UTM (Mississauga)	St. George (Toronto)	St. George (Toronto)
Hospitals	*Anchor hospital:* St. Michael's *Associate hospital:* St. Joseph's Health Centre	*Anchor hospital:* Trillium Health Partners (Credit Valley Hospital, Mississauga Hospital, Queensway Health Centre)	*Anchor hospital:* Sunnybrook Health Sciences Centre *Associate hospitals:* Women's College Hospital, North York General Hospital	*Anchor hospitals:* Mount Sinai Hospital, University Health Network *Associate hospital:* Toronto East General Hospital
Director	Dr. Molly Zirkle	Dr. Pamela Coates	Dr. Eugenia Piliotis	Dr. Jackie James
E-mail	zirklem@smh.ca	pamela.coates@trilliumhealthpartners.ca	eugenia.piliotis@sunnybrook.ca	jjames@mtsinai.on.ca
Number of students 2015-16	~54/year	54/year	~60/year	~91/year

For more information, see the "Partners" section of the UME website (www.md.utoronto.ca).

The Academy model allows students to become well-integrated into their clinical community. Opportunities exist, however, for all students in both core clerkship rotations and electives and selectives to experience hospitals and ambulatory sites outside their Academy.

The Mississauga Academy of Medicine (MAM) is based at the University of Toronto Mississauga (UTM) campus while the University of Toronto's other three Academies (FitzGerald, Peters-Boyd, and Wightman-Berris) are associated with the St. George campus.

Academy assignment is integrated into the admissions process, with applicant preference taken into consideration. Detailed information regarding the medical school's campuses and the Academy structure is provided to interviewees, who are asked to indicate a campus preference. Offers of admission are then made for either the Mississauga Academy of Medicine or the St. George campus. Students admitted to the St. George campus are subsequently assigned to one of its three Academies – FitzGerald, Peters-Boyd, and Wightman-Berris – again based as much as possible on their stated preferences. All campus and Academy assignments are for the entire four years of medical school, although students have ample opportunities to participate in clinical learning experiences outside of their Academies. The Academy Directors and their staff work together to coordinate the provision of the core curriculum as determined by the University and clinical departments.

ACADEMY CONTACT INFORMATION

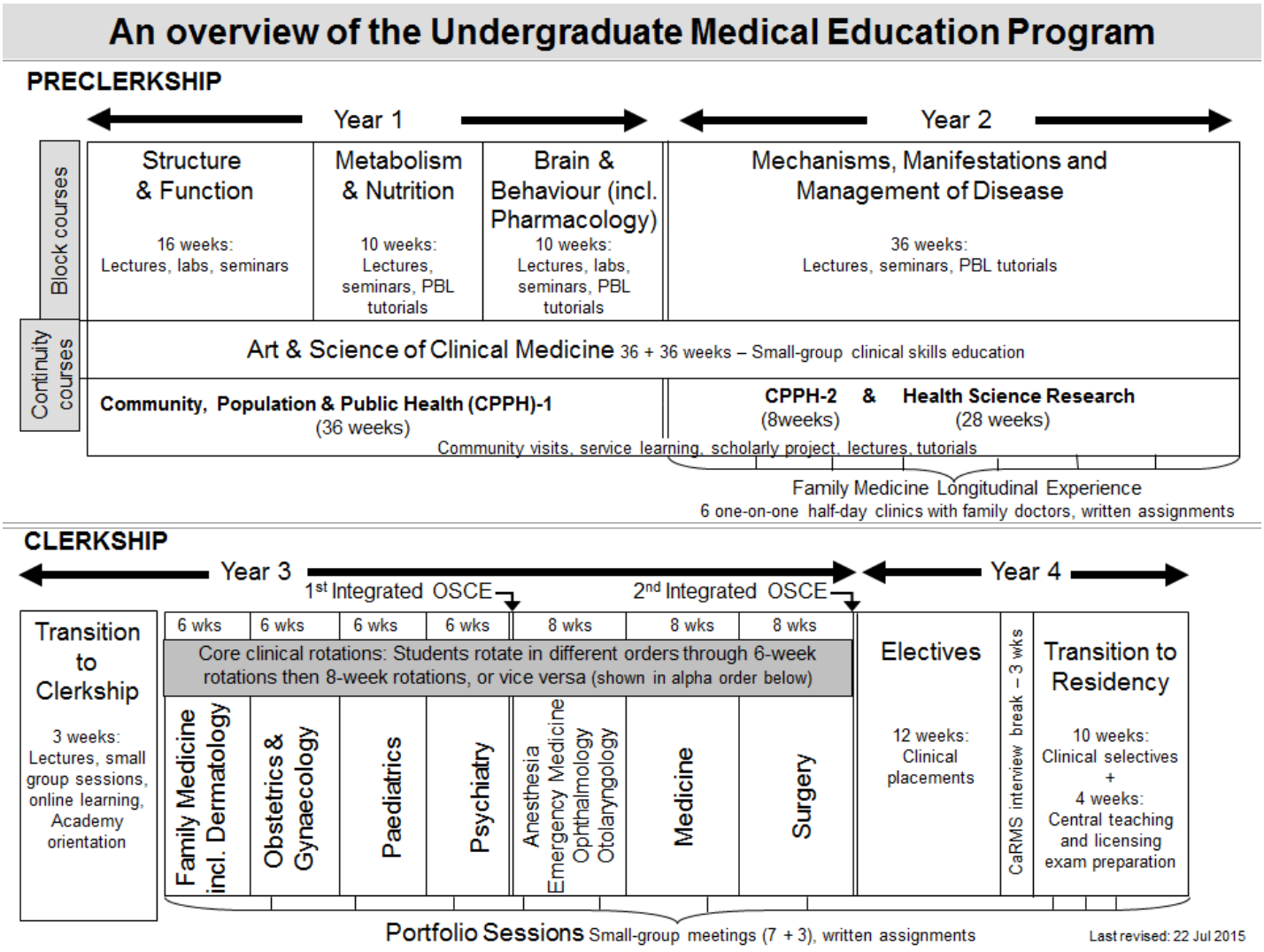
Academy	Academy Director	Medical Education Coordinator
FitzGerald	Molly Zirkle zirklem@smh.ca 416-864-5700	Caroline Pullen (St. Michael's) pullenc@smh.ca Sonya Surbek (St. Michael's) surbeks@smh.ca Erika Unelli (St. Joseph's) unelle@stjoe.on.ca Jasmine Paloheimo (LInC Coordinator) paloheimoj@smh.ca
Mississauga Academy of Medicine	Dr. Pamela Coates pamela.coates@trilliumhealthpartners.ca 905-569-4617	Tamara Breukelman (Operations Manager) t.breukelman@utoronto.ca Kristen Harshman-Best (Executive Assistant) kristen.harshmanbest@utoronto.ca Elizabeth Day (Preclerkship) elizabeth.day@utoronto.ca Mark Wlodarksi (Student Support) mark.wlodarksi@utoronto.ca Frances Rankin (CPPH at MAM) frances.rankin@utoronto.ca Sara Reynolds (Clerkship) sara.reynolds@utoronto.ca Medical Education Office at Trillium Health Partners medicaleducation@trilliumhealthpartners.ca
Peters-Boyd	Dr. Eugenia Piliotis eugenia.piliotis@sunnybrook.ca 416-480-4274	Sonya Boston (Sunnybrook) sonya.boston@sunnybrook.ca Esther Williams (Sunnybrook) esther.williams@sunnybrook.ca Jennifer Alexander (Women's College) jennifer.alexander@wchospital.ca Mabel Chan (North York General) mabel.chan@nygh.on.ca
Wightman-Berris	Dr. Jacqueline James jjames@mtsinai.on.ca 416-340-4832	Anne Marie Holmes (UHN Med Ed Manager) annemarie.holmes@uhn.ca Shamim Ladak (Mount Sinai) sladak@mtsinai.on.ca Lina Turco (Mount Sinai) lturco@mtsinai.on.ca Babita Jadobeer (Toronto General) babita.jadobeer@uhn.ca Adam Pereira (Toronto East General Hospital) medicaleducation@tegh.on.ca Joanne Mount (Toronto East General Hospital) j.mount@utoronto.ca Jenny Lam (Toronto Western) jenny.lam@uhn.ca Brian Davidson (CPPH at WB) brian.davidson@uhn.ca Katherine Brown (Bridgepoint) kbrown@bridgepointhealth.ca

Undergraduate Medical Education

THE CURRICULUM

Program Overview

The program consists of two years of Preclerkship education followed by two years of Clerkship. Throughout the curriculum, individual "courses" are enriched through longitudinal learning about key themes, some of which correspond to specific CanMEDS roles (see UME Goals and Objectives). The overall scheme of the program is diagrammed below, followed by a brief description of the major components. (Note that in the Clerkship, groups of students rotate through the clinical courses in different orders.) Greater detail is provided in the sections that follow this overview.



Every course has one or more course directors, who are responsible for the design and implementation of their course with support from their course committee, administrative staff, and often Academy Medical Education Offices.

A number of students (22 in 2015-106) complete a third year clerkship through a different approach and timetable referred to as the Longitudinal Integrated Clerkship (LInC).

PRECLERKSHIP OVERVIEW

The Preclerkship is comprised of two kinds of courses:

- Block courses, occupy most of the time during each week of the Preclerkship, and include a mixture of lectures, case-based seminars, laboratory sessions, and/or problem-based learning (PBL) tutorials. Students are also introduced in the first term of both first and second year to integrative case-based learning (CBL), medical education research, and reflective practice. The aim of the block courses is to provide a clinically relevant, scientific and humanistic foundations for the theory and practice of medicine, together with a comprehensive introduction to all aspects of clinical medicine.
    - Year 1:
        - Structure & Function (STF, 16 weeks)
        - Metabolism & Nutrition (MNU, 10 weeks)
        - Brain & Behaviour (BRB, 10 weeks), including a two-week general Pharmacology unit
    - Year 2
        - Mechanisms, Manifestations & Management of Disease (MMMD, 36 weeks)

- Continuity courses, which are each assigned a number of half-day blocks and feature a variety of instructional methods.
    - Years 1 and 2
        - The Art and Science of Clinical Medicine (ASCM-1 and ASCM-2) is scheduled for one half-day per week throughout both years, and covers history-taking and physical examination mainly through small group teaching in clinical settings.
    - Year 1 only
        - In 2015/16 Community Population and Public Health-1 is scheduled for one half-day throughout the first year. CPPH will facilitate students' understanding of the social determinants of health that affect individuals living within communities. The course will also assist students in developing skills needed to work with community organizations to best serve individual patients and the community as a whole. The components of the CPPH curriculum include lectures, online modules, small-group tutorials, field visits to community organizations and the Community Based Scholarship and Service Learning (CBS) project. The project will continue into the second year of the program.
    - Year 2 only
        - Family Medicine Longitudinal Experience (FMLE) is flexibly scheduled for six half-day clinics during second year, and provides students with a community-based experience with family physicians.
        - The Health Science Research Course (HSR) is an introduction to the principles of research, directed at helping students understand and use research to contribute to improving the health of people and populations, including First Nations, Inuit and Metis peoples, in Canada and globally. HSR takes place over twenty-four half days and consists of integrated lectures, tutorials, on line modules, and a practicum, all designed to equip students to be sophisticated consumers and communicators of medical research.

For more details on each Preclerkship course, turn to the descriptions which start here.

CLERKSHIP OVERVIEW

The beginning of the Clerkship is a three-week "Transition to Clerkship" course during which students have orientation to the hospital setting in their new role as clinical clerks, further exposure to community health and

(Clerkship Overview, continued)

ethical issues, instruction in evidence-based medicine, medical imaging and pharmacology review lectures, and teaching on their future role as managers in patient care.

The Clerkship consists primarily of a series of core clinical courses in the third year, covering all of the major disciplines of medicine, followed by a fourth year intended to consolidate and deepen students' learning through electives, selectives, and campus-based teaching.

For the third-year core rotations, students are divided into groups and sites, and rotate through each of the courses in different orders as in the Program Overview diagram. They assume supervised responsibility for patient care, and supplement this learning with didactic experiences at their local sites and through central teaching. Each course maintains a list of required clinical encounters and procedures, and the students must maintain a log on the case logs system demonstrating that they have experienced or performed all of them as part of fulfilling the educational objectives of the course (view the description of Case Logs). In addition, students take part in a "Portfolio" course for seven sessions of two hours each, during which they have the opportunity to reflect with peers and supervisors (a faculty member and a resident) on their clinical learning in each of the CanMEDS roles (see **UME Goals & Objectives**.)

The fourth-year curriculum consists of twelve weeks of electives, which can be taken at the University of Toronto or other institutions in Canada or around the world, three weeks off for CaRMS interviews (see **The Continuum of Medical Education**), and the thirteen-fourteen week Transition to Residency (TTR) course. TTR consists of campus-based teaching, including further experiences in community health and review sessions for the Medical Council examination, and three selective periods, at least one of which must be spent on a community-based experience. In addition, the final year of the program features a continuation of the Portfolio course from Year 3, with three two-hour sessions taking place during the TTR campus-based teaching blocks.

For more details on each Clerkship course, turn to the descriptions beginning here.

OVERVIEW OF THEMES & COMPETENCIES

There are several cross-cutting themes and competencies which have representation in many of the courses, during both the Preclerkship and the Clerkship. Teaching is carried out by a variety of teachers from medicine, as well as other health professions and professions outside of health care, via lectures, case-based seminars, and various team-based activities. Themes and competencies are coordinated by designated faculty leads.

The UME themes and competencies include:

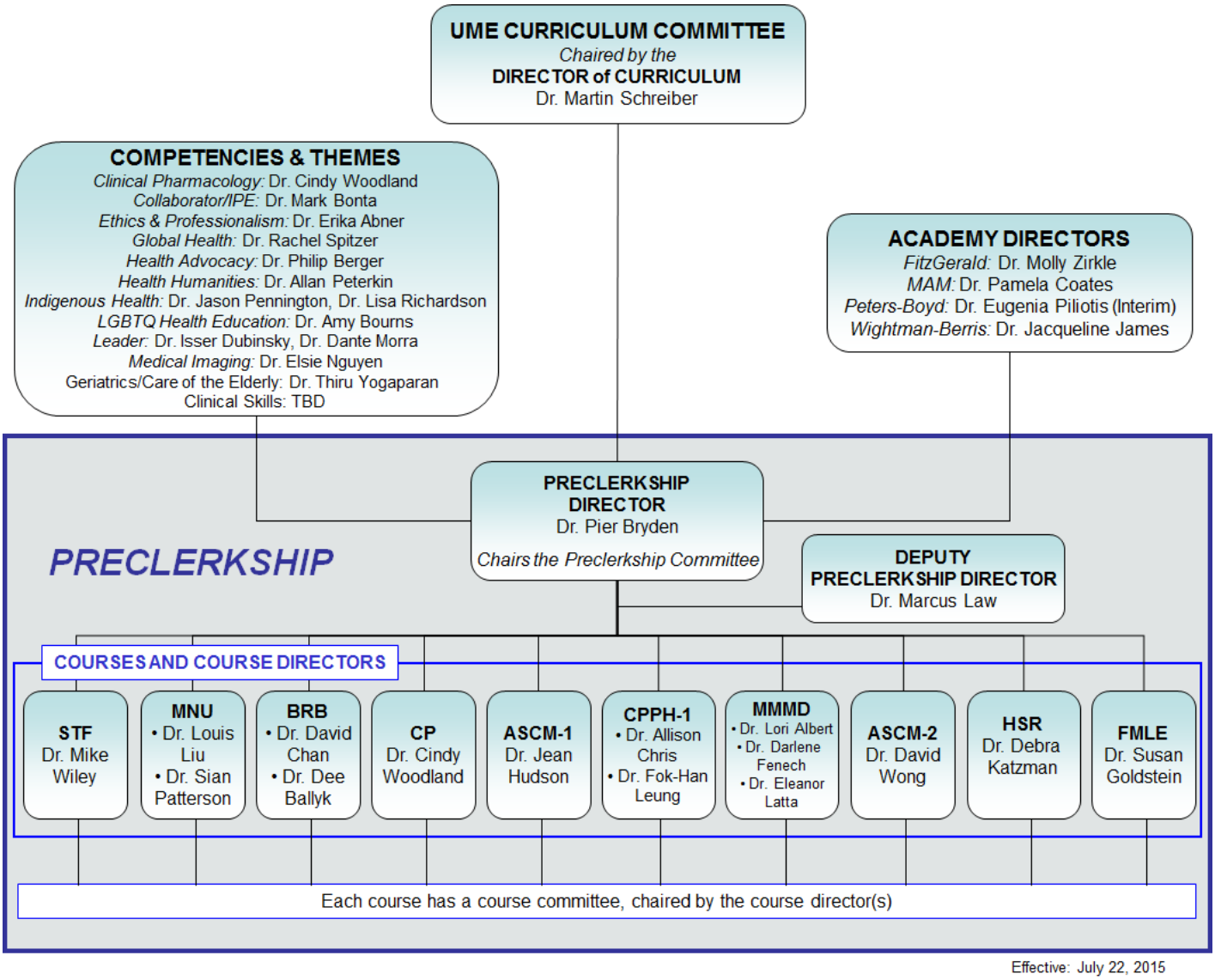
- Ethics and professionalism role
- Collaborator role and interprofessional education
- Manager/Leader role
- Pharmacology
- Health Humanities
- Clinical Skills
- Medical Imaging
- Global Health
- Indigenous Health
- LGBTQ Health Education
- Geriatrics/Care of the Elderly
- Health Advocacy

The Health Humanities initiative informs the existing curriculum and also provides co-curricular opportunities.

Note that the first three competencies ("roles") listed above are directly linked to the same CanMEDS roles that underpin the program objectives. For more details on each, view the descriptions here.

Preclerkship (Years 1 & 2)

ORGANIZATIONAL CHART



PRECLERKSHIP CONTACTS

Preclerkship Director	Senior Preclerkship Coordinator
Dr. Pier Bryden pier.bryden@utoronto.ca	Margaret Bucknam margaret.bucknam@utoronto.ca 416-978-3430

YEAR 1

Course	Course Director	Course Administrator
Structure & Function (STF)	Dr. Mike Wiley mike.wiley@utoronto.ca	Lina Marino lina.marino@utoronto.ca 416-946-7009 Elizabeth Day (MAM) elizabeth.day@utoronto.ca 905-569-4618
Metabolism & Nutrition (MNU)	Dr. Louis Liu louis.liu@uhn.ca Dr. Sian Patterson sian.patterson@utoronto.ca	Bektu Abidta bektu.abidta@utoronto.ca 416-978-1186 Elizabeth Day (MAM) elizabeth.day@utoronto.ca 905-569-4618
Brain & Behaviour (BRB) and Clinical Pharmacology & Therapeutics (CPT)	Dr. David K. Chan chandav@smh.ca Dr. Dee Ballyk d.ballyk@utoronto.ca Dr. Cindy Woodland (Clinical Pharmacology) cindy.woodland@utoronto.ca	Lina Marino lina.marino@utoronto.ca 416-946-7009 Elizabeth Day (MAM) elizabeth.day@utoronto.ca 905-569-4618
Art and Science of Clinical Medicine-1 (ASCM-1)	Dr. Jean Hudson jean.hudson@trilliumhealthpartners.ca	Bektu Abidta bektu.abidta@utoronto.ca 416-978-1186
Community Population and Public Health-1 (CPPH-1)	Dr. Allison Chris Course Director allison.chris@utoronto.ca Dr. Fok-Han Leung Associate Course Director leungf@smh.ca Dr. Mitesh Patel Associate Course Director Patel.forensic@gmail.com	Yasmin Shariff Course Administrative Coordinator yasmin.shariff@utoronto.ca 416-978-8213 Sylvia Jao Course Administrative Assistant sylvia.jao@utoronto.ca 416-978-6860 Roxanne Wright Community Health Placement Officer roxanneb.wright@utoronto.ca 416-978-0952

(Preclerkship Contacts, continued)

YEAR 2

Course	Course Director	Course Administrator
Mechanisms, Manifestations & Management of Disease (MMMD)	Dr. Lori Albert lori.albert@uhn.ca Dr. Darlene Fenech darlene.fenech@sunnybrook.ca Dr. Eleanor Latta lattae@smh.ca	Lina Marino lina.marino@utoronto.ca 416-946-7009 Sue Balaga (Mechanisms block) s.sarju@utoronto.ca 416-946-0136 Elizabeth Day (MAM) elizabeth.day@utoronto.ca 905-569-4618
Community Population and Public Health-2 (CPPH-2)	Dr. Allison Chris Course Director allison.chris@utoronto.ca Dr. Fok-Han Leung Associate Course Director leungf@smh.ca Dr. Mitesh Patel Associate Course Director Patel.forensic@gmail.com	Yasmin Shariff Course Administrative Coordinator yasmin.shariff@utoronto.ca 416-978-8213 Sylvia Jao Course Administrative Assistant sylvia.jao@utoronto.ca 416-978-6860 Frances Rankin Course Administrative Coordinator (MAM) Frances.rankin@utoronto.ca 905-569-4602 Roxanne Wright Community Health Placement Officer roxanneb.wright@utoronto.ca 416-978-0952
Art and Science of Clinical Medicine-2 (ASCM-2)	Dr. David Wong wongdav@smh.ca	Bektu Abidta bektu.abidta@utoronto.ca 416-978-1186
Health Science Research (HSR)	Debra Katzman debra.katzman@sickkids.ca	Jennifer Ng hsr.ume@utoronto.ca 416-978-1027
Family Medicine Longitudinal Experience (FMLE)	Dr. Susan Goldstein susan.goldstein@utoronto.ca	

ACADEMIES

View the Academy Director and staff contact information here.

DIAGRAM OF THE PRECLERKSHIP SCHEDULE

<table>
<tr><th colspan="9">Year 1 Schedule – 2015-2016</th></tr>
<tr><th>Sept</th><th>Oct</th><th>Nov</th><th>Dec</th><th>Jan</th><th>Feb</th><th>Mar</th><th>Apr</th><th>May</th></tr>
<tr><td colspan="4">Structure & Function
(12-20 hours/week for 16 weeks)
Aug. 31, 2015 to Dec. 16, 2015

‹ ORIENTATION
Aug. 24, 2015 to Aug. 29, 2015</td><td colspan="2">Metabolism & Nutrition
12-20 hours/week
for 10 weeks
Jan. 4, 2016 to
Mar. 10, 2016</td><td colspan="3">Brain & Behaviour / Pharmacology
12-20 hours/week
for 10 weeks
Apr. 5, 2016 to
May 30, 2016</td></tr>
<tr><td colspan="9">Art & Science of Clinical Medicine-1 (ASCM-1) – Hospital
(4 hours/week)
Sept. 4, 2015 to May 20, 2016</td></tr>
<tr><td colspan="9">Community Population and Public Health-1 (CPPH-1)– MSB/Community
(4 hours/week)
Sept. 2, 2015 to May 25, 2016</td></tr>
</table>

<table>
<tr><th colspan="9">Year 2 Schedule – 2015-2016</th></tr>
<tr><th>Sept</th><th>Oct</th><th>Nov</th><th>Dec</th><th>Jan</th><th>Feb</th><th>Mar</th><th>Apr</th><th>May</th></tr>
<tr><td colspan="9">Mechanisms, Manifestations, & Management of Disease
(12-20 hours/week for 36 weeks)
Aug. 31, 2015 to May 31, 2016</td></tr>
<tr><td colspan="9">Art & Science of Clinical Medicine-2 (ASCM-2) – Academy/Hospital
(4 hours/week)
Sept. 3, 2015 to May 25, 2016</td></tr>
<tr><td colspan="9">Health Science Research (HSR)
(3 hours/week for 28 hours during the year)
Sept. 8, 2015 to May 17, 2016</td></tr>
<tr><td colspan="9">Family Medicine Longitudinal Experience (FMLE)
(4 hours per week for 6 weeks during the year)
Sept. 28, 2015 to May 18, 2016</td></tr>
<tr><td colspan="9">Community Population and Public Health-2 (CPPH-2) - MSB/Community
(4 hours/week for 8 weeks during the year)
Sept. 23, 2015 to April 13, 2016</td></tr>
</table>

COURSE DESCRIPTIONS

Year 1 Block Course: STRUCTURE & FUNCTION (STF)

Course Director	Course Administrators
Dr. Mike Wiley mike.wiley@utoronto.ca	Lina Marino lina.marino@utoronto.ca 416-946-7009 Elizabeth Day (MAM) elizabeth.day@utoronto.ca 905-569-4618

Section Leads:

Section	Lead
Gross Anatomy, Embryology	Dr. Mike Wiley mike.wiley@utoronto.ca
Histology,	Dr. Barbara Ballyk d.ballyk@utoronto.ca
Ethics and Professionalism	Dr. Erika Abner erika.abner@utoronto.ca
Manager / Leader	Dr. Isser Dubinsky Isser.dubinsky@utoronto.ca Dr. Dante Morra dante.morra@trilliumhealthpartners.ca
Respiratory Physiology	Dr. David Hall hallda@smh.ca
Cardiovascular Physiology	Dr. Scott Heximer scott.heximer@utoronto.ca
Blood Physiology	Dr. Anne McLeod anne.mcleod@sunnybrook.ca

COURSE OVERVIEW

This 16-week first-year block course runs at the start of medical school, from the end of August to the end of the third week in December. It provides students with:

- a broad introduction to the language and culture of medicine;
- a solid preparation for further study in later courses;
- a sense of trust and cooperation among students and between students and the teaching staff; and
- an introduction to theories of medical education and integrated learning approaches

Specific subjects of instruction include:

- Gross anatomy, histology, and cell biology
- Embryology
- Radiological anatomy and an introduction to medical imaging
- Physiology (cardiovascular, respiratory, and blood)
- Ethics and the "Professional" role
- The "Manager" role
- Integrated learning and reflective practice

(Structure & Function, continued)

This is accomplished via the following activities, and clinical relevance is emphasized throughout.

Lectures	137 hours
Laboratories/Seminars	102.5 hours
Tutorial	8 hours
Examinations	11.5 hours

COURSE OBJECTIVES

(The numbers in parenthesis refer to the UME objectives supported by each terminal learning objective.)

By the end of STF, students are expected to be able to:

[Medical Expert / Skilled Clinical Decision-Maker]

- Describe the structure of the human body, at both the gross and microscopic levels, relevant to a future physician. (1.1, 1.2)
- Describe the embryologic development of all organ systems, with an emphasis on developmental abnormalities relevant to a future physician. (1.1, 1.2)
- Describe the functions of the following systems, explain how these functions may be deranged by disease, develop general understanding of interventions designed to treat these derangements. (1.1, 1.2):
    - Respiratory
    - Cardiovascular
    - Blood and blood cells
- Interpret radiologic images of normal human structures, and begin to appreciate the role of medical imaging in diagnosis of disease. (1.1, 1.2, 1.3d)

[Manager]

- Develop a deeper understanding of the physician's role as a manager, of how to work effectively in teams, of how teams sometimes do not work well, and of the phenomenon of leadership. (4.5, 6.3)

[Scholar]

- Demonstrate appropriate self-directed learning skills and critical thinking. (6.2a, 6.2b)
- Assist in teaching others and facilitating learning where appropriate. (6.2c)

[Professional]

- Explain the major concepts of bioethics, professionalism and law in medicine and demonstrate the beginning of a sense of how to apply these to clinical practice when approaching ethical and professional dilemmas. (7.8)
- Demonstrate a growing sense of the role of the physician as a professional, including the contribution of reflective practice to professionalism. (7)

(Structure & Function, continued)

ASSESSMENT

2015 dates	Content	Format	Value
Sept. 29	Gross Anatomy	Practical Examination	25%
Oct. 19	Embryology	MCQ Examination	10%
Oct. 27	Gross Anatomy	Practical Examination	25%
Nov. 9	Hematology	MCQ Examination	10%
Dec. 4	Phase I Integrated Module	MCQ Examination	#Pass/Fail
Dec. 14	Thoracic Anatomy and Histology	Practical Examination	10%
Dec. 16	Cardiovascular Physiology and Respirology (including the Phase I Integrated Module content) and Manager	MCQ Examination Short answer (Manager)	*20%
# This examination will be administered online. The result will not contribute to the aggregate course mark. *The Manager portion is marked as Pass/Fail. The outcome does not factor into the aggregate examination mark, or, the aggregate course mark.			

GRADING

There will be one numerical mark for each student for the Course which will be recorded and transcripted by the Registrar according to the section on Grading in the MD Curriculum Directory. This numerical mark will be derived from the marks obtained in 7 examinations, each of which has clearly identified content.

1. All 7 examinations will each have to be successfully passed in order to pass the course.

2. Evaluations related to the Phase I Integrated Module and to the Manager curriculum will need to be rated as a pass in order to pass Structure and Function.

3. A clear pass in the course would require an overall grade of 70%, based on a weighted mean of the examinations.

4. A clear fail would be a weighted average across the examinations of below 60%.

5. A student who scores between 60% and 70% on any one examination of the course may be required to undertake and succeed in extra work to address their areas of weakness.

6. Students who score below 60% on any component of the course, and students who are unsuccessful in extra work will be discussed by the Board of Examiners. The Board of Examiners may on occasion require these students to repeat the Course in the following academic year. More commonly, however, they will be required to undertake a program of remediation with examination over the summer months. Students who pass this re-examination with a mark of at least 70% will be allowed to enter Year 2, subject to the approval of the Board of Examiners.

7. Students must successfully complete the extra work and/or remediation and re-examination prior to the beginning of Year 2.

8. Where remedial work is recommended by two or more of the 1st Year Course Directors the Board of Examiners may require the student to repeat the year.

(Structure & Function, continued)

9. The final grade in Structure and Function will be reported and transcripted by the Faculty Registrar as Credit or No Credit.

These specific Course regulations and procedures further specify relevant general statements found in sections titled: Grading and Promotion in the MD Curriculum Directory.

For details, including grading regulations, see (-, the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment – direct to general policies and procedures (http://md.utoronto.ca/policies).

NB: In order to receive credit for STF, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME*.

For general regulations regarding extra work requirements in Preclerkship courses, see the *Standards for the Requirement of Extra Work in the Preclerkship*.

READING AND RESOURCE LIST

Required

Students must have Grant's Dissector, 15th Edition edited by Patrick W. Tank and published by Lippincott Williams & Wilkins. In addition students must have a lab coat, dissection kit, and examination gloves.

Recommended

- A short textbook of Regional Anatomy.
  e.g. Gray's Anatomy for Students, by Drake et al., or, Essential Clinical Anatomy, by Moore, Agur and Dalley.
  Note: There are many anatomy books to choose from. Whichever one students get, they should make sure it is brief and to the point.
- An Atlas of Anatomy
  Agur and Dalley: Grant's Atlas of Anatomy, or, Rohen and Yokochi: Color Atlas of Anatomy
- A Textbook of Embryology
  Langman's Medical Embryology, by Sadler, or, The Developing Human, by Moore and Persaud
- A Textbook of Histology
  Color Textbook of Histology, by Gartner and Hyatt, or, Histology: A Text and Atlas, by Ross and Pawlina
- A Text of General Physiology
  Review of Medical Physiology, by Ganong.
- A Text of Respiratory Physiology
  Respiratory Physiology: The Essentials, by West.

COURSE DESCRIPTIONS

Year 1 Block Course: METABOLISM & NUTRITION (MNU)

Course Directors	Course Administrators
Dr. Louis Liu louis.liu@uhn.ca Dr. Sian Patterson sian.patterson@utoronto.ca	Bektu Abidta bektu.abidta@utoronto.ca 416-978-1186 Elizabeth Day (MAM) elizabeth.day@utoronto.ca 905-569-4618
Mississauga Academy of Medicine (MAM) Faculty Site Coordinator	
Dr. Jamie Newman jamienewman@trilliumhealthpartners.ca	

COURSE OVERVIEW

Metabolism and Nutrition (MNU) is a highly-integrated, 10-week course that covers the fundamental principles of the basic medical life sciences: biochemistry, clinical biochemistry, histology, molecular biology, nutrition, pharmacology, and physiology. This course applies these topics to the study, diagnosis, and treatment of endocrine, reproductive, renal, metabolic, hepatobiliary, gastrointestinal, and cardiovascular disease.

The course has specific topics that guide an integrated approach to learning on a week-by-week basis. The educational content of the weekly topics will be delivered by formal class lecture presentations and seminars consisting of small groups (~20 students). Seminars provide an interactive active learning environment where students are encouraged to solve the clinical scenarios by applying the principles learned in lectures.

MNU is the first course in which Problem-Based Learning (PBL) is introduced. The PBL groups are smaller (6-8 students) and explore specific cases, promoting, self-directed learning under the mentorship of a clinician or other faculty member.

The overall learning goals of the course are to provide students with:

1. A solid, integrated knowledge of basic concepts in the medical life sciences needed for understanding endocrine, reproductive, renal, hepatobiliary, gastrointestinal, and cardiovascular physiology.
2. A balanced application of basic scientific principles in the appreciation of mechanisms, diagnosis and treatment of disease within the above organs and systems.
3. An introduction to clinical problem solving and an appreciation of the variety of complexities of issues confronting patients (and their families) dealing with disease.

MNU features a mixture of teaching modalities:

- Lectures and Patient Presentations - 82 hours
- Seminars - 36 hours
- Problem-based learning (PBL) -19 hours
- Histology Tutorials - 5 hours

COURSE OBJECTIVES

By the end of MNU, students are expected to be able to demonstrate the following "terminal objectives." These

(Metabolism & Nutrition, continued)

are classified under the seven CanMEDS roles, stressing the alignment of course objectives with overall UME program objectives.

[Medical Expert / Skilled Clinical Decision-Maker]

- Demonstrate a growing understanding of the basic scientific and ethical principles of clinical and translational research
- Demonstrate knowledge of the scientific foundations of medicine in the following domains:
  - Biochemistry
  - Molecular biology
  - Nutrition
  - Pharmacology
  - The physiology, histology and pharmacology of the following systems:
    - Endocrine
    - Reproductive
    - Renal
    - Cardiovascular
    - Gastrointestinal
- Describe basic principles of pathophysiology, diagnosis, and management of common clinical problems in:
  - Nutrition
  - Clinical biochemistry
  - Endocrinology
  - Nephrology
  - Gastroenterology
  - Reproduction
  - Metabolism

[Communicator / Doctor-Patient Relationship]

- Demonstrate an increased ability to communicate effectively with colleagues.

[Manager]

- Demonstrate an increased understanding of the role of the primary care physician and consultant in the care of patients.

[Advocate]

- Increase one's understanding of the determinants of health and principles of disease prevention.

[Scholar]

- Demonstrate appropriate *self-directed learning* skills.

[Professional]

- Demonstrate a growing sense of the role of the *physician as a professional*.
- Demonstrate a sound grasp of the theories and principles governing ethical decision-making in relation to *truth-telling*.

ASSESSMENT

The midterm and final exams are designed to test students' knowledge in a manner that reflects the integrated, problem-solving approach of the course, and cover lectures, seminars, and clinical presentations. The content of the PBL component of the course is also included in these exams.

Examination formats include multiple-choice questions as well as short-answer questions based upon pre-circulated case studies or patient presentations delivered in class within a PBL format. There is also a separate Histology exam based on the Histology lectures and tutorials given throughout the course.

(Metabolism & Nutrition, continued)

Component	% of Overall Course Grade
Histology Exam	10
Midterm Exam*	30
Final Exam†	60
Professionalism	Credit/No Credit

*Scenarios employed for the midterm exam are handed out approximately one week prior to the exam for students to consider and research, and the material will then be tested in the midterm.
† The final exam contains a short-answer section based upon a patient presentation given within the last week of the course.

- There will be one final grade for each student for the course, which will be transcribed as Credit/No Credit, according to the Grading System in place in the Undergraduate Medical Education program.
- The final grade will be determined based on grades obtained in each of the evaluation components. For details, including grading regulations and procedures for extra work and remediation, please refer to the MNU section of the Preclerkship program tab on the MD website (md.utoronto.ca).
- The final course grade will be submitted to the Board of Examiners.
- Students deemed to have failed the course by the Board of Examiners may be required to repeat the course in the following academic year.
- Final decisions regarding remedial privileges will be made by the Board of Examiners.
- Students granted remedial privileges by the Board of Examiners must successfully complete the remedial work and/or examinations prior to promotion to Year 2.
- When remedial work is recommended in two or more courses by the first-year course directors, the Board of Examiners may require the student to repeat the year.
- Students who do not meet expectations for any of the in-course examinations may be required to complete extra work. For details, see the MNU section of the Preclerkship program tab on the MD website.

NB: Students should be familiar with the regulations concerning Unsatisfactory Performance.

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://md.utoronto.ca/policies).

NB: In order to receive credit for MNU, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME.*

For general regulations regarding extra work requirements in Preclerkship courses, see the *Standards for the Requirement of Extra Work in the Preclerkship*.

TEXTS
Textbooks are not required in MNU, however, a basic physiology, biochemistry and/or cellular biology textbook are recommended for those that may not have adequate training in these disciplines.

COURSE DESCRIPTIONS

Year 1 Block Course: BRAIN & BEHAVIOUR (BRB) *including* CLINICAL PHARMACOLOGY (CP)

Course Directors	Course Administrators
Dr. David K. Chan chandav@smh.ca Dr. Dee Ballyk d.ballyk@utoronto.ca Dr. Cindy Woodland cindy.woodland@utoronto.ca	Lina Marino lina.marino@utoronto.ca 416-946-7009 Elizabeth Day (MAM) elizabeth.day@utoronto.ca 905-569-4618
Mississauga Academy of Medicine (MAM) Faculty Site Coordinator	
Dr. Stephen McKenzie smckenzie@thc.on.ca	

COURSE OVERVIEW

Brain & Behaviour (BRB), including Clinical Pharmacology (CP), is a ten-week course extending from the end of March until the end of May. The course begins with a two-week segment on pharmacology. In the remaining eight weeks, BRB provides a solid foundation in neuroanatomy and neurophysiology, as well as an introduction to the clinical neurosciences.

CP consists of a mixture of large- and small-group teaching to provide students with an opportunity to consolidate various aspects of pharmacology learned earlier in the first-year program, to develop greater competence in aspects of pharmacokinetics, pharmacodynamics, toxicology and adverse drug reactions, and to begin to develop an understanding of the practical use of medications.

BRB is organized around several blocks: (I) neuroanatomy and neurophysiology; (II) the motor system and somatosensation; (III) pain and epilepsy; (IV) vision; (V) consciousness and higher cortical functions; and (VI) behaviour and personality. There is a central theme each week. Students learn the core material through attendance at lectures and labs, participation in problem-based learning (PBL) tutorials and seminars, and through self-directed learning. A PBL "case of the week" is used to stimulate learning around the core topics for that week and to allow consolidation of new learning through small group sessions facilitated by a PBL tutor. Two PBL tutorials, each two hours in length, are scheduled each week.

Wednesday afternoons and Friday mornings are occupied by the longitudinal courses (CPPH-1 and ASCM-1). The didactic and small group components of BRB occur on the other days of the week. On these days, there are generally lectures followed by a lab or seminar. For the majority of weeks during the course, one to two half-days are designated as "self-study" time with no scheduled formal instruction.

Laboratories are used to teach anatomy by providing prepared specimens, models, human brains for dissection, and a variety of medical images. Neuroanatomy is a critical component of the course and is emphasized in each of the weeks. However, there is a concentration of lectures and labs at the beginning of the course to quickly familiarize students with the anatomy of the human nervous system, which is critical in understanding the clinical disorders introduced later in the course. Seminars have been included to further illustrate the clinical applications of basic science material by providing the opportunity to work through short clinical cases, with the help of an expert tutor in a small-group setting.

(Brain & Behaviour, continued)

COURSE THEMES

1. Pharmacology
2. Introduction to the neurosciences
   A. Neuroanatomy and neurophysiology
   B. The neurological examination
3. Motor system and somatosensation
   A. Motor unit and corticospinal system
   B. Cerebellum and basal ganglia
   C. Somatosensation
4. Pain and epilepsy
5. Vision
6. Consciousness and higher cortical functions
7. Behaviour and personality

COURSE OBJECTIVES

By the end of BRB, students are expected to have accomplished the following terminal objectives:

[Medical Expert / Skilled Clinical Decision-Maker]

- [CP] Develop a rational strategy for keeping up-to-date on drug information.
- [CP] Describe and apply the major principles of pharmacokinetics and pharmacodynamics.
- [CP] Understand the basic components of prescription-writing and be able to apply basic formulae to calculate drug dosages.
- [CP] Describe the use of medications in specific practical settings.
- Describe the *structure and function* of the major components of the nervous system, at the gross, microscopic and biochemical levels.
- Describe how the nervous system achieves each of its *major functions* and begin to appreciate how these may be deranged in disease states.
- Apply their understanding of the structure and function of the nervous system to the *localization and diagnosis* of nervous system disorders.
- Identify anatomical structures and common disease processes from *radiological images* utilizing axial, coronal, and sagittal planes.
- Integrate information from their understanding of nervous system structure and function, a patient's symptoms and signs (including clinical localization), and imaging abnormalities, to *propose an etiological diagnosis* of a patient's disease.
- Use their understanding of nervous system function, particularly at the subcellular level, to understand the *pharmacological management* of major neurological and psychiatric disorders.

[Communicator / Doctor-Patient Relationship]

- [CP] Describe ways to optimize communication with patients about drug therapies.
- Demonstrate an increased ability to communicate effectively with colleagues.

[Scholar]

- [CP] Describe methods to identify and investigate the efficacy, effectiveness, and safety of drug therapies.
- Demonstrate appropriate *self-directed learning* skills.

(Brain & Behaviour, continued)

[Professional]

- Demonstrate a growing sense of the role of the *physician as a professional*.

ASSESSMENT

A student's final grade in BRB & CP is determined by their performance on three examinations, weighted as follows: CP exam 20%, BRB midterm 40%, and BRB final 40%. Students must achieve a combined average mark of 70% or higher on these three examinations, and a minimum of 65% on each exam on the components (see below) of the BRB midterm and final exams in order to achieve a clear pass in the course.

A student's grade in the CP section of the course is determined by their performance on a multiple-choice examination at the end of the pharmacology block that addresses the pharmacology objectives.

The BRB midterm examination consists of three components: (1) a "bell-ringer" practical anatomy examination (50% of midterm exam mark), (2) 45 single-answer multiple-choice questions (40% of midterm exam mark), and (3) a series of short-answer questions based on a new PBL case (10% of mid-term exam mark).

The final examination consists of two components: (1) 60 single-answer multiple-choice questions (80% of final exam mark), and (2) a series of short-answer questions based on another new PBL case (20% of final exam mark).

Both the BRB midterm and final examinations test knowledge of the core material presented in lectures, labs, and seminars. The material covered in the weekly PBL cases is tested based on the learning objectives of the summary lecture following each case.

Professionalism is assessed during both PBL sessions and neuroanatomy labs. As in other courses in the UME program, students must pass the professionalism component in order to receive credit for the course.

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://md.utoronto.ca/policies).

For general regulations regarding extra work requirements in Preclerkship courses, see the *Standards for the Requirement of Extra Work in the Preclerkship*.

Students must successfully complete the required extra work or remediation/re-examination prior to the beginning of Year 2. Where remediation/re-examination is recommended by two or more of the first-year Course Directors, the Board of Examiners may require the student to repeat the year.

Grades will be recorded and transcripted by the Faculty Registrar as *Credit* or *No Credit*.

(Brain & Behaviour, continued)

RECOMMENDED TEXTBOOKS

Neuroanatomy:

- Blumenfeld H. *Neuroanatomy through Clinical Cases*. 2nd Edition. Sinauer Associates, 2010. http://go.utlib.ca/cat/7795080
- Kiernan JA. *Barr's The Human Nervous System: An Anatomical Viewpoint*. 10th Edition. Lippincott Williams & Wilkins, 2014. http://go.utlib.ca/cat/6840153 (9th ed.)
- Goldberg S. *Clinical Neuroanatomy Made Ridiculously Simple (Book & CD-ROM)*. 4th Edition. McGraw-Hill, 2010. http://go.utlib.ca/cat/6786365 (3rd ed., CD) http://go.utlib.ca/cat/6181024 (2nd ed., book)
- Young PA, Young PH, Tolbert DL. *Basic Clinical Neuroscience*. 3nd Edition. Lippincott Williams & Wilkins, 2015. http://go.utlib.ca/cat/6459138 (2nd ed.)
- Wilson-Pauwels L, Stewart PA, Akesson EJ, Spacey SD. *Cranial Nerves: Function and Dysfunction*. 3rd Edition. PMPH-USA, 2010. http://go.utlib.ca/cat/7383658
- Vanderah TW, Gould DJ. Nolte's The Human Brain: An Introduction to its Functional Anatomy. 7th Edition. Elsevier, 2015. http://go.utlib.ca/cat/6497162 (6th ed., 2009)
  Afifi AK, Bergman RA. *Functional Neuroanatomy: Text and Atlas*. 2nd Edition. McGraw-Hill, 2005. http://go.utlib.ca/cat/6258007
- Martin JH. *Neuroanatomy: Text and Atlas*. 4th Edition. McGraw-Hill, 2012. http://go.utlib.ca/cat/5014962 (3rd ed.)
- Crossman AR, Neary D. *Neuroanatomy: An Illustrated Colour Text*. 5th Edition. Churchill Livingstone, 2014. http://go.utlib.ca/cat/7359416 (4th ed.)

Neuroanatomy Atlases:

- Haines DE. *Neuroanatomy: An Atlas of Structures, Sections, and Systems*. 9th Edition. Lippincott Williams & Wilkins, 2014. http://go.utlib.ca/cat/7631696 (8th ed.)
- England MA, Wakeley J. *Color Atlas of the Brain and Spinal Cord*. 2nd Edition. Mosby, 2006. http://go.utlib.ca/cat/5806436
- Woolsey TA, Hanaway J, Gado MH. *The Brain Atlas: A Visual Guide to the Human Central Nervous System*. 3rd Edition. Wiley, 2008. http://go.utlib.ca/cat/6327097
- Greenstein B, Greenstein A. *Color Atlas of Neuroscience: Neuroanatomy and Neurophysiology*. Thieme, 2000. Online access at: http://go.utlib.ca/cat/6041030

Neurophysiology:

Note: A number of the neuroanatomy textbooks also cover the neurophysiology content required for the course.

- Conn PM. *Neuroscience in Medicine*. 3rd Edition. Humana Press, 2008. Online access at: http://go.utlib.ca/cat/6787401
- Haines DE. *Fundamental Neuroscience for Basic and Clinical Applications*. 4th Edition. Churchill Livingstone, 2013. http://go.utlib.ca/cat/8696743
- Kandel ER, Schwartz JH, Jessell TM. Siegelbaum S, Hudspeth AJ. *Principles of Neural Science*. 5th Edition. McGraw-Hill, 2012. http://go.utlib.ca/cat/8619861 (5th ed) http://go.utlib.ca/cat/3618259 or http://go.utlib.ca/cat/7782642 (4th ed.)
- Bear MF, Connors B, Paradiso M. *Neuroscience: Exploring the Brain*. 3rd Edition. Lippincott Williams & Wilkins, 2007. http://go.utlib.ca/cat/6208440

(Brain & Behaviour, continued)

Neuropharmacology:

- Nestler EJ, Hyman SE, Malenka RC. *Molecular Neuropharmacology: A Foundation for Clinical Neuroscience*. 2nd Edition. McGraw-Hill, 2009.
  Online access at: http://go.utlib.ca/cat/8163344
- Kalant H, Grant D, Mitchell J. *Principles of Medical Pharmacology*. 7th Edition. Saunders, 2006.
  http://go.utlib.ca/cat/5920076
- Katzung B, Masters S, Trevor A. *Basic and Clinical Pharmacology*. 12th Edition. McGraw-Hill, 2012.
  Online access at: http://go.utlib.ca/cat/8451894

Clinical Neurology, Neurosurgery and Ophthalmology:

Note: The clinical texts will be more important after first-year medicine; obtaining one of the following may be helpful for working through the problem-based learning cases.

- Lindsay KW, Bone I, Fuller G. *Neurology and Neurosurgery Illustrated*. 5th Edition. Churchill Livingstone, 2010.
  http://go.utlib.ca/cat/7313354
- *Aids to the Examination of the Peripheral Nervous System*. 5th Edition. Saunders, 2010.
  http://go.utlib.ca/cat/7387995
- Ropper AH, Samuels MA, Klein JP. *Adams and Victor's Principles of Neurology*. 10th Edition. McGraw-Hill, 2014
  http://go.utlib.ca/cat/6810932 (9th ed.)
  The only 10th ed. access is online at http://go.utlib.ca/cat/9284393 for Mount Sinai users
- Rowland LP (editor). *Merritt's Neurology*. 12th Edition. Lippincott Williams & Wilkins, 2010.
  http://go.utlib.ca/cat/6996843 (12th ed. book) or online access to the 11th ed.: http://go.utlib.ca/cat/7992989
- Yousem DM, Grossman RI. *Neuroradiology: The Requisites*. 3rd Edition. Mosby, 2010.
  http://go.utlib.ca/cat/7135314(3rd ed.) or http://go.utlib.ca/cat/5019191 (2nd ed.)
- Harper RA. *Basic Ophthalmology*. 9th Edition. American Academy of Ophthalmology, 2010.
  http://go.utlib.ca/cat/7387996
- Posner JB, Saper CB, Schiff ND, Plum F. *Plum and Posner's Diagnosis of Stupor and Coma*. 4th Edition. Oxford University Press, 2007.
  http://go.utlib.ca/cat/6199972 or online access at http://go.utlib.ca/cat/8191628
- Strubb RL, Black FW. *The Mental Status Examination in Neurology*. 4th Edition. F.A. Davis, 2000.
  http://go.utlib.ca/cat/3250033
- Feinberg TE, Farah MJ. *Behavioral Neurology and Neuropsychology*. 2nd Edition. McGraw-Hill, 2003.
  http://go.utlib.ca/cat/5005939 http://go.utlib.ca/cat/7135314(3rd ed.) or http://go.utlib.ca/cat/5019191 (2nd ed.)

COURSE DESCRIPTIONS

Year 1 Continuity Course: THE ART & SCIENCE OF CLINICAL MEDICINE-1 (ASCM-1), including PORTFOLIO I

Course Directors	Course Administrators
Dr. Jean Hudson jean.hudson@trilliumhealthpartners.ca	Bektu Abidta bektu.abidta@utoronto.ca 416-978-1186
Portfolio Component:	
Dr. Nirit Bernhard portfolio.director@utoronto.ca	Melissa Casco portfolio.ume@utoronto.ca 416-978-7327

Site Directors:

Academy	Site	Site Directors
FitzGerald	SMH	Dr. Lee Schofield lee.schofield@utoronto.ca
FitzGerald	SJHC	Dr. Erin Kraftcheck e.kraftcheck@utoronto.ca
Mississauga	THP – CVH	Dr. Suleman Remtulla ssremtulla@rogers.com
Mississauga	THP – MH	Dr. Darren Sukerman mailtoyoo@yahoo.com
Peters-Boyd	SHSC	Dr. Grant Chen gichen21@yahoo.com
Peters-Boyd	Markham	Dr. Grant Chen gichen21@yahoo.com
Peters-Boyd	WCH	Dr. Pamela Lenkov pamela.lenkov@sunnybrook.ca
Peters-Boyd	NYGH	Dr. Yashi Yathindra yashi.yathindra@gmail.com
Wightman Berris	MSH	Dr. Adam Millar amillar@mtsinai.on.ca
Wightman Berris	TGH	Dr. Douglas Ing douglas.ing@uhn.ca
Wightman-Berris	TWH	Dr. Bohdan Laluck bohdan.laluck@uhn.ca
Wightman-Berris	TEGH	Dr. Michelle Lockyer michelle.lockyer@utoronto.ca
Wightman-Berris	Bridgepoint	Lead tutor: Dr. Karen Chu kchu@bridgepointhealth.ca

(The Art & Science of Clinical Medicine-1, continued)

COURSE OVERVIEW

ASCM-1 takes place Friday mornings from 8:00-12:00, throughout Year 1 for a total of 33 sessions. The course provides an introduction to interviewing skills, history-taking, and physical examination. Students interact with patients who may be real or volunteer or standardized. Students are divided into groups of six at their Academies, with each group typically led by one, two, or three core tutors. At some sites, sessions are co-led by two tutors at a time. Content experts such as rheumatologists, orthopaedic surgeons, ethicists, and neurologists may be present at some of the small-group sessions.

In addition, students will have an opportunity to discuss and reflect on their training during three Portfolio sessions within the course. These sessions give students the opportunity to reflect on their ultimate goal – developing their identity as doctors and shaping the way in which they conduct themselves in their future practice of medicine.

COURSE OBJECTIVES

The overall or terminal objectives for ASCM-1 are as follows:

[Medical Expert / Skilled Clinical Decision-Maker]

- Obtain a patient's medical history
- Perform a complete physical examination.
- Present the findings from the history and physical examination orally and in writing
- Understand the goal and principles of infection control

[Communicator / Doctor-Patient Relationship]

- Communicate effectively with patients during an interview, both verbally and non-verbally, so as to obtain accurate information that the patient is comfortable providing.
- Use an electronic medical record system effectively without detracting from the interaction during the interview.
- Exhibit a non-judgmental, patient-centred approach to the doctor/patient interaction, in order to promote the physical, emotional and social well-being of patients.

[Manager and Scholar]

- Work effectively with colleagues

[Scholar]

- Demonstrate appropriate self-directed learning skills.

[Professional]

- Maintain confidentiality of patient data.
- Exhibit honesty, fairness and compassion towards patients, peers, and other members of the health care professions.
- Manage time and workload effectively.

(The Art & Science of Clinical Medicine-1, continued)

ASSESSMENT

Standing in ASCM-1 is transcribed as Credit/No-Credit. In order to obtain a credit in ASCM-1, a student must:

1. Receive a passing mark on the Portfolio assignment.
2. Complete 2 Clinical Encounter Cards (CECs) – one in first semester and one in second semester.
3. Receive a passing mark on each course component:

	Course component
Case report one	0
Case report two	0
Case report three	5%
Case report four	5%
Case report five	5%
October Narrative Evaluation (formative)	0%
September-December Narrative Evaluation (summative)	10%
January-May Narrative Evaluation (summative)	20%
December observed history/physical examination (mid-year evaluation)	25%
Final OSCE	30%

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://md.utoronto.ca/policies).

NB: In order to receive credit for ASCM-1, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME*.

For general regulations regarding extra work requirements in Preclerkship courses, see the *Standards for the Requirement of Extra Work in the Preclerkship*.

COURSE DESCRIPTIONS

Year 1 Continuity Course: COMMUNITY, POPULATION AND PUBLIC HEALTH-1 (CPPH-1)

Course Directors	Course Administrators
Dr. Allison Chris Course Director allison.chris@utoronto.ca Dr. Fok-Han Leung Associate Course Director leungf@smh.ca Dr. Mitesh Patel Associate Course Director Patel.forensic@gmail.com	Yasmin Shariff Course Administrative Coordinator yasmin.shariff@utoronto.ca 416-978-8213 Sylvia Jao Course Administrative Assistant sylvia.jao@utoronto.ca 416-978-6860 Roxanne Wright Community Health Placement Officer roxanneb.wright@utoronto.ca 416-978-0952

Academy Coordination

Academy	Lead Tutor	Site Coordinator
MAM	Dr. Maria Upenieks maria.upenieks@utoronto.ca	Frances Rankin frances.rankin@utoronto.ca 905-569-4602
Wightman-Berris	Dr. Lesley Adcock lesley.Adcock@uhn.ca	Brian Davidson brian.davidson@uhn.ca 416-340-4800 ext. 3265
FitzGerald	Dr. Fok-Han Leung leungf@smh.ca	Caroline Pullan pullanc@smh.ca 416-864-5475
Peters-Boyd – SHSC	Judith Manson judith.manson@sunnybrook.ca	Esther Williams esther.williams@sunnybrook.ca 416-480-4273
Peters-Boyd – WCH	Jordana Sheps jordana.sheps@utoronto.ca	Jennifer Alexander jennifer.alexander@wchospital.ca 416-323-6044
Peters-Boyd – NYGH	Rick Penciner rick.penciner@nygh.on.ca	Mabel Chan mabel.chan@nygh.on.ca 416-756-6000 ext. 4724

(Community, Population and Public Health-1, continued)

COURSE OVERVIEW

The Community, Population and Public Health (CPPH) courses take place in first-year (CPPH-1) and second year (CPPH-2). There is also related teaching offered in the clerkship, particularly during Transition to Clerkship and Transition to Residency. Jointly, these course offerings introduce students to a population and community health perspective on medical practice.

CPPH fosters the development of future physicians' responses to changing community and societal needs and concerns. As a result of completing the course work in CPPH, U of T medical graduates will have the foundation of necessary knowledge, skills and attitudes to form appropriate alliances with patients, other healthcare professionals and community organizations to the benefit of the individual patient and community as a whole. Their practice will be population-health oriented and evidence-based. They will be aware of factors and resources needed to promote health and wellness and be able to integrate this knowledge effectively into clinical practice.

CPPH objectives are linked closely with the CanMEDs Roles and the Medical Council of Canada 'Medical Expert' Objectives in Population Health.

CPPH-1 integrates the academic material of population health with community-based field experiences. The overall goals of the course are for students to become familiar with the social and physical determinants of health for both individual patients and for communities as a whole; with the Canadian healthcare system; and, with health promotion and health protection strategies. The course is scheduled for one half-day per week on Wednesday afternoon for all of first year.

Students will learn about health and illness, the determinants of health, the principles of population health, the structure of the health care system in Canada, health promotion, disease prevention and health protection. Students will learn the basic tools of population health, including the techniques of descriptive epidemiology (the study of the distribution of health events and their determinants in a population) and concepts of community health. Students will have field experiences in Toronto and Mississauga schools in order to apply the principles of population health to school children. Students will visit patients who receive services in their home organized through the Community Care Access Centres to understand the role of home-based care in the healthcare system. Through these field experiences, students will understand the relationship between health and the social and physical determinants of health.

The Community-Based Service-Learning Project (CBSL) is a longitudinal field experiences in CPPH that starts in the spring of first year. Students, in pairs, are matched with a community organization where they will engage in meaningful work, while answering questions connected to topics in community and population health. The total scope of CBSL is 20 half-days distributed in first (12 half-days) and second (8 half-days) year and includes dedicated time for on-site field experiences, interviews to match with organizations, tutorials and lectures on themes including community development, health promotion and community health. Students will report on their experience during CPPH-1 through a tutorial-based presentation and a written reflection component.

(Community, Population and Public Health-1, continued)

CPPH COURSE OBJECTIVES

CanMEDs role	#	Objective: The medical graduate should be able to:
Medical Expert	1.	Assess the health status of individuals and of populations, in terms of the impact of determinants of health
	2.	Apply principles of health promotion, health protection and disease prevention (including the use of screening tests) in the management of the health of individuals and populations
	3.	Work together with public health to manage the health of individuals in situations that require public health intervention, including those subject to legal requirements
	4.	Describe the roles of physicians and public health in the identification of health problems in the community, and their role in diagnosis and management of these problems.
	5.	Work together with community-based agencies to support patient care and community health.
	6.	Use epidemiological methods and data and other appropriate information sources to describe and assess the health of individuals and populations, and to assist in the diagnosis of disease.
Communicator	7.	Communicate and interact effectively and sensitively with patients of different cultures and socio-economic backgrounds
	8.	Communicate and interact effectively and respectfully with staff at community-based and public health agencies.
	9.	Communicate effectively both verbally and in writing about issues in the domain of CPPH
Collaborator	10	Understand the roles played by the physician, public health and community-based agencies in the health system.
	11.	Describe how to establish partnerships with community-based agencies and public health in support of the care of individuals and populations.
Manager	12	Describe the basic features and complexities of the local, provincial/territorial and federal health systems in Canada and the roles of physicians in each of these domains.
	13	Participate in the analysis of a community or public health problem, and understand the development of a plan that addresses these problems.
	14	Work effectively in teams that include physicians, other health professionals and others in the domain of CPPH
	15	Describe how population-based approaches to health care services can improve medical practice and participate in the evaluation of this
Health Advocate	16	Address the unique health needs and barriers to access to appropriate health and social services of specific populations, including but not limited to persons of Indigenous descent, immigrants, refugees, persons with disabilities and persons identifying as LGBTQ

	17	Understand efforts to reduce health inequities in clinical practice and at the population level, locally and globally
	18	Demonstrate methods of advocacy to improve the health and wellbeing of individuals and describe how to advocate effectively to improve population health
	19	Accept appropriate responsibility for the health of populations
	20	Describe how public policy impacts on the health of the population served.
	21	Participate in community activities directed at improving health.
	22	Inform, educate and empower individuals and groups about health issues.
Scholar	23	Understand the methods, tools, and applications of research in community, population and public health; recognize how these relate to biomedical and clinical research; and, appraise the results of such research and apply these appropriately to clinical practice
	24	Demonstrate the capacity to maintain competence in the domain of CPPH through lifelong learning
Professional	25	Apply the professional codes, relevant legislation and ethical frameworks of community, population and public health in the care of individual patients and in managing the health of populations
	26	Demonstrate professionalism in all interactions with patients, colleagues, and other members of the health team in the context of CPPH, including: • Altruism • Honesty • Integrity • Reliability • Responsibility • Compassion • Recognize one's limitations • Strive for excellence

TEACHING METHODS

CPPH-1 employs a variety of teaching modalities including lectures, academy-based tutorial sessions, field experiences, readings, and self-study modules.

Lecture sessions present the theory and principles of population and public health. Lecture sessions may include guest speakers and presentations by patient advocates. **Lectures involving patients "lived experience" are not recorded to protect their privacy.**

Field experiences are voluntarily provided by schools, community care access centres, and community-based organizations, to offer students practical learning experiences and the context in which to apply the material learned from lectures. Students attend field experiences in pairs.

(Community, Population and Public Health-1, continued)

Tutorial sessions provide opportunities for students to discuss CPPH-1 material in a small group format and receive formative feedback and assessments from the physician and allied health professional co-tutors. They are academy-based.

Course readings have been carefully chosen to supplement the lecture and tutorial material. Readings may present concepts in a slightly different way, which broadens the students' learning experience.

Self-study, including the Epidemiology and Health Promotion modules and dedicated CPPH-1 self-study time, give students the opportunity to review CPPH-1 material in depth, pursue areas of interest related to CPPH in greater detail, and practice their self-management skills.

ASSESSMENT
The following assessments are included in CPPH-1:

Assessment	Contribution to course grade:	For more information
Tutorial Presentation: School Field Experience (October 21, 2015 for WB/MAM or November 11, 2015 for FITZ/PB)	10%	Tutorial #2
Tutorial Presentation: CCAC Field Experience (October 21, 2015 for FITZ/PB or November 11, 2015 for WB/MAM)	10%	Tutorial #3
Tutorial Presentation: "In the Shoes of ...." Determinants of Health Presentation (December 2, 2015)	Credit/No credit	Tutorial #4
Tutorial Activity: Health Promotion Media Exercise (January 13, 2016)	Credit/ No credit	Tutorial #5
Examination (February 10, 2016)	40 %	Exam information
Tutorial Presentation: CBSL Task 1 (May 4, 2016)	10%	Tutorial #8
CBSL Task 2: Reflection (May 18, 2016)	30%	CBSL Task 2
Professionalism (May 23, 2016 - based on academic year performance)	Credit / No credit	Professionalism information
Total	**100%**	

(Community, Population and Public Health-1, continued)

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://md.utoronto.ca/policies).

NB: In order to receive credit for CPPH-1, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME*.

For general regulations regarding extra work requirements in Preclerkship courses, see *Standards for the Requirement of Extra Work in the Preclerkship*.

Students must pass each component of the course in order to receive credit for the course. For all of the components which contribute a percentage to the final grade, students must achieve a score of at least 60% to pass. Students who do not pass any of the components will be required to complete extra work, with reassessment.

Students who achieve less than 70% may be required to complete extra work.

Students will normally be presented to the Board of Examiners under the following circumstances:

- An overall course grade below 60%
- In the event the student has been required to do extra work on a component, and upon reassessment of that component the grade is still below the required standard
- Failing to achieve a passing grade on more than one component
- Significant lapses of professionalism

The Board of Examiners will then determine if the student is required to complete remedial work in the areas of identified weakness, and when such remedial work needs to take place.

ii. Assessment of Professionalism

Because medicine is a profession, students in medical school must conduct themselves in a professional manner. In CPPH, **professional conduct is expected from all students at all times** – in the classroom, in Medical Education offices, during tutorials, and on field experiences. Professionalism is an important component of this course and students must pass this component to achieve credit for this course. The standards on professional conduct as stated by the UME program are available on the CPPH website. Demonstration of professional behaviour will be noted in all areas of the course.

EVALUATION OF THE CPPH-1 COURSE

Evaluation by students:

This course has been developed with extensive student input. Student feedback is requested during the semester following lectures to allow for in-term adjustments and at the end of each semester.

Evaluation by tutors, lecturers, and community partners:

The course depends on the skills and knowledge of our excellent lecturers, tutors, and preceptors who deliver a substantial proportion of the course, and their comments and feedback are important. Evaluation forms are provided to them at the end of each semester.

(Community, Population and Public Health-1, continued)

Review by the CPPH-1 Course Committee:
All of these sources of information are summarized and presented to the Committee to evaluate the course. It is important that the course be evaluated from a number of perspectives and thus different aspects are assessed at different times and by different methods.

REQUIRED TEXT
The required text for the Community, Population and Public Health course is the *PHEN Primer on Population Health*, a virtual textbook accessed at http://www.afmc-phprimer.ca/. The PHEN Primer on Population Health is a resource created under the sponsorship of the Association of Faculties of Medicine of Canada (AFMC) by the Public Health Educator's Network (PHEN), and made possible through funds provided by the Public Health Agency of Canada. The PHEN includes representatives from 17 Medical Faculties in Canada who have worked collaboratively with experts, students, teachers and other stakeholders to review the Primer on Population Health. This text covers the objectives of population health from the Medical Council of Canada, it presents a perspective on population-health and it demonstrates the relevance of concepts of population health to health professionals engaged in clinical care. Additional readings may come from variety of sources including "Public Health and Preventive Medicine in Canada" by Chandrakant P. Shah, 5th edition, Excelsior Press, 2003 and selected websites and other online sources.

COURSE DESCRIPTIONS

Year 2 Block Course: MECHANISMS, MANIFESTATIONS, & MANAGEMENT OF DISEASE (MMMD)

Course Directors	Course Administrators
Dr. Lori Albert lori.albert@uhn.ca Dr. Darlene Fenech darlene.fenech@sunnybrook.ca Dr. Eleanor Latta lattae@smh.ca	Lina Marino lina.marino@utoronto.ca 416-946-7009 Sue Balaga (Mechanisms block) s.sarju@utoronto.ca 416-946-0136 Elizabeth Day (MAM) elizabeth.day@utoronto.ca 905-569-4618

Mississauga Academy of Medicine (MAM) Faculty Site Coordinators		
Dr. Dalip Bhangu dbhangu@thc.on.ca	Dr. Dennis Di Pasquale ddipasquale@thc.on.ca	Dr. Dybesh Regmi dregmi@cvh.on.ca

COURSE OVERVIEW

Mechanisms, Manifestations, & Management of Disease (MMMD) is a 36-week course which runs throughout the second year of medical school. The first nine weeks of the course concentrate on the mechanisms of disease: the pathogenesis and the changes in disease that occur at the tissue, cellular and molecular levels and how these correlate clinically. A comprehensive understanding of the mechanisms and structural alterations produced by disease is a necessary framework with which one can plan strategies for prevention, diagnosis, and treatment. The mechanisms section covers the major categories of human disease and is divided into four major topics: genetics and genetic diseases, immunology and disorders of the immune system, microbiology (including bacteriology, virology, mycology, and parasitology), and pathology (including cellular and molecular responses to injury, inflammatory disorders, and neoplasia). A three-week Case Based Learning Unit will take place during the first three weeks of MMMD this coming year and will cover the topics of Cell Damage, Inflammation, and Neoplasia. Information and material relevant to the cases will be made available prior to the beginning of the week, with material for Week 1 made available to you before the start of second year. The format will be very similar to what you experienced last year, with fewer lectures per week, more online reference material, and CBL small group learning, as opposed to PBL (Problem Based Learning). Following the completion of this three-week module, the schedule for MMMD will revert back to its current format, with PBL sessions beginning in Week 4.

The remaining 27 weeks of the course consist of system-based medicine and is organized with each week structured around one or more themes. The curriculum of each week has been developed by a committee from one or more of the major clinical departments (Anesthesia, Family & Community Medicine, Medicine, Obstetrics and Gynaecology, Ophthalmology, Otolaryngology, Paediatrics, Psychiatry, and Surgery). Also present will be additional mechanisms-based lectures, predominantly by members of the Department of Laboratory Medicine & Pathobiology, in association with clinical lectures; the goal of these lectures is to present an integrated approach to a disease, from tissue and cellular events, through clinical manifestations, diagnosis and therapy. Teaching in pharmacology, medical imaging, the "manager" role, and ethics and professionalism is integrated throughout the entire curriculum.

(Mechanisms, Manifestations, & Management of Disease, continued)

Instruction consists of lectures, weekly problem-based tutorials, and small-group workshops. Lectures are largely concerned with providing core information needed for students to develop as Medical Experts. Problem-based tutorials and workshops build on information covered in lectures, but also allow students to develop skills in clinical decision making, communication, collaboration, health advocacy, and resource management. Small-group sessions also help to develop and promote skill in self-directed learning. Lecturers provide notes for their lectures, and these are also posted on the course website for review by students. There is a limited amount of supplemental reading materials provided for most weeks to enhance the learning around topics covered.

These are considered part of the curriculum and may be examinable materials. Handouts may be made available for some workshops.

OVERALL COURSE GOALS

- To provide a link between the basic sciences taught in the first year of the undergraduate medical curriculum and the clinical disciplines encountered during Clerkship
- To develop an understanding of clinical medicine and to foster the development of attitudes necessary for the practice of sound, humanistic medicine
- To further develop an approach to clinical problem solving
- To develop an understanding of the psychosocial issues surrounding disease, illness and therapy, and the ability to integrate considerations of ethics, culture, gender, family and community into the assessment of a patient

OVERALL (OR "TERMINAL") COURSE OBJECTIVES

At the conclusion of the course, students should be able to demonstrate the following "terminal objectives." They are classified under the seven CanMEDS roles, to emphasize how the course objectives are aligned with the overall UME program objectives. The specific UME objectives supported by each of the course objectives are indicated in parentheses.

[Medical Expert/Skilled Clinical Decision Maker]

1. Describe current concepts of the mechanisms of disease, including etiology and pathogenesis, in relation to: Cell pathology, Environmental pathology, Immunology, Microbiology, Neoplasia, Genetic disease, Paediatric disease, Cardiovascular disorders.(1.1, 1.2)
2. Describe how structural alterations of disease correlate with clinical manifestations. (1.1, 1.2)
3. Describe common and/or life-threatening diseases in terms of their: Etiology, Pathogenesis, Clinical manifestations, Complications, Treatment, Prevention (1.2)
4. Provide an approach to the differential diagnosis of the major presenting problems in clinical medicine, and how to manage the problem pending the identification of the underlying cause.(1.2)
5. Demonstrate growing competence in the gathering and interpretation of clinical data, including:
    - Taking a history, performing a physical examination
    - Selecting and interpreting laboratory and imaging tests
    - Creating a problem list, generating a differential diagnosis and a provisional diagnosis (1.3a, 1.3b, 1.3c, 1.3d)
6. Retrieve, analyze and synthesize current data and literature in order to help solve a patient problem. (1.4)
7. Integrate best research evidence with clinical expertise and patient values in making clinical decisions. (1.5)

(Mechanisms, Manifestations, & Management of Disease, continued)

8. Describe how physicians provide assistance to patients with managing "normal life events" including during pregnancy, childhood and adolescence, menopause, advice about lifestyle issues such as exercise, and diet, and the dying process. (1.2)
9. Describe the following treatments of disease and illness in terms of their rationale, the mechanism of their effects, indications for each, and side effects: Management plan, Pharmacotherapeutics, Psychotherapy, Surgery (including management of trauma), Transfusion, Intravenous fluid therapy, Organ donation and transplantation, Radiation therapy, Rehabilitation, Therapy of genetic disorders, Palliative care (1.3e)
10. Make appropriate use of medical imaging in the diagnosis of fractures, cancer, trauma and disorders of the heart and lungs. (1.3c)

[Communicator]

1. Further develop the ability to communicate effectively with patients, clinical colleagues and other allied health professionals. (2.1, 2.2, 2.4, 2.5)
2. Deliver information to patients humanely and effectively (2.3)
3. Contribute to a cumulative patient profile. (2.5)

[Collaborator]

1. Describe in general terms the roles of other members of the health care team. (3.1)
2. Contribute to the development of a multidisciplinary care plan. (3.2, 3.3)

[Manager]

1. Further develop a general understanding of the resource costs of health care interventions. (4.4)\
2. Understand the optimal use of laboratory testing in relation to cost issues (4.4)
3. Help to build better teams. (4.5)
4. Describe aspects of the organization of the health care system (4.2)

[Health Advocate]

1. Propose health promotion and disease prevention strategies for individuals and populations based on an understanding of disease mechanisms (5.1)
2. Demonstrate respect for diversity (5.3)
3. Demonstrate a deepening understanding of the doctor-patient relationship and the legal and ethical issues pertaining to it (5.5)

[Scholar]

1. Demonstrate increasing self-directed lifelong learning skills (6.2)
2. Demonstrate a growing capacity to teach others (peers and patients) about clinical issues (6.2)

[Professional]

1. Manage their time effectively. (7.4)
2. Demonstrate responsibility and reliability in the learning and performance of tasks. (7.4)
3. Demonstrate respect for instructors and peers within the educational environment. (7.2, 7.6)
4. Demonstrate a basic understanding of major concepts in bioethics and law as applied to medicine, and apply this understanding to challenges in clinical medicine. (7.8, 7.9)
5. Recognize and accept the limitations in his/her knowledge and clinical skills, and demonstrate a commitment to continuously improve his/her knowledge, ability and skills and leadership, always striving for excellence. (7.5)

(Mechanisms, Manifestations, & Management of Disease, continued)

6. Develop the capacity to recognize common medical errors, report them to the required bodies, and discuss them appropriately with patients. (7.10)

ASSESSMENT

There are five written examinations in MMMD, occurring approximately every seven weeks. The material covered in each examination is non-cumulative, although it must be recognized that the concepts taught in the later portions of the course will assume pre-existing knowledge from earlier sections, particularly the mechanisms section and some pharmacology teaching. The examinations will be composed of multiple choice questions and short answer questions. They will address material covered in lectures, workshops, problem-based tutorials and any assigned mandatory readings (including any supplemental materials provided for the week). All examinations will be weighted equally for the purpose of calculating the final course grade.

Students will be evaluated on their participation in problem-based tutorials, and their acquisition of skills relevant to evaluating a problem, researching information and interacting as a group, however, this evaluation will be for purposes of feedback, and will not be included in calculation of the student's overall grade. PBL tutors will also complete evaluations of each student's professionalism as demonstrated during the PBL tutorials. Lapses in professionalism in PBL may constitute grounds for not achieving credit in the course.

As well, annual feedback will be provided to students regarding their performance in the Ethics and Professionalism curriculum included within the MMMD course. The feedback will not be included on the transcript.

GRADING

Grading in MMMD conforms to the "Guidelines for the assessment of undergraduate medical trainees – Preclerkship." The application of these guidelines to MMMD is as follows:

In order to achieve credit in the course, the student must meet the requirements for success in the course as listed below. As well, they must demonstrate satisfactory professional behaviour. Multiple minor lapses in professionalism, or major lapses or critical incidents, may constitute grounds for not achieving credit in the course. Students who have not met the requirements to achieve credit in the course will be presented to the Board of Examiners, and the Board will decide whether a course of remediation is appropriate. With regards to the Ethics and Professionalism component of the curriculum, students who are struggling to master the concepts taught regarding Ethics and Professionalism will be asked to meet with Dr. Erika Abner and may be required to complete additional work.

Student grades in the course are classified based on the overall average score of the five examinations, and on the scores of each of the five individual examinations as follows:

Clear "Credit": A student who has achieved a grade of 65% or higher on each of the five examinations, AND an overall cumulative average of 70% or higher, will be deemed to have achieved credit in the MMMD course.

Clear "No Credit": A student will be deemed to have failed to achieve credit in the MMMD course in the following situations:

a. If a student achieves a failing grade (<60%) on two examinations, or achieves a grade below 65% on three examinations, their performance will be reviewed by the Board of Examiners at the next available meeting. A determination will be made by the Board, taking into account all relevant factors, whether

(Mechanisms, Manifestations, & Management of Disease, continued)

the student merits a grade of "No Credit" and therefore requires formal remediation or whether the student will have to repeat the course.

b. If a student is required to do extra work or remediation in the course and is not successful in completing this to the required standard, then they may be presented to the Board of Examiners with the recommendation that the Board assign a grade of "No Credit".
c. If the student demonstrates major lapses or a significant number of minor lapses in professionalism, then this may also be considered grounds for a grade of "No Credit" to be determined by the Board of Examiners

Borderline: Students who achieve neither a clear "Credit" nor clear "No Credit" are deemed to be borderline, and will require additional work in order to achieve credit in the course. This applies to students who score below 60% on one examination or 65% on one or two of the examinations. The performance of students scoring at a borderline level will be carefully reviewed by the course co-directors and faculty members of the course committee. Based on this review, students will be required to do extra work, which may include a focused examination on the identified areas of weakness. The exact nature of the required extra work will depend on the following factors:

- The student's overall mark in the course
- The number of examinations on which they scored below 65%

Students who are identified as showing borderline performance in MMMD and requiring extra work, may also be presented to the Board of Examiners for review of their performance.

Students who score less than 70% on any of the written exams will be invited to have an interview with one of the course directors to discuss their performance and to explore what might be done to assist them in future. Students whose cumulative course average at the end of the year is between 60% and 70% will also be reviewed by the course directors and may be asked to complete extra work, if they have not already done so (additional extra work may also be required).

Although numerical grades will be used for the purpose of determining if the student achieves credit, the grade will be officially reported on the transcript as Credit or No Credit.

For further details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://md.utoronto.ca/policies).

NB: In order to receive credit for MMMD, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME*. For general regulations regarding extra work requirements in Preclerkship courses, see the *Standards for the Requirement of Extra Work in the Preclerkship*.

RECOMMENDED TEXTS

There are no required textbooks for this course. The textbooks cited below should be of considerable value in assisting the study of the material from this course. Most of the textbooks listed below, as well as many other useful resources, are available on-line through the University of Toronto Libraries. There is a link to the Library on the course portal. There is a course librarian, and contact information is available on the portal. He/she can be contacted for help in locating these, or alternate resources.

(Mechanisms, Manifestations, & Management of Disease, continued)

Pathology:

Robbins' Pathologic Basis of Disease (8th Edition). V Kumar, A Abbas, N Fausto, J Aster. Elsevier Saunders, 2010.

Microbiology:

Schaechter's Mechanisms of Microbial Disease (5th Edition). NC Engleberg, T Dermody, V DeRita. Lippincott Williams & Wilkins, 2012.

Immunology:

Case Studies in Immunology – A Clinical Companion (5th Edition). F Rosen, R Geha. Garland Publishing Inc., 2007.
The Immune System (3nd Edition). P Parham. Garland Publishing Inc., 2009. (4th edition available in October 2014)

Genetics:

Thompson and Thompson Genetics in Medicine (7th Edition). RL Nussbaum, RR McInnes, HF Willard. Elsevier Saunders, 2007.

Obstetrics and Gynecology:

Hacker and Moore's Essentials of Obstetrics and Gynecology (5th Edition). NF Hacker, JC Gambone, CJ Hobel. WB Saunders Co., 2010.

Ophthalmology

American Academy of Ophthalmology "Basic Ophthalmology for Medical Students and Primary Care Residents, 9th ed" by R. Haper, 2010

Pediatrics:

Nelson's Essentials of Pediatrics (5th Edition). RM Kliegman et al. Elsevier Saunders, 2011.

Family Medicine :

Essential Family Medicine Fundamentals & Cases (3rd Edition). RE Rakel. WB Saunders Co., 2006.
Primary Care Medicine (7th Edition). AH Goroll, AG Mulley Jr. JB Lipincott Company, .
Family Medicine: Ambulatory Care and Prevention (5th Edition). MB Mengel, LP Schwiebert. McGraw-Hill, 2008
Family Medicine Handbook (5th Edition). MA Graber, JL Jones, JK Wilbur. Mosby, 2006.
The Canadian Task Force on Preventive Health Care : http://canadiantaskforce.ca/
Mosby's Family Practice Sourcebook: An Evidence-Based Approach to Care (4th Edition). M Evans. Mosby, 2006.

Psychiatry:

Clinical Psychiatry for Medical Students (3rd Edition). Stoudemire. Lippincott, 1998.
Diagnostic and Statistical Manual of Mental Disorders (5th Edition). American Psychiatric Association, 2013.
Kaplan and Sadock, Synopsis of Psychiatry (10th Edition). Williams and Wilkins, 2007.

Surgery:

Essentials of General Surgery (4th Edition). PF Lawrence ed. Lippincott, Williams and Wilkins, 2006.
Essentials of Surgical Specialties (3rd Edition). PF Lawrence ed. Lippincott, Williams and Wilkins, 2007.
Current Surgical Diagnosis and Treatment (11th Edition). LW Way, GM Doherty, eds. Lange, 2010.
Schwartz's Principles of Surgery (9th Edition). FC Brunicardi et al. McGraw-Hill, 2010. (Available on STATref).

Gastroenterology:

First Principles of Gastroenterology (5th Edition), ABR Thomson and EA Shaffer. Janssen-Ortho.
Handbook of Liver Disease (3rd Edition) L Friedman and EB Keeffe. Elsevier Saunders, 2012

Medicine:

Andreoli and Carpenter's Cecil Essentials of Medicine (8th Edition). T Andreoli ed. WB Saunders, 2010.
Harrison's Principles of Internal Medicine (18th Edition). AS Facui et al., eds. McGraw-Hill, 2011.

Urology:

Campbell-Walsh Urology (10th Edition). AJ Wein et al., Elsevier, 2012.

General References :

How to Break Bad News. A Guide for Health Care Professionals. R Buckman. Johns Hopkins University Press, 1992.
Doing Right. A Practical Guide to Ethics for Medical Trainees and Physicians. PC Hebert. Oxford University Press, 1996.

COURSE DESCRIPTIONS

Year 2 Continuity Course: THE ART & SCIENCE OF CLINICAL MEDICINE-2 (ASCM-2)

Course Director	Course Administrator
Dr. David MC Wong wongdav@smh.ca	Bektu Abidta bektu.abidta@utoronto.ca 416-978-1186

Site Directors:

Academy	Site	Site Director
Fitzgerald	SMH	Dr. David M.C. Wong wongdav@smh.ca
Fitzgerald	SJHC	Dr. Suzanne Lilker slilker@rogers.com
Mississauga	MH	Dr. Stephen McKenzie stephen.mckenzie@trilliumhealthpartners.ca
Mississauga	CVH	Dr. Jeff Myers jeffrey.myers@trilliumhealthpartners.ca
Peters-Boyd	SHSC	Dr. Michael Bernstein michael.bernstein@sunnybrook.ca
Peters-Boyd	WCH	Dr. Savannah Cardew savannah.cardew@wchospital.ca
Peters-Boyd	NYGH	Dr. Yashi Yathindra yashi.yathindra@gmail.com
Wightman-Berris	MSH	Dr. Yash Patel ypatel@mtsinai.on.ca
Wightman-Berris	UHN	Dr. Diana Tamir diana.tamir@uhn.ca
Wightman-Berris	TEGH	Dr. Michelle Lockyer michelle.lockyer@utoronto.ca

Block Coordinators:

Block	Coordinator
Paediatrics	Dr. Julie Johnstone julie.johnstone@sickkids.ca
Psychiatry	Dr. Adrian Grek agrek@mtsinai.on.ca
Ophthalmology	Dr. Daniel Weisbrod dan.weisbrod@utoronto.ca
Geriatrics	Dr. Thirumagal Yogaparan tyogaparan@baycrest.org Dr. Mireille Norris mireille.norris@sunnybrook.ca
MSK	Dr. Lori Albert lori.albert@uhn.ca
ENT	Dr. Brad Hubbard brad.hubbard@utoronto.ca

(The Art & Science of Clinical Medicine-2, continued)

COURSE OVERVIEW

This course continues clinical skills instruction in the second year via 35 half-day sessions, which are scheduled on Thursday mornings. Students in the course are, for the most part, organized into Academy-based groups of six students. The course builds on previously learned skills in history and physical examination in ASCM-1 and focuses on students learning more advanced skills in history-taking and physical examination. The components of the written case report are reviewed and strengthened. Students improve skills in performing an oral case presentation. The skill of performing a focused history and physical examination is introduced early in the course and students then build on this skill as the course progresses. Students learn to integrate knowledge of states of health and illness into their history-taking in order to perform a focused history and physical and to formulate a differential diagnosis.

The course is divided into several sessions led by one or two core tutors and blocks of sessions devoted to specialized learning in geriatrics, paediatrics, psychiatry, and other specialty areas. Specific skills are taught in the following dedicated sessions: the musculoskeletal system; orthopaedics; the back examination; the breast examination; the male genital-urinary system; the peripheral vascular system; the neurological system; the acute abdomen; and the ophthalmological and otolargyngological examinations.

Core sessions allow groups to review and strengthen history taking and physical examination and to practice presentation skills. Students also have the opportunity to learn and use an electronic medical system during patient encounters. Specialized core sessions focus on performing a palliative care history, a sexual history and HIV test counselling, and learning to perform a female pelvic examination. During core sessions, students and tutors should identify and direct learning where needed for the individual learner.

In addition, students will have an opportunity to discuss and reflect on their training through five Portfolio sessions that are integrated with the current curriculum. These sessions will provide students the opportunity to reflect on their ultimate goal – developing their identity as doctors and shaping the way in which they conduct themselves in their future practice of medicine.

Interviewing skills, communication skills, empathy, and professionalism are emphasized. During most ASCM-2 sessions there is an opportunity for a clinical encounter. Observation of students and feedback by tutors is emphasized.

COURSE OBJECTIVES

By the end of ASCM-2, the student should be able to:

[Medical Expert/Skilled Clinical Decision Maker]

- Obtain a complete and focused medical history
- Perform a complete physical examination.
- Present the findings from the history and physical examination
- Know about all aspects of common and life-threatening illness and all MCC clinical presentations
- Interpret laboratory and imaging tests
- Integrate clinical data into a diagnostic formulation
- Demonstrate therapeutic and management skills (in specific contexts)
- Retrieve best evidence
- Understand the goals and principles of infection control

(The Art & Science of Clinical Medicine-2, continued)

[Communicator / Doctor-Patient Relationship and Health Advocate / Community Resources]
- Communicate effectively in multiple ways with patients and families

[Collaborator]
- Exhibit honesty, fairness and compassion towards patients, peers and other members of the heath care professions

[Health Advocate/Community Resources and Scholar]
- Work effectively with colleagues

[Scholar]
- Demonstrate appropriate self-directed learning skills

[Professional]
- Exhibit honesty, fairness and compassion towards patients, peers and other members of the health care professions.
- Maintain confidentiality of patient data
- Manage time and workload effectively

ASSESSMENT

Component	% of Final Grade
OSCE	50
Observed History and Physical	20
Written Reports (2)	15 (7.5 each)
Oral Presentations (2)	15 (7.5 each)
Observed Technical Assessment Log	Credit/No Credit (students are required to complete and return the Observed Technical Assessment Log in order to pass the course)
Portfolio Written Assignment	Credit/No Credit
Professionalism	Credit/No Credit (students have a mid-year and a year-end evaluation of professionalism, and are required to demonstrate satisfactory professional behaviour in order to pass the course)

GRADING
ASCM-2 is transcribed as Credit/No Credit. The grade in ASCM-2 is derived from the grades obtained in the course components.

Students are required to pass all course components in order to pass the course, by scoring at least 60% on each component, and a grade of "credit" for portfolio assignment, professionalisms and for the observed technical assessment log. Students are expected to have mastered the basic skills of history-taking and physical examination in order to pass the course. Students must pass the OSCE in order to pass the course. The OSCE is a 10-station examination and students must achieve a minimum score of 60% and pass seven stations in order to pass the exam.

(The Art & Science of Clinical Medicine-2, continued)

Marks between 60-69% in any component are considered borderline and students scoring in this range on any component may be required to complete extra work in order to meet the requirements of the course.

Students are expected to exhibit the attributes of professionalism in order to pass the course.

For further details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://md.utoronto.ca/policies).

NB: In order to receive credit for ASCM-2, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME*.

For general regulations regarding extra work requirements in Preclerkship courses, see the *Standards for the Requirement of Extra Work in the Preclerkship*.

Students who fail any component of the course or who are borderline in more than one component will normally be presented to the Board of Examiners for review. In the case of such inadequate performance, including unprofessional behaviour, supplemental or remedial work and/or examinations will be recommended by the course director to the Board of Examiners. Students granted supplemental or remedial privileges by the Board of Examiners must successfully complete the work or examinations prior to commencing the Clerkship.

REQUIRED TEXTS

1. Bickley, L., R. Hoekelman, *Bates' Guide to Physical Examination and History Taking*, 11th ed., Lippincott, Philadelphia, 2013.
2. Course Book – The Art and Science of Clinical Medicine 2, 2015-2016
3. The ASCM Preclerkship Clinical Skills Handbook
4. ASCM 2 Paediatric Examination Handbook
5. Learning resources on the course website on the Portal.

*Students may also use The Medical Society's handbook (but this companion book should be used only in addition to the recommended textbooks on physical examination): Woganee Filate, Rico Leung, Dawn Ng, Mark Sinyor., *Essentials of Clinical Examination Handbook*, 5th ed., 2005 (or most recently edited version).

COURSE DESCRIPTIONS

Year 2 Continuity Course: HEALTH SCIENCE RESEARCH (HSR)

Course Directors	Course Administrators
Debra Katzman Debra.katzman@sickkids.ca	Jennifer Ng hsr.ume@utoronto.ca 416-978-1027

Health Sciences Research Committee		
Susan Armstrong	Paul Krueger	Martin Schreiber
Pier Bryden	Marcus Law	Neil Sweezey
Allison Chris	Joyce Nyhof-Young	Mindy Thuna
Alan Fung	Jason Pennington	Ross Upshur
Tim Guimond	Richard Pittini	Fiona Webster
Moira Kapral	Heather Sampson	Albert Wong

COURSE OVERVIEW

The Health Science Research (HSR) course is part of the Preclerkship undergraduate medical education (UME) curriculum and takes place in the second year of medical school. The HSR course is an introduction to the principles of research, directed at helping students understand and use research to contribute to improving the health of people and populations, including First Nations, Inuit and Metis peoples, in Canada and globally.

It is expected that most students will be involved in research or quality improvement (QI) activities to some degree at various times in their career. Some students will be involved in research through a project during medical school or residency. Others may be involved in research because their patients will be recruited as participants in a clinical trial. Many may collaborate on projects with others who are the principal investigator, while some students will have research as their principal career activity. All will be involved as consumers of research. Each student's ability to make use of research findings in patient care will be much enhanced if they have an understanding of how research studies are conducted and interpreted.

Students will learn the epistemological underpinnings of the scientific method as well as the skills required to conduct, evaluate and apply health-related research, thus broadening their experience and understanding of the translational research pathway. The translational research pathway facilitates the multidirectional integration of basic science research, social science research, humanities research, patient-oriented research, and population-based research with the long-term aim of improving the health of the public. Students will be exposed to the existence and validity of different conceptions of knowledge about health and wellness.

Two major foci of the course are to (i) develop the student's understanding of qualitative and quantitative methodologies and techniques; and (ii) help the student to appreciate translational research.

TEACHING METHODS

HSR employs the following pedagogical approaches:

1. **E-modules and Self-Study Time**: The e-modules are designed to provide a foundation in the principles and application of research. The key information and core knowledge presented in the e-modules are designed to help the student develop their practicum exercise (see #4).
2. **Tutorial Sessions:** These small group sessions are Academy based and provide opportunities for students to discuss HSR material in a small group format.

(Health Science Research, continued)

3. **Grand Round Lectures**: These lectures include presentations by preeminent experts in health science research on latest and evolving areas related to the coursework.

4. **Practicum Exercise:** The practicum exercise is a longitudinal exercise that will allow the student to apply the core research knowledge they learn in the Health Science Research Course. This exercise is intended to address a component of the human translational pathway from one of the four Canadian Institutes of Health Research (CIHR) pillars http://www.cihr-irsc.gc.ca/e/193.html. Those students with previous research experience will be expected to engage in a practicum exercise that is from a new and different pillar, in an effort to enhance and broaden their research skills.

COURSE OBJECTIVES

The HSR course objectives are linked closely with the UME Scholar Role objectives and competencies, and the Medical Council of Canada 'Scholar" Objectives and the Indigenous Physicians Association of Canada/Association des Medecins Indigenes du Canada scholar objectives and competencies.

Terminal Objectives	Enabling Objectives
A. Describe the relationship between scientific endeavor and clinical practice.	1. Describe the basic scientific principles of research, including the epistemological underpinnings of science. 2. Describe the relationship between evidence and uncertainty. 3. Define the varied meanings and applications of evidence in a clinical context. 4. Demonstrate an appreciation for the limitations of evidence in clinical contexts.
B. Describe the concepts and application of translational research.	1. Describe the translational research pathway. 2. Demonstrate an understanding and appreciation of the diversity and breadth of research. 3. Demonstrate ways to acknowledge and value Indigenous knowledge.
C. Contribute to the work of a research project	Describe and contribute to the basic components of a research project, as described below: *Research Question* 1. Formulate a research question in an area of inquiry that is of interest to the student. 2. Describe the characteristics of a well-constructed research question.
	Background and significance 1. Formulate a specific question in order to guide the design of a literature search. 2. Demonstrate the use of technology to search the relevant literature efficiently for evidence in order to answer a research or clinical question. 3. Evaluate information resources in order to select the best source for the information needed. 4. Critically appraise and interpret relevant research and scientific literature (including its cultural context). 5. Summarize and synthesize the results of the retrieved

	research and literature. 6. Apply the results of the search process to the identified research question. Manage research and literature using an appropriate citation manager.
	Design and Implementation 1. Describe and apply both quantitative research (e.g., laboratory experiments, clinical trials) and qualitative research (e.g. phenomenology, ethnography, grounded theory, case study) used in health science research, including the advantages and limitations of each. 2. Identify alternative and /or new ways to create evidence (e.g., mixed methods, quality improvement). 3. Propose which study designs are best suited to address specific types of research questions. 4. Describe various ways of respectfully and transparently acquiring information about First Nations, Inuit, Metis, and other populations, which involve communities as research partners. 5. Identify appropriate procedures for sampling, implementation, data collection and analysis for both qualitative and quantitative studies and understand the logic underlying the experiments or data collection proposed. 6. Describe analytical approaches and limitations for qualitative analyses (e.g. coding, thematic analyses) and quantitative analyses (e.g. sample size and power calculations; p-values and confidence intervals; bivariate and multivariable statistics for both categorical and continuous data). 7. Describe measurement issues (e.g. validity and reliability, sensitivity, specificity, positive predictive value, negative predictive value) and ways to report effect sizes (e.g. relative risk, odds ratio, attributable risk, number needed to treat). 8. Describe strategies for establishing the trustworthiness of qualitative data analysis (e.g., member checking, triangulation, interviewer corroboration, peer debriefing, prolonged engagement, negative case analysis, confirmability, bracketing, audit trails). 9. Describe the concepts of efficacy, effectiveness, and efficiency.
	Research ethics 1. Describe the ethical principles applicable to animal and human research, particularly in the Canadian context. 2. **Describe the appropriate use and acceptability of animals in research, teaching, and testing as outlined in the Canadian Council on Animal Care** *Policy Statement*. 3. Appropriately apply the ethical principles and policies described and mandated by The Canadian *Tri-Council Policy Statement 2: Ethical Conduct for Research Involving Humans. There will*

	be an emphasis on informed consent, harms and benefits and vulnerable populations including the conduct of medicinal product and medical device clinical trials, while observing international research standards. 4. Identify and critically analyze fundamental ethical principles as they apply to research and scholarly inquiry. Adhere to responsible practices and ethical behaviors when contributing to or participating in research.
	Interpretation of Novel Research Findings 1. Assess the quality of information, using principles of critical appraisal. 2. Draw valid conclusions from quantitative and qualitative data. 3. Interpret research findings for patients and populations, in a manner that promotes community input and community identification of relevant health issues and needs.
	Dissemination of Results 1. Communicate and discuss effectively with peers and professionals in written reports and oral presentations, the finding of applicable studies and reports. 2. Describe appropriate strategies for working with First Nations, Inuit and Metis, and other populations in adherence to OCAP (ownership, control, access, and possession) principles to share and promote more appropriate health-related information.
D. Identify and apply research evidence to the care of patients. populations, health systems and policy	In response to a clinical patient problem or population health issue where there is a need for additional information to support decision-making: 1. Formulate a clear and usable question to guide the search for an answer. 2. Use an effective search strategy to identify relevant literature. 3. Make use of systematic reviews, clinical practice guidelines, meta-analyses and point-of-care decision supports 4. Summarize, critically appraise, interpret and synthesize the results of retrieved reports. 5. Demonstrate autonomy and independence in critically evaluating evidence. 6. Apply the results of the search process to the identified clinical issue using principles of shared decision-making. 7. Identify and critically analyze ethical principles as they have been applied, or not applied, to research globally, while working within the Canadian context. 8. Discuss how the results of medical research can be translated to improve the clinical care of patients and populations and improve understanding of the mechanisms of disease. 9. Discuss how the results of research can be translated to improve health services, health systems and policy.

(Health Science Research, continued)

COURSE STRUCTURE

HSR is divided into nine main themes set out below. Each theme has associated:

- Learning objectives
- E-modules
- Required reading or other pre-tutorial activity preparation
- Other resources

This information is available for each theme in a synopsis format on HSR website.

Themes
1.What is the research process?
2. Asking a research question
3. Finding the Evidence: Searching & managing
4. Quantitative Research
5. Qualitative Research
6. Research ethics and integrity
7. Critical Appraisal
8. Relationship between scientific endeavor and clinical practice
9. Alternative and/or new approaches to creating evidence

ASSESSMENT

Activity to be Evaluated	Method of Evaluation	% of Final Evaluation
E - MODULES	Pre-tests (September 2015 and January 2016 - Required)	0%
	E-module post-theme tests (Required)	0%
	Final Exam	40%
PRACTICUM EXERCISE	Written Practicum*	25%
	Oral Presentation*	15%
TUTORIAL	Tutor Evaluation*	20%

*All evaluation rubrics are posted on the HSR website.

Note: Students must achieve a passing grade on each of these components in order to pass the course. For components of the course that contribute to the final percentage grade, the passing grade is 60%. Students who do not pass any component will be required to do extra work relevant to that component and to repeat the assessment and will be required to reach the passing grade on reassessment.

(Health Science Research, continued)

Students will normally be presented to the Board of Examiners under certain circumstances, such as the following:

- An overall course grade below 60%
- The student has been required to do extra work on a component, and upon reassessment of that component the grade is still below the required standard.
- Failure to achieve a passing grade on more than one component.
- Significant lapses of professionalism

The Board of Examiners will then determine next steps, e.g. if the student is required to complete remedial work in the areas of identified weakness, and when such remedial work needs to take place.

For further details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://md.utoronto.ca/policies).

NB: In order to receive credit for HSR, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME.

For general regulations regarding extra work requirements in Preclerkship courses, see the Standards for the Requirement of Extra Work in the Preclerkship.

REQUIRED TEXTS

For a complete list of required readings, please see the HSR Portal site.

COURSE DESCRIPTIONS

Year 2 Continuity Course: FAMILY MEDICINE LONGITUDINAL EXPERIENCE (FMLE)

Course Director	Course Administrator
Dr. Susan Goldstein susan.goldstein@utoronto.ca	TBD

During FMLE, students participate in community-based family medicine clinics on six Monday and/or Wednesday afternoons spread out through the second year of the program. Students are assigned preceptors through a match process, after which the six clinic dates are arranged and agreed on jointly by the student and preceptor from a list of possible dates supplied by the University.

The goal of FMLE is for students to develop an appreciation of the importance of generalist specialties and of family medicine in particular, including an understanding of the role family physicians play within the health care system. In addition, students will have some exposure to important issues in our health care environment such as physician distribution, physician remuneration, primary care reform, and social accountability.

During FMLE, students also practise some of the history-taking and physical examination skills learned in ASCM-1 and ASCM-2. They also learn about the family medicine-based clinical S.O.A.P. ("Subjective, Objective, Assessment, Plan") note and practice documentation using an Electronic Medical Record (EMR)-type document.

COURSE OBJECTIVES

The FMLE Course Objectives are derived from the CanMEDS-FMU Objectives* and support the UME Program Goals and Objectives**. Upon successful completion of the FMLE, the student should be able to:

CanMEDS-FMU Objective*	Course Objective	UME Program Objective(s) supported**
FM Expert: 1.5 FM Communicator 2.5	1. Use the patient-centered clinical method (including a patient-centered interview) to conduct a supervised office visit.	UME 1.3.1, 1.3.2, 2.1, 2.2., 2.3, 2.4, and 2.5
FM Health Advocate: 5.1	2. Demonstrate some ability to identify the health needs of an individual patient and how to work with this patient to improve their health.	UME 1.3.4 and 5.5
FM Expert 1.3	3. Use patient-centered record keeping when caring for patients.	UME 1.3.1, 1.3.2 and 2.1
FM Communicator 2.1	4. Identify that the patient-physician relationship is central to the practice of family medicine in allowing therapeutic relationships with patients to develop.	UME 5.5, 7.2 and 7.3
FM Expert 1.13	5. Demonstrate an appreciation of the value of continuity of care for developing a deep knowledge of patients.	UME 5.5

(Family Medicine Longitudinal Experience, continued)

CanMEDS-FMU Objective*	Course Objective	UME Program Objective(s) supported**
FM Manager 4.1	6. Demonstrate an understanding of the role of the family physician, family medicine and primary health care in the overall function of the health care system including family physician roles in office based care	UME 4.2, 4.4 and 4.6
FM Collaborator 3.2.1 FM Professional 7.1.2 FM Collaborator 3.2.4	7. Create and maintain a positive working environment by: I. Demonstrating a respectful attitude towards other colleagues, other health care professionals and/or members of the health team and patients and their families. II. Demonstrating professionalism in all aspects of care.	UME 2.5 and 7.2 UME 3.1, 3.2 , 3.3 and all aspects of objective 7
FM Scholar 6.1	8. Engage in self-directed learning based on reflective practice (e.g. read around cases).	UME 6.2

*CanMEDS-FMU can be found at:
http://www.cfpc.ca/uploadedFiles/Education/CanMEDS-FMU_Feb2010_Final_Formatted.pdf
**UME Program Goals and Objectives can be found at:
http://md.utoronto.ca/goals-objectives-competencies

ASSESSMENT

- Midterm report (50%)
- Final report (50%)
- Professionalism evaluation (Credit/No Credit)

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://md.utoronto.ca/policies).

NB: In order to receive credit for FMLE, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME.*

For general regulations regarding extra work requirements in Preclerkship courses, see the *Standards for the Requirement of Extra Work in the Preclerkship*.

COURSE DESCRIPTIONS

Year 2 Continuity Course: COMMUNITY, POPULATION AND PUBLIC HEALTH-2 (CPPH-2)

Course Directors	Course Administrators
Dr. Allison Chris Course Director allison.chris@utoronto.ca Dr. Fok-Han Leung Associate Course Director leungf@smh.ca Dr. Mitesh Patel Associate Course Director Patel.forensic@gmail.com	Yasmin Shariff Course Administrative Coordinator yasmin.shariff@utoronto.ca 416-978-8213 Sylvia Jao Course Administrative Assistant sylvia.jao@utoronto.ca 416-978-6860 Frances Rankin Course Administrative Coordinator (MAM) Frances.rankin@utoronto.ca Roxanne Wright Community Health Placement Officer roxanneb.wright@utoronto.ca 416-978-0952

COURSE OVERVIEW

The Community, Population and Public Health (CPPH) courses take place in first-year (CPPH-1) and second year (CPPH-2). There is also related teaching offered in the clerkship, particularly during Transition to Clerkship and Transition to Residency. Jointly, these course offerings introduce students to a population and community health perspective on medical practice.

CPPH fosters the development of future physicians' responses to changing community and societal needs and concerns. As a result of completing the course work in CPPH, U of T medical graduates will have the foundation of necessary knowledge, skills and attitudes to form appropriate alliances with patients, other healthcare professionals and community organizations to the benefit of the individual patient and community as a whole. Their practice will be population-health oriented and evidence-based. They will be aware of factors and resources needed to promote health and wellness and be able to integrate this knowledge effectively into clinical practice.

CPPH objectives are linked closely with the CanMEDs Roles and the Medical Council of Canada 'Medical Expert' Objectives in Population Health.

CPPH-2 is the continuation of CPPH-1 in second year. There are eight scheduled CPPH-2 sessions on Wednesday afternoons during the academic year. All CPPH-2 sessions are dedicated to the Community-Based Scholarship and Service-Learning (CBS) field experience that students commenced in CPPH-1. CBS is a

longitudinal field experience that starts in the spring of CPPH-1 and concludes at the end of CPPH-2. Students are partnered with a community organization where they engage in meaningful work, while answering questions connected to topics in community and population health. Students will share their CBS experience at an Academy-based forum.

(Community, Population and Public Health-2, continued)

COURSE SCHEDULE

All sessions are scheduled on Wednesday from 1-5pm.

Sept 23rd 2015	CBS Field Experience - Community Organization
Sept 30th 2015	Tutorial 1/CBS Field Experience - Academy and Community Organization
Oct 21st 2015	CBS Field Experience - Community Organization
Nov 25th 2015	CBS Field Experience - Community Organization
Jan 13th 2016	CBS Field Experience - Community Organization
Feb 3th 2016	Tutorial 2/CBS Field Experience - Academy and Community Organization
Feb 24th 2016	CBS Field Experience - Community Organization
Apr 13th 2016	CBS Academy Based Field Experience Forum - Academy

CPPH COURSE OBJECTIVES

CanMEDs	#	Objective: The medical graduate should be able to:
Medical Expert	1.	Assess the health status of individuals and of populations, in terms of the impact of determinants of health
	2.	Apply principles of health promotion, health protection and disease prevention (including the use of screening tests) in the management of the health of individuals and populations
	3.	Work together with public health to manage the health of individuals in situations that require public health intervention, including those subject to legal requirements
	4.	Describe the roles of physicians and public health in the identification of health problems in the community, and their role in diagnosis and management of these problems.
	5.	Work together with community-based agencies to support patient care and community health.
	6.	Use epidemiological methods and data and other appropriate information sources to describe and assess the health of individuals and populations, and to assist in the diagnosis of disease.
Communicator	7.	Communicate and interact effectively and sensitively with patients of different cultures and socio-economic backgrounds
	8.	Communicate and interact effectively and respectfully with staff at community-based and public health agencies.
	9.	Communicate effectively both verbally and in writing about issues in the domain of CPPH
Collaborator	10.	Understand the roles played by the physician, public health and community-based agencies in the health system.

	11.	Describe how to establish partnerships with community-based agencies and public health in support of the care of individuals and populations.
Manager	12.	Describe the basic features and complexities of the local, provincial/territorial and federal health systems in Canada and the roles of physicians in each of these domains.
	13.	Participate in the analysis of a community or public health problem, and understand the development of a plan that addresses these problems.
	14.	Work effectively in teams that include physicians, other health professionals and others in the domain of CPPH
	15.	Describe how population-based approaches to health care services can improve medical practice and participate in the evaluation of this
Health Advocate	16.	Address the unique health needs and barriers to access to appropriate health and social services of specific populations, including but not limited to persons of Indigenous descent, immigrants, refugees, persons with disabilities and persons identifying as LGBTQ
	17.	Understand efforts to reduce health inequities in clinical practice and at the population level, locally and globally
	18.	Demonstrate methods of advocacy to improve the health and
		wellbeing of individuals and describe how to advocate effectively to improve population health
	19.	Accept appropriate responsibility for the health of populations
	20.	Describe how public policy impacts on the health of the population served.
	21.	Participate in community activities directed at improving health.
	22.	Inform, educate and empower individuals and groups about health issues.
Scholar	23.	Understand the methods, tools, and applications of research in community, population and public health; recognize how these relate to biomedical and clinical research; and, appraise the results of such research and apply these appropriately to clinical practice
	24.	Demonstrate the capacity to maintain competence in the domain of CPPH through lifelong learning
Professional	25.	Apply the professional codes, relevant legislation and ethical frameworks of community, population and public health in the care of individual patients and in managing the health of populations

	26.	Demonstrate professionalism in all interactions with patients, colleagues, and other members of the health team in the context of CPPH, including: Altruism Honesty Integrity Reliability Responsibility Compassion Recognize one's limitations Strive for excellence

TEACHING METHODS

CPPH-2 focuses on the CBS longitudinal field experience to offer students practical learning experiences and context in which to apply the foundational material learned in CPPH-1. The eight CPPH-2 sessions include time to pursue the field experience, two Academy-based tutorials to provide students the opportunity to reflect on the CBS field experience and optional course readings selected to support the CBS experience.

ASSESSMENT
The following assessments are included in CPPH-2:

Assessment	Contribution to course grade:	For more information/due:
CBS Workplan	15%	October 21, 2015
CBS Case reflection	15%	Tutorial #2 February 3, 2015
CBS Task 3: Project summary and reflection	20 %	April 13, 2016
CBS Task 4: Field Experience presentation	40%	April 13, 2016
Community Professionalism and Collaboration	10 %	April 13, 2016
Total	100%	

Students must pass each component of the course in order to receive credit for the course. For all of the components which contribute a percentage to the final grade, students must achieve a score of at least 60% to pass. Students who do not pass any of the components will be required to complete extra work, with reassessment.

(Community, Population and Public Health-2, continued)

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://md.utoronto.ca/policies).

NB: In order to receive credit for CPPH-2, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME*.

For general regulations regarding extra work requirements in Preclerkship courses, see: *Standards for the Requirement of Extra Work in the Preclerkship* on the UME website (http://md.utoronto.ca/policies).

Students will normally be presented to the Board of Examiners under the following circumstances:

- An overall course grade below 60%
- In the event the student has been required to do extra work on a component, and upon reassessment of that component the grade is still below the required standard
- Failing to achieve a passing grade on more than one component
- Significant lapses of professionalism

The Board of Examiners will then determine if the student is required to complete remedial work in the areas of identified weakness, and when such remedial work needs to take place.

ii. Assessment of Professionalism

Because medicine is a profession, students in medical school must conduct themselves in a professional manner. In CPPH, **professional conduct is expected from all students at all times** – in the classroom, in Medical Education offices, during tutorials, and on field experiences. Professionalism is an important component of this course and students must pass this component to achieve credit for this course. The standards on professional conduct as stated by the UME program are available on the CPPH website. Demonstration of professional behaviour will be noted in all areas of the course.

EVALUATION OF THE CPPH-1 COURSE

Evaluation by students:

This course has been developed with extensive student input. Student feedback is requested during the semester following lectures to allow for in-term adjustments and at the end of each semester.

Evaluation by tutors, lecturers, and community partners:

The course depends on the skills and knowledge of our excellent lecturers, tutors, and preceptors who deliver a substantial proportion of the course, and their comments and feedback are important. Evaluation forms are provided to them at the end of each semester.

Review by the CPPH-1 Course Committee:

All of these sources of information are summarized and presented to the Committee to evaluate the course. It is important that the course be evaluated from a number of perspectives and thus different aspects are assessed at different times and by different methods.

(Community, Population and Public Health-2, continued)

REQUIRED TEXT

The required text for the Community, Population and Public Health course is the *PHEN Primer on Population Health*, a virtual textbook accessed at http://www.afmc-phprimer.ca/. The PHEN Primer on Population Health is a resource created under the sponsorship of the Association of Faculties of Medicine of Canada (AFMC) by the Public Health Educator's Network (PHEN), and made possible through funds provided by the Public Health Agency of Canada. The PHEN includes representatives from 17 Medical Faculties in Canada who have worked collaboratively with experts, students, teachers and other stakeholders to review the Primer on Population Health. This text covers the objectives of population health from the Medical Council of Canada, it presents a perspective on population-health and it demonstrates the relevance of concepts of population health to health professionals engaged in clinical care. Additional readings may come from variety of sources including "Public Health and Preventive Medicine in Canada" by Chandrakant P. Shah, 5th edition, Excelsior Press, 2003 and selected websites and **(Community, Population and Public Health-2, continued)**other online sources.

Themes & Competencies (Years 1-4)

In addition to the courses in the Preclerkship and the Clerkship, UME includes several "themes" and "competencies":

- Ethics & Professionalism / Professional Role
- Manager/Leader Role
- Collaborator Role/Interprofessional Education
- Pharmacology Theme
- Health Humanities
- **Clinical Skills**
- Medical Imaging
- Global Health Theme
- Indigenous Health
- LGBTQ Health Education
- Geriatrics/Care of the Elderly
- Health Advocacy

The first three of these correspond very closely to three of the CanMEDS roles that form the basis of the UME program objectives. Teaching in these thematic areas is given during both the Preclerkship and Clerkship and serves to provide students with an *integrated* exposure to these very important issues. Each of them has a faculty lead, as indicated below.

Themes & Competencies	Faculty Lead	Administrator
Ethics & Professionalism	Dr. Erika Abner erika.abner@utoronto.ca	Joan McKnight joan.mcknight@utoronto.ca 416-946-8719
Manager/Leader	Dr. Isser Dubinsky isser.dubinsky@haygroup.com	Susan Rice s.rice@utoronto.ca 416.978.2188
Collaborator / Interprofessional Education	Dr. Mark Bonta mark.bonta@uhn.ca	Susan Rice s.rice@utoronto.ca 416.978.2188
Clinical Pharmacology & Therapeutics	Dr. Cindy Woodland (Preclerkship) cindy.woodland@utoronto.ca Dr. Rachel Forman (Clerkship) rachel.forman@utoronto.ca	
Medical Imaging	Dr. Elsie Nguyen elsie.nguyen@uhn.ca	
Global Health	Dr. Rachel Spitzer rspitzer@mtsinai.on.ca	Sue Romulo sue.romulo@utoronto.ca 416-978-1831
Indigenous Health	Dr. Lisa Richardson lisa.richardson@uhn.ca Dr. Jason Pennington jpennington@tsh.to	Rochelle Allan rochelle.allan@utoronto.ca 416-946-0051
Health Humanities	Dr. Allan Peterkin allan.peterkin@utoronto.ca	Joan McKnight joan.mcknight@utoronto.ca 416-946-8719
LGBTQ Health Education	Dr. Ed Kucharski ekucharski@sherbourne.on.ca	
Health Advocacy	Dr. Philip Berger philip.berger@utoronto.ca	
Geriatrics/Care of the Elderly	Dr. Thiru Yogaparan tyogaparan@baycrest.org	

THEME & COMPETENCY DESCRIPTIONS

ETHICS & PROFESSIONALISM

Faculty Lead	Administrator
Dr. Erika Abner erika.abner@utoronto.ca	Joan McKnight joan.mcknight@utoronto.ca /416-946-8719
Mississauga Academy of Medicine (MAM) Faculty Site Coordinator	
Dr. Rob Boyko rboyko@cvh.on.ca	

Teaching in professional ethics in the core curriculum includes a mix of large-group sessions and seminars/workshops. The large-group sessions give students familiarity with the central concepts of medical ethics, professionalism and medical jurisprudence. Some of these sessions are given by single lecturers, others are team-taught, and some involve multidisciplinary panels and patients. Ethics seminars are expert-led and case-based, and sometimes involve the participation of standardized patients.

The Ethics & Professionalism Preclerkship curriculum consists of 52 hours, woven into almost all of the Preclerkship courses. Ethics teaching addresses topics pertaining to the individual doctor-patient encounter (e.g., confidentiality, truth-telling, obstetrical and paediatric ethics, informed consent, euthanasia and assisted suicide, and breaking bad news). There is also teaching on issues such as public and private rights, social justice, and professionalism.

In the Clerkship, there are 18 hours of scheduled sessions for didactic ethics, medical jurisprudence, and professionalism teaching, in addition to the education about ethics and professionalism that arises in the course of students' patient care experience. These sessions include several lectures and seminars in the Transition to Clerkship and Transition to Residency courses, and seminars in the Surgery, and Paediatrics rotations.

In addition, the Clerkship Portfolio course has as a central theme students' professional identity formation. The small group component of the course encourages students to discuss issues and experiences related to the development of their professional roles, while the written component promotes reflective practice as a key skill in medical professionalism.

Also see: Professionalism of UME students

THEME & COMPETENCY DESCRIPTIONS

LEADER (Formally MANAGER)

Faculty Lead	Administrator
Dr. Isser Dubinsky isser.dubinsky@haygroup.com 416-815-6418	Susan Rice s.rice@utoronto.ca 416.978.2188

The Leader theme curriculum spans the four years of the UME program, and so provides an opportunity for students to learn in progressively greater depth about the various aspects of the role of the physician as a leader in the health care system. The objectives for the Leader role are contained within the overall UME program objectives.

Leader theme activities are woven into the block courses during the Preclerkship and also play a major role in the Transition to Clerkship that marks the beginning of the third year, and the Transition to Residency that occurs at the conclusion of fourth year. Assessment involves the completion of required assignments, and also questions on the course examinations.

Year 1:

This year includes lectures on the leader role as part of a series on the CanMEDs roles, as well as lectures on the Canadian health care system and on career planning. Students complete a group assignment that focuses on management and team-building skills. They also complete a Canadian Medical Association (CMA) leadership module on personal leadership and emotional intelligence.

Year 2:

Students have more formal instruction about the Leader role via several half-day exercises that address the following topics, the first three of which are CMA modules:

- team-building and leadership
- managing conflict
- health and personal growth
- patient-centred care
- diversity and advocacy

Year 3

Several activities at the beginning of the Clerkship, during the Transition to Clerkship (TTC) course, further develop students' grasp of the Leader role and teamwork, and in particular the phenomenon of change management, via a complex health care planning simulation activity. Major topics during TTC include learning about quality of care, quality improvement, patient safety, health care costs, and management of medical error, and this is accomplished through both classroom sessions and Institute for Healthcare Improvement (IHI) open school online modules. The Leader role is also the focus of one of the Portfolio meetings and reflections in Year 3.

Year 4 (Transition to Residency (TTR)

In the Transition to Residency course in Year 4, students learn about negotiation, transfer of care, getting involved in the health care system, and physician supply.

THEME & COMPETENCY DESCRIPTIONS

COLLABORATOR / INTERPROFESSIONAL EDUCATION

Faculty Lead	Administrator
Dr. Mark Bonta mark.bonta@uhn.ca	Susan Rice s.rice@utoronto.ca 416.978.2188

Interdisciplinary collaboration is an integral component of healthcare and is associated with improved patient outcomes. Analysis of Interprofessional collaboration in acute and primary care settings describes a myriad of benefits for both patients and health care professionals. The benefits include: reduced length of stay and costs, enhanced patient satisfaction, treatment compliance and patient-reported health outcomes.

Moreover, members of the health care team report greater job satisfaction and sense of well-being when working in a collaborative fashion. This understanding, coupled with the inherent complexity of health care systems in an era where we must provide care to an aging population of persons with multiple chronic diseases has led to international consensus that models of health professions education must change in order to create a collaborative, practice-ready workforce. Recognizing this, the World Health Organization (WHO) published a framework for action on Interprofessional education (IPE) in which it outlined supporting evidence and strategies for implementing IPE into various healthcare disciplines to achieve this goal. According to the World Health Organization (WHO, 2010), interprofessional education (IPE) occurs when students pursuing education in two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes. Governments and health professions faculties worldwide, including the University of Toronto, have endorsed this move.

In the context of the CanMEDS objectives, the guiding principles of IPE are similar to those defined by the Collaborator competency. The Collaborator objectives, which are found in the overall UME program objectives, are fulfilled by the learners through participation in a variety of theme-specific sessions across the four years of the curriculum. One of the chief ways in which this educational content is delivered is via the formal IPE curriculum.

Interprofessional Education (IPE)
The IPE curriculum has been developed for students from 11 University of Toronto health professions Departments and Faculties (Dentistry, Medical Radiation Sciences, Nursing, Occupational Therapy, Pharmacy, Physical Education & Health, Physical Therapy, Physician Assistant, Social Work, and Speech-Language Pathology, as well as the MD program), and is delivered under the auspices of the Centre for IPE. To complete the IPE curriculum, students take part in both core and elective learning activities throughout the four-year UME program.

The core activities include:

- a large-group session with all first-year health professionals that introduces the concept of collaborative practice in Year 1;
- a week-long session on the multidisciplinary approach to the management of pain during Year 2;
- a Conflict in Interprofessional Life workshop in Year 3; and
- a Palliative Care Session in Year 4

(Collaborator / Interprofessional Education, continued)

In addition to these 4 sessions, the students complete a half-day experience during TTC whereby they shadow a member of the IP team in a hospital setting and have devoted time during their Portfolio sessions in Clerkship to reflect on their experience as collaborators.

Lastly, students are required to complete a variety of IPE elective learning activities during their four years of training that expose them to different aspects of their role as collaborators. The students select experiences from a catalogue of various learning activities that range in topic, depth of immersion and specific IP competency addressed. Examples of IPE electives include an afternoon workshop on medication safety, various lectures from non-physicians and patients, panel presentations, and immersive clinical experiences with learners from other health care faculties. The formal IPE elective experiences are complemented by their interactions with other health professionals during clinical training in Clerkship, during teamwork sessions, and educational sessions delivered by educators from other health professions during their clinical rotations.

THEME & COMPETENCY DESCRIPTIONS

CLINICAL PHARMACOLOGY & THERAPEUTICS

Theme Coordinators
Dr. Cindy Woodland (Preclerkship) cindy.woodland@utoronto.ca Dr. Rachel Forman (Clerkship) rachel.forman@utoronto.ca

Instruction in clinical pharmacology and therapeutics is distributed throughout the undergraduate medical program. Formal teaching in pharmacology primarily occurs during the two years of the Preclerkship and in the Transition to Clerkship. In Year 1, students are introduced to the principles of pharmacology in lectures and seminars. Therapeutic drug classes are introduced with the appropriate systems, with an emphasis on their mechanisms of action. In Year 2, appropriate drug therapies (often involving a combination of drug classes) are taught in an integrated fashion with the diseases of interest. Some specific drugs and dosages are discussed during the Clerkship.

- Art & Science of Clinical Medicine-1
    - Students are provided with a list of commonly prescribed medications that they are likely to encounter. In March, students have an interactive session addressing how to take an accurate medication history and the importance of medication reconciliation.

- Structure & Function
    - Relevant drugs are mentioned throughout this course.

- Metabolism & Nutrition
    - Early in this course, students are introduced to pharmacokinetic and pharmacodynamic principles. Throughout the course, students learn about medications relevant to the systems being addressed (e.g., endocrine, gastrointestinal, and renal). The instruction is delivered via lectures and a seminar, and is also incorporated into problem-based learning (PBL) cases.

- Brain & Behaviour
    - During the dedicated two-week Pharmacology block of this course (see BRB course description), students apply principles of pharmacokinetics and pharmacodynamics to the prediction of drug-drug interactions, the calculation of drug dosages, and when examining interindividual differences and changes in drug handling during pregnancy. They also receive expanded instruction in autonomic and cardiovascular drugs. Other drug classes mentioned during the year are reviewed during case discussions as the students begin to develop an understanding of the practical use of medications. Topics such as clinical toxicology (including the management of common poisonings), adverse drug reactions, drug dependence, herbal medicines, and the cost effectiveness of drug therapies are also introduced. The teaching is delivered via lectures and seminars.
    - In the rest of BRB, pharmacology is formally addressed in lectures on anti-seizure agents, drugs used to treat mood disorders, and drug-dependence. Neuropharmacology (including the treatment of movement disorders) is also discussed during problem-based learning (PBL) cases and relevant lectures.

(Clinical Pharmacology & Therapeutics, continued)

- Mechanisms, Manifestations, & Management of Disease
  - Learning about the appropriate use of medications in the treatment of disease is a principal goal of the MMMD course. Medications are addressed in virtually every week of the course. In addition, there is specific lecture-based teaching of several key pharmacological topics such as teratogens, drug use in pregnancy, adverse reactions, and drug interactions.

- Transition to Clerkship
  - There are nine hours of pharmacology teaching designed to prepare students for entry into the Clerkship. This teaching consists of small-group sessions to provide a practical approach to therapeutics. Teaching centres around decision-making in prescribing medications and helps students become familiar with the medications they will be most likely to prescribe for common disease processes while in the Clerkship. Small-group sessions allow students to work through cases specifically designed to cover the practical management of common medical problems encountered in the Clerkship, including choice of medication, dose and frequency, side effects, and monitoring.

- Clinical Clerkships
  - Students are provided with informal teaching about therapeutics during the clerkship from staff preceptors and residents. For each clerkship rotation, they are provided with "Drugs of the Rotation" information tables available on the portal that list the most common drugs that will be encountered during that rotation. Each drug listed has possible clinical indications, mechanism(s) of action, typical dosages, contraindications, and common adverse effects. A compilation of these tables is also available in booklet form.
  - Clinical pharmacology topics appear in the Case Log requirements for various rotations.
  - Clinical pharmacology is also tested in the Integrated OSCES (iOSCES) at the midway point and end of Year 3.

- Transition to Residency
  - There is a review session on important aspects of clinical pharmacology to help prepare students for both the Medical Council exam and their training in residency.

THEME & COMPETENCY DESCRIPTIONS

MEDICAL IMAGING / DIAGNOSTIC RADIOLOGY

Theme Coordinator
Dr. Elise Nguyen elsie.nguyen@uhn.ca

Medical imaging instruction occurs in a number of courses in the Preclerkship and Clerkship:

Year 1:

- Structure & Function:
  - There is a major introduction to this topic including seven introductory lectures on radiologic anatomy of the major parts of the body, with clinical correlations provided. Also, postgraduate trainees in medical imaging provide instruction to students on radiographic anatomy utilizing plain radiographs and cross-sectional imaging in the context of their gross anatomy dissection laboratories.
  - Students have the opportunity to deepen their learning of anatomy through the use of ultrasound which is used to teach abdominal and musculoskeletal anatomy. Students have an opportunity during the ultrasound seminar to scan fellow students and use the ultrasound machines. They are not however, expected to master scanning with ultrasound after this seminar.
- Brain & Behaviour:
  - There is instruction on neuroradiology during Brain and Behaviour via lectures and also during problem-based learning (PBL) tutorials.
  - An optional Interactive Workshop on Neuroimaging conducted by radiology residents is held during self-study time.

Year 2:

- Mechanisms, Manifestations, & Management of Disease:
  - Teaching in medical imaging is delivered through dedicated sessions that address chest X-ray interpretation, imaging in the context of trauma, and obstetrical ultrasound, and is also integrated into the discussion of many of the clinical problems presented in the course. Small-group teaching is provided during Respirology Week on chest X-ray interpretation and during Trauma Week on interpretation of imaging in the setting of trauma.
- Community, Population, and Public Health
  - Radiologists participate in research projects with a small number of Year 2 students in fulfillment of the CPPH research requirement.

Year 3

- Transition to Clerkship
  - There is a total of three hours, including an introductory lecture on medical imaging, "Approach to effective utilization of the Medical Imaging Department," resources such as PACS and ordering imaging studies, a review of the American College of Radiology Guidelines for appropriate use of medical imaging, an algorithmic approach to the utility of medical imaging studies, using a clinical case-based interactive session.
- Medicine
  - There are three one-hour case-based, interactive seminars conducted during the Clerkship Introductory Seminars during the Medicine rotation. The sessions address chest imaging, abdominal imaging, and neuroimaging.
- Surgery
  - A two-hour interactive, case-based seminar is conducted during each rotation on the subject of surgical issues and the role of medical imaging in addressing them.

Year 4:

- Electives
  - Electives in medical imaging are offered at all of the fully affiliated academic health science centres and some of the community hospitals (including Trillium Health Partners and North York General Hospital).
- Transition to Residency
  - TTR selectives include a variety of opportunities in medical imaging geared to participating students' specific residency programs.
  - Small-group interactive seminars on "Utilizing Imaging Department Resources Effectively" and interactive sessions on "Interpreting CXR" and "Interpreting Brain CT" are conducted at certain TTR selective sites.
  - New in 2015 a hands-on ultrasound session for 3 hours was added where students learn about FAST scan used in emergency departments. An introductory lecture in cardiac echocardiogram was introduced with demonstrations on student volunteers. The session is conducted by Dr. Nguyen and Dr. Roy Yank (PGY3 radiology resident).
  - During the Fusion Weeks, an interactive seminar using an audience response system is provided in preparation for the MCCQE Part I examination.

Extra-curricular research

- Comprehensive Research Experience for Medical Students (CREMS)
  - Opportunities are available for Preclerkship students to participate in jointly-funded summer research programs with faculty from the Department of Medical Imaging. (See the description of CREMS)

GLOBAL HEALTH

Theme Coordinator	Administrator
Dr. Rachel Spitzer rspitzer@mtsinai.on.ca	Sue Romulo sue.romulo@utoronto.ca 416-978-1831

Global health is a major focus of the Faculty of Medicine's 2011-2016 strategic plan, and an important facet of social responsibility, another major University theme and has a key place in the upcoming changes to the undergraduate medical curriculum. Global health has been defined as "the area of study, research and practice that places a priority on improving health and achieving equity in health for all people worldwide" (Koplan JP, et al; Lancet. 2009;373:1993-1995). According to the WHO, it is the health of populations in a global context and transcends the perspectives and concerns of individual nations. Thus, global health practice and endeavours can very much take place within our own city and scope of practice or can be located in clinical practice, research, or public health endeavours taking place very far from home.

The Global Health theme focuses on integration and coordination of existing teaching in this subject area and on expanding it across the entire program. This will involve elements including identification of global health elements in existing courses (such as MMMD), faculty development to enhance global health education opportunities, faculty input into the existing global health EEE course and input into the ongoing process of extensive curricular development and redevelopment within UME. Further, it is the aim of this theme to support the initiatives of the student global health representatives to respond to student needs in regard to global health education. Finally, this theme will also include enhanced oversight of out-of-country opportunities, electives, and selectives for medical students. A pre-departure training program for students participating in educational experiences outside Canada has been implemented under the Global Health theme and postreturn debriefing opportunities are being developed. The undergraduate theme lead works closely with the postgraduate global health lead to create coordination and consistency in the overall medical program.

THEME & COMPETENCY DESCRIPTIONS

INDIGENOUS HEALTH

Faculty Co-Leads	Administrator
Dr. Lisa Richardson lisa.richardson@uhn.ca Dr. Jason Pennington jpennington@tsh.to	Rochelle Allan rochelle.allan@utoronto.ca 416-946-0051

The Indigenous peoples of Canada (First Nations, Metis, and Inuit) face health inequities when compared to the general population. The Faculty of Medicine is committed to addressing this issue. Training physicians with the appropriate knowledge and skills to better serve the Indigenous population is a cornerstone to success. Furthermore, it is part of recommendation #24 of the Truth & Reconciliation Commission.

Aboriginal Health issues and concepts are being integrated throughout the curriculum. The first formal introduction will occur in CPPH where topics include: *Traditional Indigenous Concepts of Health (The Medicine Wheel)*, *Health Status, Historical and Political Influences on Health and Health Care Delivery* and *The Social Determinants of Aboriginal Health*. Progressing through the curriculum, these subjects will be reinforced and expanded upon in PBL cases and in several clerkship rotations. Because these teachings can play an integral role in ones development as a clinician and a health care professional, they will also be revisited and adapted to the learners evolving roles as clinical clerk and resident in the TTC and TTR courses.

Incorporating the concept of *Cultural Safety* into ASCM is a key step to nurture appropriate clinical skills. Developed by Maori health care practitioners who noted that cultural factors play a role in health disparities, *Cultural Safety* uses self-reflection as a tool to advance therapeutic encounters. Although it was created for care models in Indigenous communities, *Cultural Safety* can be applied to all therapeutic encounters; it is especially beneficial as a concept to guide students' interactions with marginalized patients or in difficult clinical scenarios. While it is introduced in ASCM, *Cultural Safety* must be fostered throughout medical training and maintained as a practicing physician. A self-reflective approach is the hallmark of our innovative selective in Urban Indigenous Health.

There are many other exciting ways in which students are able to become involved in Indigenous Health. The student-run Aboriginal Health Elective has been a great success. There are also opportunities for CPPH (CBS) community placement and summer research projects. Electives and selectives in a variety of Aboriginal populations (reserve, rural and urban) are possible thanks to partnerships with NOSM and numerous Aboriginal organizations and communities.

The office of the Indigenous Health Program is located in MSB Room 2354.

THEME & COMPETENCY DESCRIPTIONS

HEALTH HUMANITIES

Faculty Lead	Administrator
Dr. Allan Peterkin allan.peterkin@utoronto.ca	Joan McKnight joan.mcknight@utoronto.ca /416-946-8719

Health Humanities can be defined as a sustained interdisciplinary and inter-professional inquiry into aspects of medical practice, education, and research, expressly concerned with the humanistic side of medicine.

The Health, Arts, and Humanities Program advances a deeper understanding of health, illness, suffering, disability, human dignity, and the provision of care by creating a community of scholars in the arts, humanities, and clinical and social sciences. Our Program encourages the development of skills and attitudes essential to providing person-centered care.

1. Narrative Competence: the capacity to appreciate, interpret, and work empathically with the stories of others.
2. Reflective Capacity: the ability to step back to interpret both subjective and objective experiences as a part of learning and to foster professional wellbeing.
3. Critical Thinking: the ability to solve problems creatively and to analyze and critique knowledge using the multiple lenses provided by the arts and health humanities.
4. Visual Literacy-the ability to work with non-verbal cues, images and visual narratives.

CORE CONTENT

The Health Humanities UME Program helps to shape content and learning approaches within the obligatory Portfolio Course. The Companion Curriculum provides literary and visual arts content to match every learning block in all four years of undergraduate medical education and is sent in "pulses" through the student-run humanities blog ARTBEAT (www.utmedhumanities.wordpress.com).

ELECTIVES

A longitudinal health humanities elective allows students to accrue points and IPE learning credits over all four years of education. This can lead to a Certificate of Distinction in Inter-Professional Health Humanities. For more information on the Certificate, please contact: rebecca.singer@uhn.ca

Offerings include:

- Two Artists in Residence Programs (the Illustrator in Residence Program and the Massey College Barbara Moon Editorial Program) both offering seminars during the academic year
- Monthly Lunch and Learn sessions on arts and humanities topics
- Cinema Medica offering monthly discussion around films dealing with health-related themes
- A Medical History interest group
- An English- Medicine book club
- The Art Gallery of Ontario Art Appreciation elective
- Theater-based seminars
- Monthly mindfulness sessions
- The Program publishes a highly acclaimed literary journal called Ars Medica, A Journal of Medicine, the Arts and Humanities. Students have the option to submit to the journal and to obtain editorial experience in producing a literary journal. (www.ars-medica.ca)
- Students also have the option to create individualized learning experiences through the summer CREMS research program or through liaison with humanities/clinical educators

For more information and updates on new humanities elective and interest group offerings, please visit the Program's website: www.health-humanities.com.

THEME & COMPETENCY DESCRIPTIONS

LGBTQ HEALTH EDUCATION

Theme Lead
Dr. Ed Kucharksi ekucharski@sherbourne.on.ca

The health disparities and unique health needs of the LGBTQ (lesbian, gay, bisexual, transgender, and queer) population are becoming increasingly recognised by public health researchers and the medical community. Insufficient numbers of physicians competent in dealing with LGBTQ health issues have been identified as a substantial barrier to accessing care for these patients. In line with a commitment to the values of equality and social justice, the Faculty of Medicine is dedicated to addressing this issue.

The LGBTQ Health theme aims to equip students with the knowledge, skills, and attitudes necessary to provide clinically and culturally competent care to patients who are LGBTQ-identified. Within ASCM, students will learn how to perform a culturally appropriate sexual history and physical examination, including the use of language that is affirming to those belonging to minorities of sexual orientation and gender identity. Clinical knowledge will be integrated within relevant block course lectures, PBL cases, and other tutorials on the determinants of health as they relate to the LGBTQ population. Students will gain an appreciation of the impact of stereotypes, assumptions, and physician attitudes on health outcomes of LGBTQ patients, and will be encouraged in turn to examine and explore their own perspectives and possible biases.

The LGBTQ Health theme aims to incorporate innovative strategies to deliver relevant curriculum content in an interactive, dynamic and meaningful way. LGBTQ community members will be involved in all aspects of curricular development, delivery, and evaluation. Opportunities for inter-professional education will prepare students to care for members of marginalized populations as part of an interdisciplinary team.

Other ways that students may wish to supplement their competency in this domain include participation in electives and selectives in LGBTQ Health in various health care environments ranging from primary to quaternary. Additionally, opportunities will exist for students to complete LGBTQ-focused research projects.

We invite all students and faculty, LGBTQ and allies alike, to become involved in the ongoing development of LGBTQ-related curriculum through participation in the LGBTQ Undergraduate Medical Education Advisory Committee and Community Liaison. Through fostering attitudes of appreciation for diversity and respect for difference, the Faculty of Medicine aims to create a climate in which all LGBTQ-identified faculty, students, and patients feel supported, included, and safe. Interested individuals should contact Dr. Kucharski directly (ekucharski@sherbourne.on.ca).

THEME & COMPETENCY DESCRIPTIONS

HEALTH ADVOCACY

Theme Lead
Dr. Philip Berger philip.berger@utoronto.ca

Health Advocacy is a newly developing curriculum initiative for the Faculty of Medicine that was formally launched on January 1, 2014 with the appointment of an Advocacy Lead and the establishment of an Advocacy Advisory Reference Group which includes student representatives. The Faculty is seeking to fully integrate the teaching of advocacy into the Undergraduate curriculum in a manner consistent with the draft 2015 revised CanMEDS role for Advocacy which states that "Advocacy requires action", that "Physicians contribute their knowledge of the determinants of health to positively influence the health of the patients, communities, or populations they serve and that "Physicians support patients, communities, or populations to call for change, and they speak on behalf of others when needed".

Beyond the traditional annual lecture on advocacy delivered to first year students and popular workshops on poverty and advocacy skills which have been available for several years, an accredited CPPH Community Based Service advocacy project was implemented in February 2015. The project called AMI (Advocacy Mentorship Initiative) pairs students as mentors with clients of Big Brothers/Sisters Toronto. The 2014 inaugural Longitudinal Integrated Curriculum (LInC) for clerks being held at the FitzGerald Academy constituted a formal advocacy project as part of the curriculum and will be extended to the other academies in 2015. All first year students are provided the opportunity to spend a half day at a homeless shelter under the supervision of a physician from the Inner City Health Associates.

The Advocacy Lead is available as an advisor to any student who is pursuing an advocacy activity such as the nearly 40 students who organized the 2015 fourth National Day of Action opposing cuts to refugee health care.

The intent of these activities in the advocacy portfolio is to spread the teaching of advocacy into all aspects of undergraduate education from the seminar rooms to the hospital wards.

THEME & COMPETENCY DESCRIPTIONS

GERIATRICS / CARE OF THE ELDERLY

Theme Lead
Dr. Thiru Yogaparan tyogaparan@baycrest.org

The proportion of the population that is elderly continues to grow. The elderly have special health care needs and future physicians must be prepared to provide optimal care to them. Accordingly, a Care of the Elderly/Geriatrics theme has been established and a theme lead appointed during the 2014-15 academic year.

The purpose of this theme is to develop appropriate learning objectives that support the learning of core competencies related to geriatrics in light of the national geriatrics curriculum throughout the four-year program. The geriatric theme lead works in collaboration with course directors and other theme leads to design appropriate learning activities that permit students to achieve these competencies. Assessment activities are also jointly designed to ensure students have in fact reached the required milestones.

Clerkship (Years 3 & 4)

CURRICULUM DESIGN

The Clinical Clerkship is 76-77 weeks long, and is divided into Year 3 (51 weeks) and Year 4 (25-26 weeks).

Transition to Clerkship (TTC) occurs in the first three weeks of Clerkship. This curriculum provides students with the opportunity to gain knowledge and skills that will help them to successfully move from Preclerkship to Clerkship. TTC focuses on developing competency in teamwork, managing and applying evidence, quality improvement and patient safety. The course also includes sessions on medical legal aspects of professionalism and public health and population health. Also included are two full days of instruction in dermatology, involving; viewing a large number of patients with various skin findings; seminars; time to complete online learning modules; plus a written examination. Students also attend mandatory Academy sessions which include an orientation to the Academy, sessions on professionalism, infection control, crisis intervention and clinical skills training.

In Year 3 of the Clerkship curriculum there are two 24-week blocks, one of which includes eight weeks each of Surgery and Medicine, four weeks of Emergency Medicine, two weeks of Anesthesia, and one week each of Ophthalmology and Otolaryngology. The other 24-week block includes six weeks each of Psychiatry, Paediatrics, Obstetrics & Gynecology, and Family & Community Medicine. Each rotation includes substantial time spent learning in the context of providing care to patients, often as part of a multidisciplinary team, in a variety of settings including ambulatory clinics, hospital wards, the emergency department, the operating room, the labour and delivery suite among others. Rotations include a variety of assessments, including clinical performance evaluations, written tests and on several of the rotations, clinical skills assessments via oral or OSCE examinations.

During Year 3, students participate in the Portfolio course which has been designed to facilitate students' professional development through guided reflection, focused on all their activities in the clinical phase of the UME-MD journey and how they relate to the six intrinsic CanMEDS roles of Collaborator, Communicator, Manager, Health Advocate, Scholar and Professional. The goal of the course is to promote greater professional self-awareness in each of these roles, as students enter the clinical world. Students attend one large group introductory session and seven mandatory small group meetings throughout the academic year. In the latter, students meet in small groups of up to eight, with one resident (Junior Academy Scholar) and one faculty member (Academy Scholar) to support them in reflecting on their experiences in the clinical setting, and the resulting effects on their professional development. Students will create portfolio submissions, for eventual inclusion in the Final Portfolio, throughout the year.

Students are required to electronically log required patient encounters and procedures during each core Clerkship through MedSIS to guide their learning and satisfy the relevant accreditation standard. Additional information is available on the Portal.

Student assessment includes an integrated OSCE (iOSCE) during Year 3. The OSCE stations each consist of a simulated patient encounter during which students may be required to obtain a history, do aspects of a physical examination, interpret diagnostic tests, provide patient counselling, suggest management or provide answers to questions related to the patient encounter. The first iteration, which provides principally formative evaluation, is held during week 24, and the second, which is a summative evaluation, is held during the second last week of Year 3. Successful completion of the iOSCE is a requirement for graduation from the MD program.

(Clerkship, Curriculum Design, continued)

At the beginning of Year 4, 12 weeks of curriculum time are allocated to elective experiences, wherein students are provided the opportunity to gain exposure to areas of expertise beyond the scope of the core clerkship and to further enhance their training in sub-disciplines within the major specialties. According to electives requirements, electives in the Clinical Clerkship must be organized so that by the time of graduation, each student has had an elective experience in a minimum of three different disciplines, each of which takes place for a minimum of two weeks. Note that a discipline is any CaRMS entry level program

Transition to Residency consists of the final 13-14 weeks of Year 4. This course allows students to bring together many of the concepts they have learned about functioning as doctors and put them into practice in real world settings, where they get a chance to participate in the "real" work of physicians, as preparation for postgraduate training. There are two Campus weeks which contain classroom-based learning activities about concepts such as understanding chronic care, medical-legal and licensure issues, complementary medicine, fitness to drive, and a number of other topics. The two-week Fusion period brings the students back together for review of clinical material through the Tovee lectures which help to prepare students for the Medical Council of Canada Part 1 Examination. The Selectives cover 9 weeks and promote workplace-based learning, where students have increased (graded) responsibility under supervision, and allow the students to bring together many different areas of knowledge and skill in the care of patients or populations, as they get ready for the increased responsibility of their postgraduate programs. Selectives also serve as a resource for students to complete specific self-directed learning activities for course credit, and also include an evaluation performed by their supervisor(s). Students should experience how the competencies of Communication, Collaboration, Advocacy, Manager, Professionalism and Scholar all work together in "real" clinical activity. Finally, students ideally should be able to interact with multiple disciplines (physician specialties, other health care professions) over patient care issues to develop a more holistic understanding of those issues.

Students are required to complete at least one of the Selectives in a community setting, and at least one of the Selectives in either a Medicine or Surgery based area. It is possible that a single Selective can satisfy both requirements. Students may use one of their Selectives to satisfy the CaRMS requirement for three direct-entry electives in their UME program.

CLINICAL RESPONSIBILITIES OF CLERKS

It is to be understood that a clinical clerk is an undergraduate medical student and not a physician registered under the Regulated Health Professions Act (RHPA). Clerks will wear name tags, clearly identifying them by name, and as a "senior medical student", and they must not be addressed or introduced to patients as "Dr." to avoid any misrepresentation by patients or hospital staff.

Each student shall be under the supervision of a physician registered under the RHPA who is a member of a medical or resident staff of a hospital or who is a designated preceptor. **Final responsibility for medical acts performed by clinical clerks rests with the clinical teacher or preceptor.**

Recommendations for the scope of activities:

- Documentation of a patient's history, physical examination and diagnosis. This must be reviewed and countersigned by either the attending physician, or another physician registered under the RHPA who is responsible for the care of the patient, if it is to become part of the official record in the patient's chart. Similarly, progress notes must also be countersigned.
- Orders concerning the investigation or treatment of a patient may be written under the supervision or direction of a physician registered under the RHPA. Before these orders can be put into effect, the supervising registered physician must either 1) immediately countersign the order or 2) verbally confirm them with the healthcare personnel (usually nursing staff) responsible for their enactment. All orders must be countersigned within 24 hours.
- Orders for medication or investigations are to be clearly and legibly signed with the signature of the clinical clerk followed by the annotation "cc". Students should make a practice of printing their name below their signature.
- Guided by the principles of graded responsibility, medical students engaged in clinical activities may carry out controlled acts, according to the RHPA, under direct or remote supervision, depending on the student's level of competence. *In the latter case, these acts must be restricted to previously agreed upon arrangements with the registered physician who is responsible for the care of the patient.*
- A clinical clerk is not permitted to submit prescriptions to a pharmacist unless they are countersigned by a registered physician.

For more information, please visit the College of Physicians & Surgeons of Ontario's Policy on Professional Responsibilities in Undergraduate Medical Education
http://www.cpso.on.ca/policies-publications/policy/professional-responsibilities-in-undergraduate-med

THE LONGITUDINAL INTEGRATED CLERKSHIP (LInC)

Faculty Leads	LInC Coordinator
Dr. Stacey Bernstein Clerkship Director stacey.bernstein@sickkids.ca	Samantha Fortunato samantha.fortunato@utoronto.ca 416-946-5208
Dr. Raed Hawa Deputy Clerkship Director raed.hawa@uhn.ca	

Academy/Site	Site Faculty Lead	Site Coordinator
FitzGerald/ St. Michael's Hospital	Dr. Ra Han hanra@smh.ca	Jasmine Paloheimo paloheimoJ@smh.ca 416-864-6060 ext. 77451
Peters-Boyd/North York General Hospital	Dr. Clare Hutchinson clare.hutchinson@nygh.on.ca	Ariel Weber ariel.weber@nygh.on.ca 416-756-6000 ext. 4896
Peters-Boyd/Sunnybrook Health Sciences Centre	Dr. Piero Tartaro piero.tartaro@sunnybrook.ca	Norma Armas-Lewis norma.armaslewis@sunnybrook.ca 416-480-5962
Wightman-Berris/ Toronto East General Hospital	Dr. Adam Kaufman adam.kaufman@utoronto.ca	Joanne Mount j.mount@utoronto.ca 416-469-6580 ext.6545
Wightman-Berris /Toronto Western Hospital	Dr. Natalie Clavel natalie.clavel@uhn.ca	Jasmine Paloheimo jasmine.paloheimo@uhn.ca 416-340-4800 ext. 8293

LInC Overview

The Longitudinal Integrated Clerkship (LInC) strives to support students in the achievement of the same objectives as the block clerkship program. The LInC curriculum content, preceptors, exams and other assessments will match the block clerkship; however, the implementation model will differ.

The LInC experience is designed to:

- Provide flexible, integrated, longitudinal, patient-centered opportunities for guided deliberate practice in achieving the University of Toronto clerkship goals and objectives across all of the CanMEDS roles.
- Enhance the relationship between the student and preceptor through a mentored apprenticeship to enhance the learning of all of the CanMEDS roles.
- Cultivate curiosity and augment lifelong learning skills by providing enhanced opportunities and structured time for reflection and for self-directed learning with the patient as a guide, in support of the CanMEDS scholar role.
- Help the student to learn how to navigate complex health systems and manage competing clinical priorities by following patients longitudinally through the health care system. This also provides an opportunity for appreciating the experience through the patient's lens and grounding several of the CanMEDS roles: manager, health advocate and collaborator.

(The Longitudinal Integrated Clerkship, continued)

- Focus on clinical delivery primarily within a hospital-based ambulatory context, thereby mirroring the environment in which practicing physicians ultimately work and provide care, in support of the CanMEDS manager role. The LInC also accommodates short, relevant inpatient experiences as required by the patient and the student in order to support the development of competencies best learned in a concentrated inpatient context.
- Facilitate learning of enhanced communication skills to better meet communication challenges in the health care system in support of the CanMEDS communicator role.
- Foster students' professional identity formation through longitudinal relationships with patients and preceptors in support of the CanMEDS professional role.
- Foster the development of a humanistic, holistic professional in support of the CanMEDS professional role.
- Have alignment of its objectives, clinical course time and assessment tools with the broader clerkship curriculum, in support of all CanMEDS roles.

In the LInC, students meet the core clinical competencies of year 3 across multiple disciplines simultaneously. Students work longitudinally with a small number of preceptors in each discipline who serve as mentors and provide oversight to their experience. Over the year students will follow a patient panel of 50-75 patients from across all the clerkship rotations, with an emphasis on conditions that involve significant contact with the health care system. The patients on the panel are to represent various developmental milestones in a person's life and to reflect diversity in terms of ethnicity, gender, ability and other attributes.

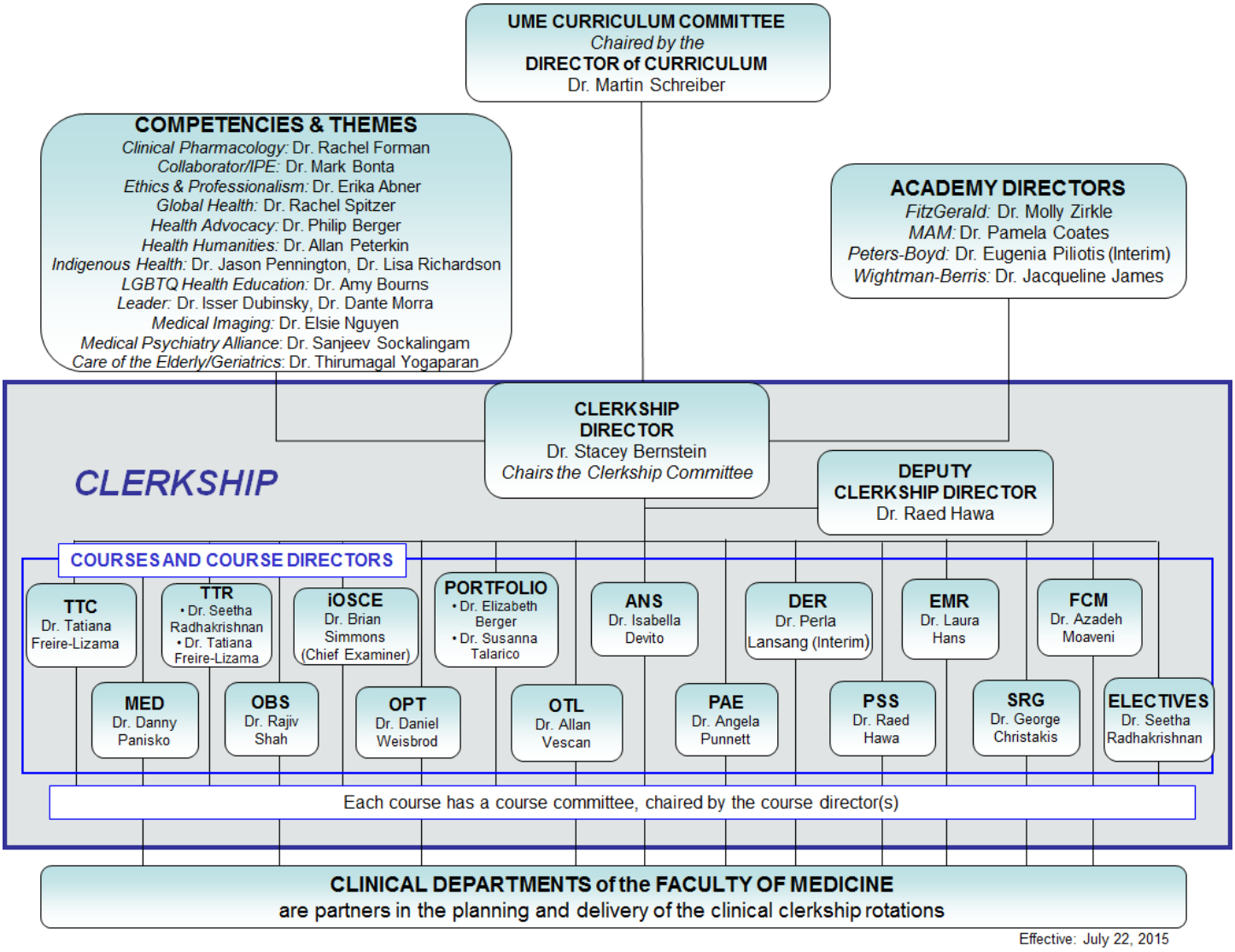
LInC students will complete three weeks of Transition to Clerkship along with the rest of the class. LInC students will also complete:

- A 3 week introductory experience in family medicine. Subsequently students will be in family medicine clinics one half-day per week allowing longitudinal follow-up of panel patients
- 1 week of LInC preparation ("LInC prep") which provides an orientation to the LInC experience, an introduction to the O.R., as well as all simulations necessary to start the clerkships simultaneously.
- 37 weeks of concurrent ambulatory clinical experiences
- 3 weeks of in-patient general surgery immersion
- 4 weeks of in-patient general internal medicine immersion

LInC students will have 1.5 days per week of flexible, self-directed clinical time ("White Space"). During White Space time students are able to participate in the *clinical* care of their panel of patients and engage in reflective practice. During this time, students may arrange to visit a patient who has been admitted to hospital, follow up on patient results, go on a home visit, accompany their patient to an appointment, participate in the operating room if one of their patients is having surgery, deliver a baby from one of their panel patients, etc.

One half-day per week will be devoted to coverage of various core content areas through the LInC School. Sessions will include topics currently taught during mandatory centralized teaching in the block clerkship rotations. The core content will be scheduled to cover topics so that students are adequately prepared for their examinations and be exposed to humanities related topics. Students will cover topics in a flexible manner according to questions that arise from their patient panel and other clinical experiences. They will have access to all the recorded seminars that the block students participate in.

ORGANIZATIONAL CHART



CLERKSHIP CONTACTS

Clerkship Director	Senior Clerkship Coordinator
Dr. Stacey Bernstein stacey.bernstein@sickkids.ca	Tim Flannery tim.flannery@utoronto.ca 416-978-6941
	Clerkship Coordinator
	Samantha Fortunato samantha.fortunato@utoronto.ca 416-946-5208

YEAR 3

Course	Course Director	Course Administrator
Transition to Clerkship	Dr. Tatiana Freire-Lizama Freire-LizamaT@smh.ca	Susan Rice s.rice@utoronto.ca/ 416-978-2188
Anesthesia	Dr. Ahtsham Niazi ahtsham.niazi@uhn.ca	Katia Malyuzheinets katia.malyuzhinets@utoronto.ca/ 416-946-0926
Dermatology	Perla Lansang perlalansang@gmail.com	Lyn Sarceda lyn.sarceda@sunnybrook.ca /416-480-6100 x4995
Emergency Medicine	Dr. Laura Hans hansl@smh.ca	Nancy Medeiros em.undergrad@utoronto.ca / 416-586-5058
Family & Community Medicine	Dr. Azadeh Moaveni Azadeh.moaveni@uhn.ca	Cheryl O'Donoghue dfcm.clerkship@utoronto.ca / 416-978-1896
Medicine	Dr. Danny Panisko danny.panisko@uhn.ca	Sumitra Robertson med.undergrad@utoronto.ca / 416-978-6766
Obstetrics & Gynaecology	Dr. Rajiv Shah rajivrobert.shah@utoronto.ca	Jeannette Moniz obgyn.ug@utoronto.ca / 416-946-0305
Ophthalmology	Dr. Daniel Weisbrod dan.weisbrod@utoronto.ca	Dela Muhundarajah educationdovs@utoronto.ca / 416-978-6294
Otolaryngology	Dr. Allan Vescan avescan@mtsinai.on.ca	Michael Figueiredo mike.figueiredo@utoronto.ca / 416-946-8743
Paediatrics	Dr. Angela Punnett angela.punnett@sickkids.ca	Mary Antonopoulos mary.antonopoulos@sickkids.ca / 416-813-6277
Psychiatry	Dr. Raed Hawa raed.hawa@uhn.ca	undergrad.psych@utoronto.ca / 416-979-6838
Surgery	Dr. George Christakis george.christakis@sunnybrook.ca	Shibu Thomas shibu.thomas@utoronto.ca / 416-978-6431
Portfolio	Nirit Bernhard portfolio.director@utoronto.ca	Melissa Casco portfolio.ume@utoronto.ca / 416-978-7327
Integrated OSCE	Dr. Brian Simmons (Chief Examiner) Brian.simmons@sunnybrook.ca	Samantha Fortunato samantha.fortunato@utoronto.ca / 416-946-5208

(Clerkship Contacts, continued)

YEAR 4

Course	Course Director	Course Administrator
Electives	Dr. Seetha Radhakrishnan seetha.radhakrishnan@sickkids.ca	Eva Lagan eva.lagan@utoronto.ca / 416-978-0416
Portfolio	Dr. Nirit Bernhard portfolio.director@utoronto.ca	Melissa Casco portfolio.ume@utoronto.ca / 416-978-7327
Transition to Residency	Dr. Seetha Radhakrishnan (Co-Director – Selectives) Seetha.radhakrishnan@sickkids.ca Dr. Tatiana Freire-Lizama (Co-Director- Campus-Based Teaching) Freire-LizamaT@smh.ca	Ezhil Mohanraj ttr.ume@utoronto.ca / 416-978-2763

ACADEMIES

View the contact information of Academy Directors and staff here.

DIAGRAM OF THE 2015-16 CLERKSHIP SCHEDULE

YEAR 3:

ROTATION	Aug. 24 - Sep. 11 3 Weeks	Sep. 14 - Oct. 25 6 Weeks	Oct. 26 - Dec. 6 6 Weeks	Dec. 7 - 18 2 Weeks	Dec. 19 - Jan. 3 2 Weeks	Jan. 4 - 31 4 Weeks	Feb. 1 - Mar. 11 6 Weeks	1 WEEK	Mar. 21 - May 15 8 Weeks	May 16 - Jul. 10 8 Weeks	Jul. 11 - Sep. 2 8 Weeks
A	TRANSITION TO CLERKSHIP	PAEDS	PSYCH	O/G	BREAK	OB/GYN	FAMILY	BREAK	ANES/OPT/ENT/EM	MEDICINE	SURGERY
B		PSYCH	FAMILY	PEDS		PAEDS	OB/GYN		MEDICINE	SURGERY	ANES/OPT/ENT/EM
C		FAMILY	OB/GYN	PSYC		PSYCH	PAEDS		SURGERY	ANES/OPT/ENT/EM	MEDICINE
		Sep. 14 - Nov. 8 8 Weeks	Nov. 9 - Dec. 18 6 Weeks			Jan. 4 - 17 2 Weeks	Jan. 18 - Mar. 11 8 Weeks		Mar. 21 - May 1 6 Weeks	May 2 - Jun. 12 6 Weeks	Jun. 13 - Jul. 24 6 Weeks	Jul. 25 - Sep. 2 6 Weeks
D		ANES/OPT/ENT/EM	MEDICINE			MED	SURGERY		PAEDS	FAMILY	PSYCH	OB/GYN
E		MEDICINE	SURGERY			SURG	ANES/OPT/ENT/EM		PSYCH	OB/GYN	FAMILY	PAEDS
F		SURGERY	ANES/OPT/ENT/EM			OBGYN	MEDICINE		FAMILY	PAEDS	OB/GYN	PSYCH

NOTE: Three half-day Dermatology clinics are scheduled within the Family Medicine block
Rotation C will not be used at FitzGerald nor Peters-Boyd Academy
PORTFOLIO GROUP MEETING DATES (All on a Thursday, 4:00 - 6:00 p.m.): Oct. 1, Nov. 26, 2015; Jan. 7, Mar. 3, Mar. 31, June 2, June 30, 2016

YEAR 4:

Aug. 31 - Dec. 6 14 Weeks	Dec. 7 - 11 1 Week	Dec. 12 - Jan. 3 3 Weeks	Jan. 4 - 17 2 Weeks	Jan. 18 - Feb. 7 3 Weeks	Feb. 8 - 12 1 Week	Feb. 15 - Mar. 6 3 Weeks	Mar. 7 - Apr. 3 4 Weeks	Apr. 4 - 15 2 Weeks
ELECTIVES (12 Weeks) + VACATION (2 Weeks)	CAMPUS 1 WEEK	BREAK	SELECTIVE A	CaRMS	CAMPUS 2 WEEK	SELECTIVE B1	SELECTIVE C1	FUSION
						Feb. 15 - Mar. 13 4 Weeks	Mar. 14 - Apr. 3 3 Weeks	
						SELECTIVE B2	SELECTIVE C2	
	TRANSITION TO RESIDENCY							

PORTFOLIO GROUP MEETING DATES (All on a Thursday, 4:00 - 6:00 p.m.): Dec. 10, 2015; Feb. 11, Apr. 7, 2016

COURSE DESCRIPTIONS

Year 3 Transition Course: TRANSITION TO CLERKSHIP (TTC – 3 weeks)

Course Director	Course Administrator
Dr. Tatiana Freire-Lizama freire-lizamat@smh.ca	Susan Rice s.rice@utoronto.ca 416.978.2188

Course Leads for Various Core Sessions

Section	Lead(s)	Email
Lakeview Simulation	Dante Morra	Dante.morra@trilliumhealthpartners.ca
Managing Information	Trevor Jamieson	jamiesont@smh.ca
Resource Stewardship	Rory McQuillan	rory.mcquillan@uhn.ca
Patient safety and quality improvement	Geetha Mukerji	geetha.mukerji@wchospital.ca
Therapeutics	Martin Schreiber	schreiberm@smh.ca
Nutrition	Ashley Leone and Martin Schreiber	ashleyleonenutrition@gmail.com schreiberm@smh.ca
Dermatology	Perla Lansang	perlalansang@gmail.com
Medical Imaging	Ben Fine and Elsie Nguyen	ben.fine@utoronto.ca elsie.nguyen@uhn.ca
IPE	Mark Bonta	mark.bonta@uhn.ca
Outbreak management	Kate Bingham	kate.bingham@utoronto.ca
Poverty	Sharon Gazeley	gazels@hotmail.com
Diversity	Martin Schreiber	schreiberm@smh.ca
Medicolegal	Erika Abner	erika.abner@utoronto.ca
Capstone	Tatiana Freire-Lizama	freirelizamat@smh.ca

(Transition to Clerkship, continued)

Academy Day Leads

Academy	Academy Director	Email
MAM	Pamela Coates	Pamela.coates@trilliumhealthpartners.ca
FitzGerald	Molly Zirkle	zirklem@smh.ca
Peters-Boyd	Eugenia Piliotis	Eugenia.piliotis@sunnybrook.ca
Wightman-Berris	Jackie James	jjames@mtsinai.on.ca

COURSE DESCRIPTION
There are three major elements to the course:

1. The TTC Core Curriculum. This occupies most of the three-week course. Some of the time is spent at the campuses, and some at the academies. This includes both large group and small group face-to-face learning activities, as well as several required online learning sessions.

2. The TTC Academy Days. These take place on each of the three Wednesdays in the course, and also the first Friday morning. This time is spent entirely at the academies.

3. The Dermatology course. The third-year dermatology course has been moved to take place within TTC. The details of the dermatology course, including the examination scheduled for Friday September 11, 2015, are described in the Dermatology syllabus, found on the Portal in the TTC course shell, and also separately on the Portal in the Dermatology shell.

GOALS
The Transition to Clerkship (TTC) course strives to assist students in developing the knowledge, skills and attitudes they require to successfully progress from their role as a student in the preclerkship, to a member of the healthcare team as a clinical clerk. The course builds on the very substantial learning from the preclerkship, and provides students with the opportunity to learn in four priority areas:

1. The Intrinsic CanMEDS roles (i.e., those apart from medical expert), with special emphasis on teamwork, interprofessional care, resource stewardship, managing information, and patient safety)
2. Medical Expert roles in areas previously identified by clinical clerks as requiring further attention in preparation for clerkship
3. The care of priority populations
4. Specific skills needed for clerkship

COURSE OBJECTIVES
At the completion of the Transition to Clerkship course, students will be able to demonstrate the following competencies, categorized under several groups:

Related to Intrinsic CanMEDS Roles
Teamwork and Change Management (Leader/Manager role)

1. Describe the attributes of high performing teams in healthcare

(Transition to Clerkship, continued)

2. Describe the Kotter framework for change management
3. Be able to apply the Kotter framework to a healthcare problem
4. Work closely with a new team towards a shared goal
5. Describe and apply key principles of change management
6. Contribute to creating a team charter
7. Carry out stakeholder interviews
8. Present the outcomes of team activities
9. Reflect on team dynamics

Patient Safety (Leader/Manager role)

1. Appreciate the clinical clerks' role in recognizing and reporting patient safety events
2. Learn about and apply commonly used patient safety concepts including preventable adverse events, error, adverse event, near miss, and just culture
3. Describe the importance of taking a systems approach for evaluating patient safety events
4. Describe principles pertinent to teamwork and communication as they apply to safe delivery of healthcare

Resource Stewardship (Leader/Manager Role)

1. Describe the need for resource stewardship in healthcare
2. Define and give examples of "low-value" healthcare
3. Explain the goals of the Choosing Wisely campaign
4. Navigate web-based healthcare stewardship guidelines and resources
5. Give examples of why physicians may not always apply principles of resource stewardship
6. Discuss effectively the phenomenon of unnecessary tests and treatments with patients and colleagues

Managing Information (Scholar role)

1. Create patient-driven personal learning objectives on a daily basis
2. Retrieve information in real-time, and appreciate the related challenges
3. Use common informational resources including search engines, Wikipedia, and non-peer-reviewed aggregators
4. Appraise online content using a simple four-factor approach
5. Progress from appraisal of information to its curation and dissemination

Interprofessional Care (Collaborator Role)

1. Describe the roles and responsibilities of other healthcare professionals involved in the collaborative care of a patient/client
2. Recognize the desired qualities of the "medical" team member (i.e., clinical clerk) from the perspective of the other healthcare professionals
3. Communicate effectively with other members of the healthcare team

Medicolegal Issues (Professional Role)

1. Describe differences between legal and ethical/professional reasoning
2. Describe how the law defines professional duties and responsibilities for physicians
3. Describe how physicians and lawyers may work together as colleagues

(Transition to Clerkship, continued)

Related to the Medical Expert Role

Therapeutics
For acute medical disorders frequently encountered in the in-patient and emergency health care settings, and for common ambulatory care problems:

1. Identify medications available to treat the problem
2. Explain their mechanisms of action
3. Describe the principles relate to choosing among the available agents
4. Describe how to monitor for efficacy
5. Describe side effects of the medications and how to monitor for these

Nutrition

1. Describe principles of identification and management of common clinical nutritional issues.
2. Be able to appropriately refer a patient to a registered dietitian.
3. Reflect on their own nutrition

Medical Imaging

1. Describe safe and effective utilization of imaging studies using best-practice guidelines when investigating patients' symptoms and diseases
2. Demonstrate an organized approach to interpreting chest X-rays and brain CT scans
3. Use picture archiving systems in the hospital setting

Outbreak Management

1. Describe the structure and roles of public health units
2. Describe major principles of the epidemiology of infectious disease, including line listing and the epidemic curve
3. Describe the main methods used for infectious disease control
4. Describe the role of physicians in reporting disease to public health authorities
5. Describe how to assess risk from infectious diseases in the context of an outbreak

Dermatology
For information about the objectives of the Dermatology course within TTC, please see the separate Dermatology syllabus.

Related to the Care of Priority Populations

Patients living in poverty

1. Be able to use the poverty tool and poverty primers to assist patients living in poverty.
2. Identify how attitudes towards people living in poverty can affect how a physician provides care to his/her patients
3. Give examples of how individual, community-based or systemic advocacy can minimize the impact of poverty in the community
4. Identify community resources that can assist patients and communities which experience poverty

Diversity and Cultural Sensitivity

1. Identify key characteristics of specific diversity groups in the local population
2. Describe what assumptions must be avoided in these groups
3. Describe key questions to ask

(Transition to Clerkship, continued)

4. Appreciate the heterogeneity of patient characteristics within these diversity groups
5. Identify useful resources in order to be able to learn more

Related to One's Role as a Clinical Clerk (Academy Days)

Order-writing and discharge planning (Medical Expert, Collaborator)

1. Describe the elements of admission orders
2. Be able to make a reasonable attempt to write the admission orders for a patient with a clinical problem the student has some familiarity with
3. Explain the role of the multidisciplinary team, especially as it pertains to discharge planning, and therefore consult effectively with them

Technical skills (Medical Expert)

1. In a simulated exercise, learn and attempt to demonstrate the correct technique for:
   - (i) Intravenous line insertion
   - (ii) Venipuncture
   - (iii) Arterial blood gas puncture
   - (iv) Nasogastric tube insertion
   - (v) Airway management
   - (vi) Recording an electrocardiogram
2. Demonstrate the correct technique for wearing personal protective devices such as gloves, gown, mask and eye wear
3. Demonstrate appropriate handling of sharps

Managing Violent Patients (Communicator, Professional, Leader/Manager)

1. Demonstrate an understanding of the situations that may trigger a violent reaction in a patient
2. Describe how they can de-escalate a situation involving an angry patient
3. Demonstrate the ability to maintain personal and patient safety when dealing with a potentially violent patient
4. Be aware of resources available to assist in managing a potentially violent patient

Professional Relationships (Communicator, Professional, Leader/Manager)

1. Demonstrate medical interviewing skills learned in Years 1 and 2
2. Demonstrate skill in managing challenging interpersonal situations when interacting with patients
3. Develop a deeper sense of the therapeutic value of the doctor-patient relationship
4. Maintain appropriate boundaries when dealing with patients
5. Have an understanding of the types of challenging conversations with patients and families they may face in clerkship

General skills (Leader/Manager, Professional/Medical Expert)

1. Have a better understanding of the role of a clinical clerk in the hospital environment and the health care team
2. Describe activation of emergency systems in the hospital and Codes
3. Use hospital electronic patient record systems
4. Apply the principles of infection control
5. Describe the Occupational Health and Safety services available in the hospital

(Transition to Clerkship, continued)

6. Be aware of important hospital policies such as privacy and have completed an e-learning module on privacy

Learning Activities in TTC (Brief Description)

(For details, see the syllabus for TTC and the materials supplied by each academy for the Academy Days)

1. **Academy Days**
   During the Academy Days, students take part in a variety of small-group generally interactive learning activities.

2. **Lakeview Activities and Simulation.**
   The Lakeview activities and simulation includes three large group presentations, and then work in small teams of approximately 8-10 students, including completing a computer-based simulation.

3. **Managing information, resource stewardship, patient safety and quality improvement module**
   a. Introductory lecture. On Thursday August 27, the material in this module will be introduced during a large-group lecture.
   b. Mrs. Singh case. This is a realistic, virtual case exercise that unfolds over several days, mimicking the evolution of an actual case. Students are asked to complete a variety of brief, online exercises in response to case-based prompts. This culminates in activities during the seminar on Thursday September 3.
   c. IHI modules on patient safety. There are four of these interactive, online modules for students to complete by September 3.
   d. Managing information modules. There are several brief videos for students to watch that describe the various information sources that students can use during their clerkship studies, including a consideration of their strengths and drawbacks.
   e. Seminar (Thursday September 3). This is a small-group, case-based interactive seminar, that takes place at the academies.

4. **Dermatology course.** The bulk of the dermatology course in the third year clerkship in 2015-16 will be offered during the TTC course timeframe.
   a. Introductory lecture. The key elements of the dermatology course will be introduced on Monday August 24 in a large group lecture.
   b. Patient viewing session. Students will take part in "patient viewing" on either Monday August 31 or Tuesday September 1. The viewing sessions involve students moving from station-to-station OSCE-style, and looking at the skin findings of patients with various dermatologic conditions, taking histories, etc. The second day (when students are not scheduled to take part in viewing) will be available for students to review several required dermatology online module exercises, as well as providing time for other online activities (such as the IHI modules).
   c. Online modules. Students will be required to complete several online modules as part of the dermatology course.
   d. Syllabus. A syllabus with core information will be provided to students, and will form a major part of the basis for the examination.
   e. Examination. A multiple-choice question-based examination will be written on Friday September 11, from 8:30 – 9:30 am. All students will write at the St. George campus.

(Transition to Clerkship, continued)

5. **Medical expert topic academy-based seminars**
   Interactive, small-group case-based seminars will be held at the academies to cover core aspects of the following topics:
   a. Medical Imaging.
   b. Nutrition.
   c. Therapeutics.

6. **Interprofessional education**
   a. IPE shadowing session. Friday August 28, students will spend the main part of the morning observing the work of one of the collaborating health professionals at their academy site. The health professional will be from the service on which the student will be working in their first rotation.
   b. Safe prescribing. This will be an interprofessional session, with both a large group introduction followed by small group, interactive application exercises.

7. **Campus-based core learning**
   a. Outbreak management. There is a large group introduction followed by small group, interactive application exercises.
   b. Priority populations
      i. *Poverty workshop.* This is a small group session to provide students with background on how to assist patients living in poverty. The sessions are co-led by a physician with expertise in the care of people living in poverty, and by co-tutors who are people who have experienced living in poverty.
      ii. *Diversity*. This is a large group panel discussion led by physicians who themselves belong to various diversity groups, and who are able to provide advice to students on how to optimally interact with patients from these groups.
   c. Medicolegal issues. There is a large group introduction followed by small group, interactive case-based application exercises.

8. **Preparing for clerkship**
   a. Capstone session. This provides students with orientation to various aspects of the clerkship, including the office of student affairs, the student assistance section of the UME website, Medsis, case logs, duty hours policies ,documentation, and the portfolio course in clerkship.
   b. Dimming the headlights. Course directors from each students' first rotation will provide students with advice on how to best participate in their initial rotation.
   c. Expectations. Students from the class of 1T6 will be available to provide further advice to 1T7's on clerkship, without faculty present.

ASSESSMENT

The Dermatology course taking place during TTC will be assessed via several measures, described in the Dermatology course syllabus. This includes an examination.

Transition to Clerkship is a Credit/No-Credit course. Determination of the final standing in TTC will be based on a number of numerically graded and CR/NC assessments. The assessments are summarized in the table on the following page. Other than the dermatology examination, there are no examinations in TTC. The

(Transition to Clerkship, continued)

following comments describe individual assessment requirements. The assessments are summarized on the following page.

Lakeview Assignments: During week one you will receive two team-based assignments: These include: Lakeview Assignment 1 (Team Charter) and 2 (Simulation). Both assignments are to be completed by the end of week 1. Sufficient time is allotted to complete the team-based deliverables. Failure to successfully complete the Lakeview-related activities will lead to a requirement for extra work, which must be successfully completed in order for credit for TTC to be granted.

Interprofessional Education: For students to successfully gain credits required for their IPE standing, attendance is mandatory and will be taken during the two IPE sessions that are scheduled on August 28 and September 10.

Institute for Healthcare Improvement (IHI) Modules: The four IHI modules have a separate syllabus which will be posted via Portal. Due dates are listed in the table below. Please note that four modules are made available to students on Monday August 24, 2015, and must be completed by 9 am on Thursday September 3, 2015. The four IHI modules must be successfully completed in order for credit for TTC to be granted.

Patient Safety, Managing Information and Resource Stewardship Module Assignments: Throughout TTC you will have a series of assignments designed to help you develop skills around self-directed learning and information management. Several of these are mandatory assignments and are assessed on a credit/no-credit basis as part of your TTC evaluation.

Quizzes: TTC has several Portal-based quizzes which will be assigned under the 'Quizzes and Assignments' tabs within the TTC course shell. Please keep in mind that once the quiz is assigned, it is timed and must be completed in one sitting. The quizzes cover: medicolegal topics, nutrition, outbreak management, poverty, and therapeutics. Students must score at least 70% on each quiz. Failure to score 70% on any one quiz will lead to a requirement for extra work which must be successfully completed before credit for TTC will be granted.

Mandatory Attendance: Attendance is mandatory and will be taken at the following activities:

- All Academy Day activities
- All Lakeview small group activities
- IPE shadowing activity (Friday August 28, 2015, morning)
- Therapeutics seminars (all three)
- Nutrition seminar (Friday August 28, 2015, afternoon)
- Medical imaging seminar (Thursday September 3, morning)
- Managing information, patient safety, resource stewardship seminar (Thursday September 3, afternoon)
- Outbreak seminar (Tuesday September 8, morning)
- Poverty seminar (Tuesday September 8, afternoon)
- Medicolegal seminar (Thursday September 10, morning)
- Safe prescribing small group session (Thursday September 10, afternoon)
- Diversity panel (Friday September 11, morning)
- Capstone session (Friday September 11, afternoon)
- Dimming the headlights (Friday September 11, afternoon)

(Transition to Clerkship, continued)

Students must attend all of these required activities for credit to be granted for TTC. Students who need to miss one or more of these sessions (or who have missed one or more of these sessions) must contact the course director, Dr. Schreiber (schreiberm@smh.ca).

For further details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://md.utoronto.ca/policies).

NB: In order to receive credit for Transition to Clerkship, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME*

COURSE DESCRIPTIONS

Year 3 Core Clinical Rotation: ANESTHESIA (2 weeks)

Course Director	Course Administrator
Dr. Ahtsham Niazi ahtsham.niazi@uhn.ca	Katia Malyuzhinets katia.malyuzhinets@utoronto.ca

Site Directors/Assistants

Site	Director (Faculty)	Assistant
HSC	Dr. Clyde Matava clyde.matava@sickkids.ca	Melissa McKay melissa.mckay@sickkids.ca
MSH	Dr. Mital Joshi mital.joshi@utoronto.ca	Josephine Sham josephine.sham@uhn..ca
NYGH	Dr. Darryl Irwin darryl.irwin@nygh.on.ca	Peggy Sze peggy.sze@nygh.on.ca
SJHC	Dr. Suzanne Lilker slilker@rogers.com	Megan Marshall marshme@stjoe.on.ca
SMH	Dr. Carol Loffelmann loffelmannc@smh.ca	Anna Salter saltera@smh.ca
SHSC	Dr. Anita Sarmah anita.sarmah@sunnybrook.ca	Eva Delavinias eva.delavinias@sunnybrook.ca
TSH – General	Dr. Larry Panos lpanos300@gmail.com	Anne Davies adavies@tsh.to
TSH – Birchmount	Dr. Alan Tallmeister tallmeister9818@rogers.com	Heather Huckfield hhuckfield@tsh.to
THP – CVH	Dr. Christopher Flynn cflynn@cvh.on.ca	Yvonne McVeigh yvonne.mcveigh@trilliumhealthpartners.ca
THP – MH	Dr. Andrew Green andrew.green@trilliumhealthpartners.ca	Lorraine Ferraro lferraro@trilliumhealthpartners.ca
TEGH	Dr. Patrick Mark patrick.mark@utoronto.ca Dr. Desmond Lam delam@tegh.on.ca	
TGH	Dr. Diana Tamir diana.tamir@uhn.ca Dr. Marjan Jariani marjan.jariani@uhn.ca	Eva Bowman eva.bowman@uhn.ca
TWH	Dr. Ahtsham Niazi ahtsham.niazi@uhn.ca	Christine Drane christine.drane@uhn.ca
WCH	Dr. Dragan Djordevic dragan7777777777@yahoo.ca	

(Anesthesia, continued)

The Anaesthesia rotation is a two-week course in the eight-week Otolaryngology/Ophthalmology/ Anaesthesia/Emergency Medicine rotation.

Clinical Schedule
Students are assigned for each shift to a faculty staff member in the operating room, labour floor, pre-admission clinic, or pain service. They are provided with a "Topics for Discussion" form which serves as a guideline for discussion of core objectives with their faculty member. Students complete a preoperative assessment on all patients assigned, and assist in all aspects of anesthetic care. There are evening shifts but no overnight call.

E-Modules, Seminar, and Simulation
The Anesthesia course is based on a "flipped classroom" model. Students are required to complete six e-modules during the two- week rotation. Faculty are available via a discussion board for students with questions around module content. One seminar in acute pain management remains.

The rotation includes two days at the Simulation Centre at Sunnybrook Health Sciences Centre for all students. Training on the first day includes IV skills, airway management and fluid responsiveness using ultrasound, and case scenarios using simulation to learn ACLS protocols, communication, and collaboration skills during critical events in a simulated operating room.

The second simulation day occurs on the second last day of the rotation. During the exit simulation, the students will rotate through preoperative, intraoperative and postoperative scenarios that reinforce the content in the e-modules. In the afternoon, students will work through integrated cases that highlight module content.

ASSESSMENT
- Written examination (60%)
- Clinical performance evaluation (assessment of the student's clinical work during the rotation (40%)
- Professionalism evaluation (Credit/No Credit)
- Case Log requirements (Credit/No Credit)

Students are required to pass both numerical components for a passing grade.

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://md.utoronto.ca/policies).

NB: In order to receive credit for Anesthesia, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME*.

COURSE OBJECTIVES
Upon completion of the Anesthesia Clerkship Rotation, third year medical students will understand the implications of pre-existing disease for patients undergoing anesthesia. They will demonstrate competency in basic airway management and acute resuscitation, and will be able to discuss pain management in the perioperative period.

(Anesthesia, continued)

A. GENERAL COMPETENCIES
The third-year medical student will be able to:

[Medical Expert / Skilled Clinical Decision Maker]
- Demonstrate the ability to assess a patient in the preoperative period and formulate a basic management plan
- Demonstrate the ability to take a focused history and physical examination, including anesthetic history and airway exam
- Develop a plan for preoperative investigations and interpret these investigations
- Understand and explain the risks and benefits associated with regional versus general anesthesia
- Develop an approach to acute resuscitation including appropriate fluid therapy
- Develop an approach to perioperative pain management
- Demonstrate competency in airway management and other procedural skills relevant to the perioperative period

[Communicator / Doctor-Patient Relationship]
- Communicate effectively and empathetically with patients and their families, and recognize their high level of anxiety.
- Communicate their level of training and involvement in the patients care
- Communicate risk with high risk patients and their families.
- Communicate effectively with the perioperative team noting anesthetic related concerns
- Present the preoperative assessment in a clear, concise and complete format in a timely manner

[Collaborator]
- Establish and maintain effective working relationships with colleagues and health care professionals.
- Consult effectively with physicians and other health care professionals
- Participate effectively on health care teams, namely the Anesthesia Care Team (ACT), Acute Pain Service (APS) and Cardiac Arrest and/or Trauma Teams
- Understand the high level of collaboration (anesthesia, surgery, nursing, pharmacy, anesthesia assistants, and respiratory therapists) required for the effective management of the patient in the perioperative period

[Manager]
- Demonstrate appropriate and cost-effective use of investigations in an evidence based manner.
- Understand the prioritization of the surgical emergency patient to minimize risk of negative outcome.
- Develop an understanding of the factors contributing to resource issues in the perioperative period.
- Understand the role of physicians in developing the health care system and promoting access to care. (Anesthesia Care Team)

[Health Advocate/ Community Resources]
- Understand the risk factors that lead to increased perioperative risk and how anesthesiologists can assist in modifying these risks in the perioperative period: Smoking cessation, Weight loss, Alcohol use, Recreational drug use

(Anesthesia, continued)

[Scholar]
- Retrieve information from appropriate sources related to the anesthesia curriculum.
- Assess the quality of information found, using principles of critical appraisal
- Develop an approach to self-directed learning

[Professional]
- Interact with patients in a compassionate, empathetic and altruistic manner.
- Recognize his or her limitations and seek appropriate help when necessary.
- Maintain patient confidentiality.
- Understand the current legal and ethical aspects of consent for surgery, anesthesia, and blood transfusion.
- Understand full and honest disclosure of error or adverse events
- Understand initiatives, such as the "Operating Room Checklist" which have been undertaken to ensure patient safety and to minimize medical error in the perioperative period.
- Fulfill all obligations undertaken, including educational obligations.

B. EDUCATIONAL CORE OBJECTIVES

I. SKILLS

At the completion of the Anesthesia Clerkship rotation, the third year medical student should be able to demonstrate basic proficiency in the following skills. These skills may be acquired during the clinical rotation, seminars or simulation day.

Technical Skills:

One of each must be attempted or completed.

1. Airway insertion
2. Cardiac monitor lead placement
3. Endotrachael intubation
4. Laryngeal mask insertion
5. Mask ventilation
6. Peripheral IV insertion
7. Video laryngoscopy

Interpretive Skills:

One of each must be completed.

1. Capnography
2. Cardiac Monitor
3. Pulse Oximetry
4. Airway assessment

II. PROBLEM-BASED

Upon completion of the Anesthesia Clerkship rotation, the third year medical student should be able to demonstrate an approach, including differential diagnosis and management, for the following patient encounters. These may be based on either real or simulated encounters.

(Anesthesia, continued)

Required:
One encounter of each is required:

1. Hypotension/Shock (Observe and manage with faculty or resident)
2. Hypoxia/Apnea (Observe and manage with faculty or resident)
3. Pain Management (Observe and discuss management with faculty)
4. Preoperative Assessment (Complete independently and discuss with faculty)

TEXTBOOKS/LEARNING RESOURCES
Students are provided with an anesthesia course manual that contains the core objectives. Chapters in the manual are authored by our faculty.

Other suggested textbooks are the following. They are not required for this course.

1. Ottawa Anesthesia Primer, Dr. Patrick Sullivan; Echo Book Publishing 2012
2. Understanding Anesthesia: A Learner's Guide, Dr. Karen Raymer
   (free download at www.understandinganesthesiology.com/)

COURSE DESCRIPTIONS

Year 3 Core Clinical Rotation: DERMATOLOGY

Course Director	Course Administrator
Dr. Perla Lansang perlalansang@gmail.com	Lyn Sarceda lyn.sarceda@sunnybrook.ca 416-480-6100 ext. 4995

COURSE OVERVIEW

The Dermatology course consists of four elements:

1. Patient viewing
2. Online modules
3. Written dermatological clinical history and physical exam note
4. Written exam

The course is held within the Transition to Clerkship course (TTC). By the end of TTC, the clerks are expected to have attended the patient viewing day, completed the online modules, and to have submitted their dermatology clinical note to the course coordinator for marking. The course concludes with a written exam.

In addition to the aforementioned course work, course materials in the form of a syllabus and online atlas are provided to students, covering all the topics that they are expected to learn during their Dermatology course. The entire course content is posted on Blackboard.

ASSESSMENT

- Attendance of patient viewing (Credit/No Credit)
- Completion of online modules (Credit/No Credit)
- Final written examination (80% of mark)
- Professionalism evaluation (Credit/No Credit)
- Written dermatologic history and physical exam note (20% of mark)

The student must achieve an overall passing mark (60% or higher) to receive credit for the course. The minimum expected mark for each component is 60%.

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://md.utoronto.ca/policies).

NB: In order to receive credit for Dermatology, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME*.

(Dermatology, continued)

COURSE OBJECTIVES
At the conclusion of the clerkship in Dermatology, the student will be able to:

[Medical Expert / Skilled Clinical Decision Maker]
- Obtain and document a complete and focused dermatological history.
- Perform a complete and focused dermatological physical examination.
- Accurately apply dermatological terms to normal and abnormal features on physical exam.
- Identify and demonstrate normal and abnormal features on general skin exam.
- Recognize dermatological manifestations of internal disease.
- Recognize common dermatological disorders.
- Demonstrate an understanding of basic pathophysiology and treatment of common skin conditions.
- Formulate a basic practical approach to the investigation of dermatological conditions.

[Communicator / Doctor-Patient Relationship]
- Communicate effectively with patients and family through verbal, and non-verbal means of communication.
- Demonstrate the importance of cooperation and communication among health professionals.

[Collaborator]
- Recognize the importance of collaboration with other health care professionals in achieving optimal dermatological patient care.
- Describe the roles and expertise of all interdisciplinary team members that are required to achieve optimal dermatological patient care.

[Manager]
- Demonstrate an understanding of the appropriate use of health care resources in the dermatological context.

[Health Advocate / Community Resources]
- Describe the determinants of health and principles of disease prevention and behaviour change pertinent to dermatological disease, including but not limited to skin cancer and occupational skin disease.

[Scholar]
- Demonstrate the ability to engage in self-directed learning and critical inquiry.
- Assist in teaching others and facilitating learning where appropriate

[Professional]
- Recognize and accept the need for self-care and personal development as necessary to fulfilling one's professional obligations and leadership role.
- Demonstrate altruism, honesty and integrity and respect in all interactions with patients, families, colleagues, and others with whom physicians must interact in their professional lives.
- Demonstrate compassionate treatment of patients and respect for their privacy and dignity and beliefs.
- Be reliable and responsible in fulfilling obligations.
- Recognize and accept the limitations in his/her knowledge and clinical skills
- Abide by the University/Faculty codes of professional conduct.

COURSE DESCRIPTIONS

Year 3 Core Clinical Rotation: EMERGENCY MEDICINE (4 weeks)

Course Director	Course Administrator
Dr. Laura Hans hansl@smh.ca	Nancy Medeiros em.undergrad@utoronto.ca 416-586-5058

Site Directors/Assistants

Site	Director (Faculty)	Assistant
CVH	Dr. Mike Cohen mike.cohen@utoronto.ca	Sanah Khokhar sanah.Khokhar@trilliumhealthpartners.ca
MSH	Dr. Yasmine Mawji ymawji@mtsinai.on.ca	Nancy Medeiros nancy.medeiros@utoronto.ca
NYGH	Dr. Meeta Patel meetapatel.md@gmail.com	Kerry McPartland kerry.mcpartland@nygh.on.ca
SJHC	Dr. Ed Pilon pilon.ed@gmail.com	
SMH	Dr. Laura Hans hansl@smh.ca	Lina Lorzano emergadmin@smh.toronto.on.ca
SHSC	Dr. Mark Freedman mark.freedman@utoronto.ca	Paola Tiveron paola.tiveron@sunnybrook.ca
TSH	Dr. Caroline Thomspon cjnthompson@gmail.com	Anne Davies adavies@tsh.to
TEGH	Dr. George Porfiris gporfiris@rogers.com	Vivian Bryan vbrya@tegh.on.ca
TGH	Dr. Peter Switakowski pswitakowski@rogers.com	Julie Johnston julie.johnston@uhn.ca
THP	Dr. Sarah McClennan sarah.mcclennan@gmail.com	Sanah Khokhar sanah.khokhar@trilliumhealthpartners.ca

COURSE OVERVIEW

The Emergency Medicine clerkship is a four-week core rotation. It commences with a seminar series covering material integral to the rotation and continues with clinical shifts at one of the ten Emergency Departments in the Greater Toronto Area. Students complete 14 shifts, including up to two weekends and three overnight shifts.

At the start of the rotation students participate in three days of hands-on workshops and seminars utilizing simulation, skills-based teaching, and case-based interactive sessions. These sessions provide opportunities to acquire essential knowledge and skills in preparation for their clinical experience, and cover topics that include medical imaging, airway management, cardiac dysrhythmias, trauma, ultrasound, toxicology, chest pain, wound management, and splinting.

During the clinical experience in the Emergency Department, clerks function as members of an interprofessional team. They are assigned one or two preceptors with whom at least half their shifts occur. Students learn to manage many types of patient problems that present to the Emergency Department, including exposure to core emergency medicine cases as outlined in the Case Log list. This list can be found on

(Emergency Medicine, continued)

the Emergency Medicine portal. During the rotation there is an opportunity for an observed patient encounter completed with an Attending Physician. In addition, each clerk will spend half a shift with members of the interprofessional team. There will be an additional opportunity to perform basic procedures (intravenous insertion, venipuncture, foley catheter insertion, NG insertion, ECG) and observe the triage process.

In order to ensure that course objectives are met, preceptors meet with clerks at the mid-rotation period to provide formative feedback and review Case Log lists. This provides opportunity for discussion of goals for the latter half of the rotation. At the end of the rotation, the preceptor and clerk meet to complete the formal clinical evaluation. This evaluation is based on shift evaluation cards filled in at the end of each clinical shift. The rotation is concluded by a written final examination.

ASSESSMENT

- Written examination (50%)
- Clinical performance evaluation, based on an assessment of the student's clinical work during the rotation (50%)
- Professionalism evaluation (Credit/No Credit)
- Case Log requirements (Credit/No Credit)
- Observed history and physical examination (Credit/No Credit)

To successfully complete the Emergency Medicine rotation, students must pass the written examination as well as the clinical performance evaluation. A mark of 60% is deemed a pass on the exam, with a borderline performance including but not limited to a mark less than 70% on the exam or on the clinical performance, as well as lapses in professionalism. Further details on assessment may be found on the Emergency Medicine shell of the portal.

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

NB: In order to receive credit for Emergency Medicine, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME*.

COURSE OBJECTIVES

By the end of Emergency Medicine Clerkship, the clinical clerk will demonstrate the foundation of knowledge, skills and attitudes necessary for the practice of Emergency Medicine.

A. GENERAL COMPETENCIES

The clinical clerk will be able to:

[Medical Expert / Skilled Clinical Decision Maker]

- Demonstrate the ability to initially assess and manage common problems presenting to the Emergency Department (ED) (see B.II below)
- Demonstrate the ability to distinguish seriously ill or injured patients from those with minor conditions.
- Demonstrate a focused history and physical examination.

(Emergency Medicine, continued)

- Develop a working differential diagnosis and management plan.
- Develop plans for investigations and interpret these investigations.
- Understand and explain the risks and benefits of investigations and treatments.
- Demonstrate competency in basic procedural skills relevant to the ED (see B.I below)
- Demonstrate skills in time management.

[Communicator / Doctor-Patient Relationship]

- Communicate effectively and empathetically with patients and their families.
- Demonstrate thorough and clear documentation and charting, with concise recording of pertinent positive and negative findings.
- Demonstrate the ability to council and educate patients and families in the ED.
- Provide clear discharge instructions for patients and ensure appropriate follow-up care.
- Demonstrate the ability to present a patient case in a clear, concise and complete manner.

[Collaborator]

- Establish and maintain effective working relationships with colleagues and other health care professionals.
- Demonstrate an understanding of the concept of triage and prioritization of care in management of multiple patients simultaneously.
- Discuss the roles of the various providers of prehospital care and the role of the Emergency Physician in prehospital care.
- Demonstrate knowledge of community resources available to the ED.
- Respect the role of the patient's primary care physician by soliciting input in the assessment, in the development of the care plan, and in follow-up.

[Manager]

- Demonstrate appropriate and cost-effective use of investigations and treatments.
- Develop organizational skills and efficiency in managing patients and maintaining patient flow.
- Develop an understanding of the factors contributing to resource issues in the ED.

[Health Advocate / Community Resources]

- Demonstrate an awareness of the underlying psychosocial and socioeconomic problems that may precipitate an ED visit.
- Discuss the role of the ED in the health care system and how it relates to other hospital and community health services.
- Demonstrate an understanding of legal and ethical issues surrounding emergency care.
- Identify opportunities for primary prevention in the ED and council patients accordingly.

[Scholar]

- Access and critically appraise the literature relevant to ED care.
- Understand the many unique learning and teaching opportunities available in Emergency Medicine.

(Emergency Medicine, continued)

[Professional]

- Attend scheduled and assigned teaching and clinical responsibilities in a timely fashion.
- Communicate with educational administrators and clinicians when not able to attend scheduled assignments in a timely fashion.
- Recognize and accept his or her limitations and know when to ask for help.
- Protect information provided by or about patients, keeping it confidential, and divulge it only with the patient's permission except when otherwise required by law.
- Be reliable and responsible when fulfilling obligations.
- Recognize situations where common medical errors may occur in the ED.
- Be respectful of the interprofessional team environment in the ED.

B. EDUCATIONAL CORE OBJECTIVES

I. SKILLS

By the end of the EM Clerkship rotation, the student should be able to demonstrate basic proficiency in the following skills. Competencies to complete these skills may be acquired during clinical shifts, seminars, workshops or on other rotations.

Technical Skills:

1. airway assessment/management
2. Casting/splinting
3. wound care (including local anesthetic, simple suturing, dressing)

Interpretive Skills:

1. cardiac monitor (rhythm interpretation)
2. electrocardiograms (MI & rhythm)
3. plain radiographs (extremity, chest)

II. PROBLEM-BASED

By the end of the EM Clerkship rotation, the student should be able to demonstrate an approach to patients presenting to the Emergency Department (based on real or simulated encounters) with the following problems (including differential diagnosis, investigations, and initial treatments):

1. Abdominal pain
2. Altered level of consciousness
3. Anaphylaxis/severe allergic reaction
4. Arrhythmia
5. Chest pain
6. First trimester bleeding
7. Fracture/Sprain
8. Headache
9. Hypotension/Shock
10. Overdose/Toxicology
11. Seizure
12. Shortness of Breath
13. Trauma

COURSE DESCRIPTIONS

Year 3 Core Clinical Rotation: FAMILY & COMMUNITY MEDICINE (6 weeks)

Course Director	Course Administrator
Dr. Azi Moaveni a.moaveni@utoronto.ca	Cheryl O'Donoghue dfcm.clerkship@utoronto.ca 416-978-1896

Site Directors/Assistants

Site	Director (Faculty)	Assistant
MKH (Markham)	Stephen Marisette smarisette@msh.on.ca	Bernice Baumgart bbaumgart@msh.on.ca
MSH	Dr. Elaine Cheng elainevcheng@gmail.com	Paula DaRocha pdarocha@mtsinai.on.ca
NYGH	Dr. Jordana Sacks jordana.sacks@gmail.com	Mirka Skoubouris mirka.skoubouris@nygh.on.ca
SJHC	Dr. Natascha Crispino ncrispino@stjoestoronto.ca Dr. Sofia Khan skhan3@stjoestoronto.ca	Helen Flynn hflynn@stjoestoronto.ca
SMH	Dr. James Owen owenj@smh.ca	Ed Ang ange@smh.ca Gilda Barillas barillasg@smh.ca
SHSC	Dr. Sherylan Young sherylan.young@sunnybrook.ca	Erin Tigchelaar erin.tigchelaar@sunnybrook.ca
TSH	Dr. Dave Wheler dave.wheler@rogers.com	Stacey Milley smilley@tsh.to
TEGH	Dr. Lisa Ilk lisa.ilk@utoronto.ca Dr. Catherine Yu Catherine.yu@utoronto.ca	
TWH	Dr. Andrew Sparrow andrew.sparrow@utoronto.ca Dr. Sarah Fleming sarah.fleming@uhn.ca	Lydia Lamberti lydia.lamberti@uhn.ca
THP-MH	Dr. Ruby Alvi ruby.alvi@utoronto.ca Dr. Jennifer Everson jennifer.everson@trilliumhealthpartners.ca	Sue Todd sue.todd@trilliumhealthpartners.ca

THP-CVH	Dr. Kimberly Kent kimberley.kent@trilliumhealthpartners.ca	Suzanne Serre-Hall suzanne.serre-hall@trilliumhealthpartners.ca
WCH	Dr. Dara Maker dara.maker@utoronto.ca	Donna Feeney donna.feeney@wchospital.ca Sheri Johnston sheri.johnston@wchospital.ca
SOUTHLAKE	Dr. Robert Doherty robert.doherty@ontariomd.ca	Rhonda Taylor rtaylor@southlakeregional.org
ROMP COLLING-WOOD	Dr. Leslie-Anne Hutchings la_hutchings@hotmail.com	Philippa Rouse learners@romponline.com
ROMP BARRIE/ RURAL LIAISON	Dr. Christine Stewart stewart.camem@gmail.com	Carolyn Brooks brooksC@rvh.on.ca
ROMP MIDLAND	Dr. Jeff Golisky jeff.golisky@utoronto.ca	Kim Stewart stewartk@gbgh.on.ca
ROMP ORILLIA	Dr. Steve DePiero stevedepiero@rogers.com	

COURSE OVERVIEW

Students will experience family medicine at a Family Medicine Teaching Unit or a community Family Physician's office or a combination of both teaching environments. The 6 week rotation will expose students to various Comprehensive Care Models and we will strive to have students learn in an interprofessional environment.

The initial week of the Family Medicine rotation includes centrally delivered core seminars which will be attended by students from all sites (including the Rural Ontario Medical Program) for the first two and a half days. Core seminars include: Orientation, Family Violence, Motivational Interviewing, Global Health, Palliative Care and Geriatrics. After core seminars, the students will then go to their respective sites to start the clinical portion of the rotation. Students will also participate in site-based seminars, and complete e-modules. These are also mandatory.

Clinical elective half days may also be available depending on the site and may include family medicine obstetrics, home visits, inpatient (hospitalist) care, diabetes care and others.
The Course Handbook is available on Blackboard.

ASSESSMENT

Formative feedback is provided to the clerk on a daily basis by the supervising physician. In addition, a mid-rotation evaluation is completed by the clerk's preceptor.

- **Clinical Evaluation 40%**
  A consensus evaluation of contributing preceptors. An overall grade of 60% is required to pass the clinical evaluation.
- **Academic Project 12%**

(Family & Community Medicine, continued)

Comprises 4% for a 250 word Abstract and 8% for a 15 minute presentation.
Students must achieve 60% on the academic project to pass this component.

- **Clinical Evaluation Exercises (FM-CEX) 16%**
  Include at least 4 FM-CEXs completed by a preceptor in weeks 2, 3, 4 and 5 of the rotation. Students must achieve an overall grade of 65% to pass this component of the evaluation.
- **Written Examination 32%**
  Includes short answer and 'key features' examination questions. An overall grade of 60% is required to pass the written examination.
- **Professionalism evaluation (Credit/No Credit)**
- **Case Log requirements (Credit/No Credit)**

Please see the Family & Community Medicine Course Manual for more details on evaluation components. For grading regulations, please see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

Students must pass all of the above components in order to pass the course.

NB: In order to receive credit for Family & Community Medicine, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME*.

COURSE OBJECTIVES
Objectives of the Family Medicine Clerkship based on the CanMEDS competencies (organized with CanMEDS-FMU framework*).

A medical student completing Family Medicine Clerkship will be able to…

Medical Expert
1. Describe the key elements of an effective doctor-patient relationship.
2. Demonstrate patient-centred medicine (including exploring the illness experience and social context, and shared decision-making to reach common ground).
3. Meet the objectives for each of the clinical topics listed below and on the Hub; the seminars (e-module and classroom based); and the topic objectives listed below.
4. Identify management priorities for patient with multiple morbidities.

Communicator
1. Share information with patients in a clear manner (e.g. pathophysiology and treatment options).
2. Write clear and accurate prescriptions for patients.
3. Write clear and accurate requisitions for investigations to work-up patients.
4. Document patient encounters in a SOAP format.
5. Present cases effectively.

(Family & Community Medicine, continued)

Collaborator
1. Describe the roles of consultant physicians and other health professionals for a given patient, including the indications for referral.
2. Write clear and effective requests for consultations.

Manager
1. Seek and synthesize additional patient information (e.g. lab results, old charts, consult reports, pharmacy records, family member, etc.) when indicated.
2. Propose initial patient-centred management plans, including follow-up and use of any community resources.
3. Protect personal health and safety in family medicine settings.

Scholar
1. Conduct focused literature searches around clinical questions that arise from patient care
2. Evaluate the quality and relevance of scientific literature to specific patient scenarios
3. Develop and implement a basic self-directed learning plan when a personal learning need is identified.

Health Advocate
1. Identify issues (social, economic, and resource) for patients and communities that may adversely affect health and access to health care.
2. Propose approaches to resolving identified issues, including the engagement of community resources where appropriate.

Professional
1. Reflect on specific aspects of professional behaviour with regards to how well they performed and how they could do better.

*** CanMEDS-FMU: Undergraduate Competencies from a Family Medicine Perspective**. College of Family Physicians of Canada. 2009. Accessible at www.cfpc.ca.

B. EDUCATIONAL CORE OBJECTIVES:

I. Skills
By the end of the Family & Community Medicine Clerkship rotation, the student should be able to demonstrate basic proficiency in at least the following skills. Competencies to complete these skills may be acquired during clinical hours, seminars, or on other rotations.

Technical Skills:
1. Pap Smear
2. Throat Swab
3. Pediatric Vaccination

II. Problem based
By the end of the Family & Community Medicine Clerkship rotation, the student should be able to demonstrate an approach to patients presenting to the Family Physician's Office (based on real or simulated encounters) with the following problems: (Including differential diagnosis, investigations and initial treatments)

(Family & Community Medicine, continued)

1. Abdominal pain
2. Anxiety
3. Asthma
4. Chest Pain
5. Contraceptive Methods
6. Cough/Dyspnea
7. Depression
8. Diabetes Type II
9. Dizziness
10. Fatigue
11. Fever
12. Headache
13. Hypertension
14. Coronary Artery Disease
15. Low Back Pain
16. Palliative Care
17. Prenatal Care
18. Periodic Health Exam (Female)
19. Periodic Health Exam (Male)
20. Well Baby/Child

The online clinical/study guide for this course is available at: The Hub - Family Medicine
http://thehub.utoronto.ca/family/

COURSE DESCRIPTIONS

Year 3 Core Clinical Rotation: MEDICINE (8 weeks)

Course Director	Course Administrator
Dr. Danny Panisko danny.panisko@uhn.ca	Sumitra Robertson med.undergrad@utoronto.ca 416-978-6766

Site Directors/Assistants

Site	Director (Faculty)	Assistant
MSH	Dr. Luke Devine ldevine@mtsinai.on.ca Dr. Zareen Ahmad zahmad@mtsinai.on.ca	Vivien Jordan vjordan2@mtsinai.on.ca
TGH	Dr. Katina Tzanetos katina.tzanetos@uhn.ca Dr. Cheryl Jaigobin cheryl.jaigobin@uhn.ca	Daisy Troiano daisy.troiano@uhn.ca
TWH	Dr. Nadine Abdullah nadine.abdullah@uhn.ca Dr. Caroline Chessex caroline.chessex@uhn.ca	Natasha Campbell natasha.campbell@uhn.ca
SHSC	Dr. Gregory Choy gregory.choy@sunnybrook.ca Dr. Mark Cheung mark.cheung@sunnybrook.ca	Sally Ganesh sally.ganesh@sunnybrook.ca
WCH	Dr. Savannah Cardew savannah.cardew@wchospital.ca	Vaughn Gillson vaughn.gillson@wchospital.ca
SMH	Dr. Yuna Lee leeyuna@smh.ca Dr. Vera Dounaevskaia vera.dounaevskaia@smh.ca	Betty-Ann Lemieux lemieuxb@smh.ca
THP – CVH	Dr. Katherine Monkman katherine.monkman@trilliumhealthpartners.ca	Sanah Khokhar Sanah.khokhar@trilliumhealthpartners.ca
THP – MH	Dr. Sumontra Chakrabarti sumontra.chakrabarti@trilliumhealthpartners.ca	Sanah Khokhar Sanah.khokhar@trilliumhealthpartners.ca

COURSE OVERVIEW

The Medicine clerkship is eight weeks in duration, and each clerk is assigned to a single Internal Medicine Team for the entire rotation. A sub-group of students may choose a two-week ambulatory care experience in the current academic year. The course begins in the first week with a seminar series over two and a half days.

(Medicine, continued)

Over the entire length of the course, there is a graduated experience with increasing responsibility as the rotation progresses. Students have the opportunity to perform the admitting history and physical examinations on patients who present to the Emergency Room, and are asked to provide a provisional diagnosis and differential diagnosis, and to construct an investigation and management plan. They also provide direct patient care for their assigned patients under supervision. Later in the rotation, students carry more patients (up to six per student) and have enhanced responsibilities for patients while on call. Support is provided by other members of the team, including the attending physician and supervising residents. Students are also assigned to six half-days in ambulatory clinics so that they have an opportunity to learn about how care is delivered to medical patients in this setting.

Structured Teaching Sessions

1. Morning Report – frequency and time slots vary by site
2. Bedside Physical Examination Sessions – weekly
3. An interactive and case-based medical seminar series taking place in Week 1, and a second series of medical seminars occurring approximately once a week in Weeks 2 through 7.
4. Medical Grand Rounds – weekly
5. Each student is assigned a Faculty Preceptor or Coach who meets with the Year 3 medical student and observes the student do a practice patient history and physical examination.

ASSESSMENT

Measure	Timing	Portion of Mark	Standard Necessary
Observed Practice History & Physical	By end of Week 3	Credit/No Credit	Completion
Written Examination	Week 6	30%	60%
Structure Clinical Oral Examination	Week 8	25%	60%
Self-Directed EBM Learning Project	Week 7	5%	
Ward Evaluation	Weeks 1-8	30%	60%
Ambulatory Clinics	Weeks 2-7	10%	
Professionalism Evaluation	Weeks 1-8	Credit/No Credit	
Case Log Requirements	Weeks 1-8	Credit/No Credit	Completion

Students must score over 60% on each of the Clinical Ward Performance, Written Examination, and Structured Clinical Oral Examination in order to achieve a grade of Credit for the rotation. Also, students must achieve an overall mark of 60% in the rotation to achieve a grade of Credit for the rotation, together with Credit on professionalism, Case Log requirements and the observed practice history & physical.

For more details, see the the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

NB: In order to receive credit for Medicine, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME.*

(Medicine, continued)

COURSE OBJECTIVES

A. GENERAL COMPETENCIES
At the conclusion of the Clerkship in Internal Medicine, the medical student will be able to:

[Medical Expert / Skilled Clinical Decision Maker]
1. Demonstrate knowledge of the scientific and humanistic foundations of medicine in order to more rationally diagnose and manage the various factors contributing to a patient's illness.

2. Demonstrate a thorough knowledge of internal medicine. This has three dimensions:
a) Relevant aspects of common and life-threatening illnesses affecting adults in terms of:
i. Definition
ii. Epidemiology
iii. Etiology
- Biological, psychological, social, economic, legal, ethical, and cultural

iv. Pathogenesis and pathophysiology
v. Clinical features
vi. Complications
vii. Investigations required to confirm a diagnosis
viii. Principles of prevention
ix. Principles of management
- Medical, Surgical, Involvement of allied health professionals, Nutritional

x. Prognosis

b) An approach to the diagnosis of the major presenting problems encountered in internal medicine. In order to do this, the student needs to be able to:
i. List in an organized fashion the major causes of each of these problems
ii. List the most important or life-threatening causes of each problem
iii. Explain how data that may be obtained from the history and physical examination will affect the likelihood of these diagnostic possibilities for each problem
iv. Understand the appropriate use and interpretation of diagnostic tests (see below)

c) The properties of medical therapies, in terms of their indications, contraindications, mechanisms of action, side effects, and monitoring.

3. Demonstrate clinical skills:
a) Students should be able to obtain and document both a complete and a focused medical history, as the situation requires.
b) Students should be able to perform and document both a complete and a focused physical examination, as the situation requires. In order to do this, students must be able to demonstrate:
- An understanding of the physiologic basis of clinical findings
- A logical, comprehensive, organized approach to the physical examination that is adaptable to specific circumstances
- Proper techniques of physical examination
- Appropriate attention to patient comfort, hygiene, and privacy
- Understanding of the significance of, and ability to detect presence of, the most important physical examination abnormalities pertinent to internal medicine.

(Medicine, continued)

c) Students should be able to interpret commonly-employed diagnostic tests, knowing their indications, contraindications, risks, and in general terms their test characteristics (sensitivity and specificity).
d) Students should be able to integrate the above history, physical findings, and diagnostic test results into a meaningful diagnostic formulation by:

- Generating a problem list
- Generating a differential diagnosis for each of the problems, and suggesting a tentative or provisional diagnosis

e) Students should be able to demonstrate therapeutic and management skills. In order to do this, the student needs to be able to:

- Suggest appropriate additional investigations for each problem
- Propose a management strategy for each of the problems based on a knowledge of efficacy, risk, and cost. By the end of the Clerkship, students should be able to write admitting orders for each of the common diagnoses encountered in internal medicine.

f) Students should be able to demonstrate the technical skills necessary to perform several of the common procedures used in internal medicine, as well as show that they understand the indications, risks, and benefits of these procedures.
g) Make use of evidence-based medicine so that they can better diagnose and manage patient problems.

[Communicator/Doctor-Patient Relationship]

1. Communicate effectively with patients, their families, and the community through verbal, written, and other non-verbal means of communication.
2. Establish professional relationships with patients, their families (when appropriate), and community that are characterized by understanding, trust, respect, empathy, and confidentiality.
3. Deliver information to the patient and family (as appropriate) in such a way that it is easily understood, encourages discussion, and promotes the patient's participation in decision-making.
4. Gather information, negotiate a common agenda, and develop and interpret a treatment plan, while considering the influence of factors such as the patient's age, gender, ethnicity, cultural and spiritual values, socioeconomic background, medical conditions, and communication challenges.
5. Present a case summary orally in a clear, logical, and focused manner.
6. Document in writing all aspects of the patient encounter in the patient chart.

[Collaborator]

1. Describe the roles and expertise of all members of the interdisciplinary team that are involved in the care of patients with an internal medicine problem.
2. Develop a care plan for a patient he/she has assessed, including investigation, treatment, and continuing care, in collaboration with the members of the interdisciplinary team.
3. Participate in interdisciplinary team discussions, demonstrating the ability to accept, consider, and respect the opinions of other team members, while contributing an appropriate level of expertise to patient care.

[Manager]

1. During the Clerkship in internal medicine, the medical student will deepen his/her understanding of the appropriate use of health care resources in the internal medicine context. Students are also expected to manage their own time in an efficient manner.

(Medicine, continued)

[Health Advocate/Community Resources]
1. Accept appropriate responsibility for the health of patients assigned to their care.
2. Recognize important determinants of health and principles of disease prevention pertinent to internal medicine.
3. Act as an advocate on behalf of patients assigned to their care, when interacting with other members of the health care team.

[Scholar]
1. Demonstrate the ability to engage in self-directed learning.
2. Assist in teaching others and in the facilitation of their learning where appropriate.
3. Demonstrate the ability to search the evidence-based medicine literature for evidence to support the diagnostic and therapeutic management of their patients.

[Professional]
Throughout the Clerkship in internal medicine, the medical student will:
1. Behave in an altruistic manner.
2. Demonstrate reliability and a strong sense of responsibility.
3. Demonstrate a commitment to excellence via self-improvement and adaptability.
4. Demonstrate respect for others, as in the course of relationships with students, faculty, and staff.
5. Demonstrate honour and integrity by upholding student and professional codes of conduct.

B. EDUCATIONAL CORE OBJECTIVES

I. Procedures & Interpretive Skills
By the end of this internal medicine clerkship rotation, the student should be able to demonstrate basic proficiency in the following procedural and interpretive skills. Competence to complete these skills may be acquired during clinical shifts, seminars, bedside teaching or on other rotations.
i. Arterial blood gases
ii. Diagnostic imaging (chest, abdomen, and brain)
iii. Electrocardiograms (MI, rhythm, conduction blocks, etc.)
iv. Diagnostic Laboratory Results (biochemistry, haematology, microbiology)

II. Problem Based Skills
By the end of this internal medicine clerkship rotation, the student should be able to demonstrate an approach to patients presenting with the following problems (including differential diagnosis, investigations, and appropriate further investigations and management plans for each of the identified problems):

(Medicine, continued)

Cardiorespiratory
- Cardiac arrest / respiratory arrest
- Chest discomfort
- Cough
- Cyanosis / hypoxemia / hypoxia
- Dyspnea
- Edema
- Hemoptysis
- Hypercarbia
- Hypoxemia and hypoxia
- Insomnia / sleep-apnea syndrome
- Murmurs / extra heart sounds
- Palpitations (abnormal ECG, arrhythmias)
- Shock, hypotension
- Syncope, presyncope, loss of consciousness
- Wheezing

Gastrointestinal / hepatobiliary
- Abdominal pain
- Ascites
- Abnormal liver enzyme levels
- Blood in stool (hematochezia and melena)
- Constipation
- Diarrhea
- Dysphagia
- Hematemesis
- Abnormalities of liver synthetic function
- Jaundice
- Vomiting, nausea

Renal / fluid-electrolyte
- Metabolic acidosis and alkalosis
- Respiratory acidosis and alkalosis
- Hypo- and hyperkalemia
- Hypo- and hypernatremia
- Hematuria
- Hypertension
- Proteinuria
- Urinary frequency (associated with dysuria; associated with polyuria)
- Oliguria

Endocrine
- Hyperglycemia
- Hypo- and hypercalcemia
- Hirsutism and virilisation

Hematologic/oncologic
- Leukocytosis
- Leukopenia
- Anemia
- Bleeding tendency/bruising
- Lymphadenopathy, Splenomegaly
- Polycythemia
- Febrile neutropenia

Rheumatologic
- Joint pain (mono-articular and poly-articular)
- Back pain

Neurological
- Coma / impaired consciousness
- Confusion / delirium
- Dementia / memory disturbances
- Diplopia
- Dizziness / vertigo
- Gait disturbances /Ataxia
- Headache
- Numbness and tingling
- Pupil abnormalities
- Seizures
- Speech and language abnormalities
- Tremor
- Visual disturbance / loss
- Weakness / paralysis

Geriatrics
- Falls
- Failure to thrive (elderly)
- Urinary incontinence (elderly)
- Polypharmacy
- Capacity assessment

Other topics
- Allergic reactions
- Dying patient
- Fatigue
- Fever and chills
- Pain
- Overdose/ Toxidrome (Especially ASA, Acetaminophen, Opioid, Benzodiazepine, Cocaine)
- Substance abuse, drug addiction, withdrawal
- Weight gain/ obesity
- Weight loss/malnutrition

LEARNING RESOURCES

Andreoli, T et al, eds., Cecil Essentials of Medicine, 9th edition, 2015.
The Toronto Notes, 2015 edition, chapters on internal medicine topics

Find more details at:
http://www.deptmedicine.utoronto.ca/edustudies/Undergraduate_Studies/orange_booklet.htm

COURSE DESCRIPTIONS

Year 3 Core Clinical Rotation: OBSTETRICS & GYNAECOLOGY (6 weeks)

Course Director	Course Administrator
Dr. Rajiv Shah rajivrobert.shah@utoronto.ca	Jeannette Moniz obgyn.ug@utoronto.ca 416-946-0305

Site Directors/Assistants

Site	Director (Faculty)	Assistant
MSH	Dr. Mara Sobel msobel@mtsinai.on.ca	Sylvia Muir smuir@mtsinai.on.ca
NYGH	Dr. Sabrina Lee sabrina.lee@utoronto.ca	TBD
SJHC	Dr. Sybil Judah sybil.judah@utoronto.ca Dr. Yolanda Kirkham yolanda.butt@mail.utoronto.ca	Chelsea Houde choude@stjoestoronto.ca
SMH	Dr. Eva Mocarski mocarskie@smh.ca Dr. Dana Soroka sorokad@smh.ca	Charlotte Aziz azizc@smh.ca
SHSC	Dr. Dini Hui dini.hui@sunnybrook.ca	Monika Selimovic obgyn@sunnybrook.ca
TEGH	Dr. Roberta MacKenzie roberta.mackenzie@utoronto.ca	Joanne Mount j.mount@utoronto.ca
THP-CVH	Dr. Scott Tigert scott.tigert@trilliumhealthpartners.ca	Kay Pantarotto kay.pantarotto@trilliumhealthpartners.ca
THP-MH	Dr. Dalip Bhangu dalip.bhangu@trilliumhealthpartners.ca	Kay Pantarotto kay.pantarotto@trilliumhealthpartners.ca
TSH	Dr. Haidar Mahmoud Haidar96@rogers.com	TBD

COURSE OVERVIEW

Each student spends six weeks participating in a variety of clinical activities related to women's health care, including rotations in labour and delivery, inpatient antenatal and postpartum units, antenatal clinics, gynaecologic ambulatory care, inpatient gynaecology units, and the operating room. In addition to clinical activities, the students attend daily small-group teaching seminars on a range of obstetrical and gynaecological topics. Students are assigned to one of eight teaching hospital sites. Students assigned to St. Michael's Hospital may have a sub-rotation at Toronto Scarborough Hospital, Birchmount Campus.

TEACHING METHODS:

In all clinical settings, the student is responsible for taking complete obstetrical and gynaecological histories. Students will also develop their pelvic examination skills under the supervision of their clinical teacher and with the consent of the patient. Students are expected to formulate differential diagnoses and management

plans. All patients seen by the student are reviewed by the obstetrics and gynaecology resident or a staff physician.

A comprehensive orientation is conducted on the first day of the clerkship rotation where students are provided with information regarding expectations, schedules, on call, and evaluations. The approach to the pelvic examination is initially taught through the use of pelvic exam videos and practice on pelvic models with supervision by a faculty member and/or resident. This initial instruction is further consolidated when students have an opportunity to perform the pelvic examination in the clinical setting.

A standardized seminars series designed for the Clerkship level will be conducted by staff physicians. The seminar teaching methods are based on the principles of small-group learning characterized by active participation, problem-solving, and reflection. In addition to the seminar series, each hospital site conducts its own set of teaching and/or grand rounds meant for the hospital staff, which students are also expected to attend. Students are also encouraged to engage in interprofessional learning opportunities as other health care professionals such as nurses, midwives, social workers, respiratory technologists, and others, are greatly involved in patient care.

Each student will have access to the Obstetrics & Gynaecology Clerkship syllabus which contains a handout for each of the topics covered in the seminar series. The syllabus is available electronically on the course website.

ASSESSMENT

There are three components which numerically contribute equally to the final evaluation:

- Written examination (33.3%)
- Structured clinical oral examination (33.3%)
- Ward/clinical skills evaluation (33.3%)

The written and oral examinations are conducted during the final week of the rotation. The ward evaluation is completed by the site coordinator, incorporating evaluations obtained during the course of the rotation from faculty members, residents and fellows who had sufficient contact with the student. Students must receive 60% or more on each of the 3 components in order to pass (i.e. receive Credit in) the course. Each component is weighted one third (33.3%) in the calculation of the final grade. A mark less than 60% on any one or more of the three components will lead to failure (No Credit) of the course.

Other Assessment Tools for Credit/No Credit

- Professionalism evaluation
- Case Log encounters – completion of mandatory problems and procedures
- Mandatory Observed History-Taking and Physical Examination Evaluation

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

NB: In order to receive credit for Obstetrics & Gynaecology, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME.*

(Obstetrics & Gynaecology, continued)

COURSE OBJECTIVES

The Obstetrics & Gynaecology Clerkship rotation is designed to further develop and consolidate the knowledge, skills and attitudes acquired in Preclerkship and to achieve clinical competence in managing common and important clinical problems that women may present within the discipline of obstetrics and gynaecology. The Obstetrics & Gynaecology Clerkship objectives are based on the CanMEDS competencies and meet the ED-2 standard of the LCME.

A. GENERAL COMPETENCIES

With respect to all the general competencies, the medical student should achieve the following:

[Medical Expert / Skilled Clinical Decision-Maker]

- Demonstrate the ability to assess and manage common and important problems which women will present within the discipline of Obstetrics & Gynaecology.
- Demonstrate the ability to take an obstetrical, gynaecological and sexual history.
- Develop a working differential diagnosis and management plan.
- Develop plans for investigation and interpret these investigations
- Understand and explain the risks and benefits of investigations and treatments.
- Demonstrate competency in pelvic examination and other basic procedural skills relevant to the discipline of obstetrics and gynaecology

[Communicator / Doctor-Patient Relationship]

- Communicate effectively and empathetically with patients and their families.
- Ensure that women have given informed consent before conducting and/or being present for examinations or procedures.
- Communicate effectively, respectfully and empathetically with women while performing and/or assisting at examinations and/or procedures.
- Demonstrate thorough and clear documentation and charting with concise recording of pertinent positive and negative findings.
- Demonstrate the ability to council and educate patients and families.
- Provide clear discharge instructions for patients and ensure appropriate follow-up care.
- Demonstrate the ability to present a patient case in a clear, concise, and complete manner.

[Collaborator]

- Establish and maintain effective working relationship with colleagues and other health care professionals.
- Demonstrate an understanding of the concept of triage and prioritization of care in management of multiple patients simultaneously in the labour and birth unit.
- Demonstrate knowledge of other resources available to women when providing prenatal, intrapartum, postpartum, and gynaecological outpatient and inpatient care.
- Maintain respect for the role of the patient's primary care provider by ensuring that the provider is informed about the patient's care plan.

(Obstetrics & Gynaecology, continued)

[Manager]
- Demonstrate appropriate and cost-effective use of investigations and treatments.
- Develop an understanding of the organizational skills and efficiency required in managing patients and maintaining patient flow.
- Develop an understanding of the factors contributing to resource issues in outpatient prenatal and gynaecology clinics, in-hospital labour and birth and postpartum units, and inpatient gynaecologic and peri-operative services.

[Health Advocate / Community Resources]
- Respond to the individual woman's health care needs and issues as part of patient care.
- Understand the health needs of the community of women served by the health care unit.
- Identify the determinants of health of the population of women that are served by the health care unit.
- Understand methods to promote the health of individual women, communities, and populations.

[Scholar]
- Access and critically appraise the literature relevant to obstetrics and gynaecology care.
- Understand the many unique learning and teaching opportunities available in obstetrics and gynaecology.

[Professional]
- Attend scheduled and assigned teaching and clinical responsibilities in a timely fashion.
- Communicate with educational administrators and clinicians when not able to attend scheduled assignments in a timely fashion.
- Recognize and accept his or her limitations and know when to ask for help.
- Protect information provided by or about patients, keeping it confidential, and divulge it only with the patient's permission except when otherwise required by law.
- Be reliable and responsible in fulfilling obligations.
- Recognize situations where common medical errors may occur.

B. EDUCATIONAL CORE OBJECTIVES

I. SKILLS - TECHNICAL AND PROCEDURAL

By the end of the Obstetrics and Gynaecology Clerkship rotation, the medical student should be able to perform the skills/procedures listed below. Competency to complete these skills may be acquired during clinical shifts, seminars, workshops, or simulations.

1. Bimanual pelvic examination
2. Vaginal speculum insertion
3. Cultures of vagina and cervix
4. Pap test
5. Fetal heart rate tracing interpretation – normal and abnormal tracings
6. Fetal heart auscultation with doptone
7. Leopold manoeuvres
8. Symphysis fundal height measurement
9. GBS (group B streptococcus) culture for antenatal screening
10. Nitrazine test for SROM
11. Fern testing for SROM (spontaneous rupture of membranes)
12. Cervical examination during labour
13. Spontaneous vaginal birth
14. Delivery and examination of placenta
15. Obtaining cord blood

(Obstetrics & Gynecology, continued)

II. PROBLEM-BASED ENCOUNTERS

By the end of the Obstetrics & Gynaecology Clerkship rotation, the student should be able to demonstrate an approach (including differential diagnosis, investigation and initial treatment) to women presenting for antenatal care, intrapartum care, gynaecological consultation (outpatient, inpatient, emergency room), and gynaecologic surgery, based on real or simulated encounters listed with the following issues:

Gynaecological:

1. Abnormal vaginal bleeding (pre and postmenopausal)
2. Adnexal mass and/or ovarian cyst
3. Amenorrhea/oligomenorrhea
4. Contraceptive methods
5. First trimester or early second trimester complications:
    a. Spontaneous abortion
    b. Unwanted pregnancy and therapeutic abortion
    c. Ectopic pregnancy
    d. Recurrent pregnancy loss
6. Dysmenorrhea
7. Dyspareunia
8. Endometriosis
9. Fibroids
10. Genital tract infections
11. Incontinence
12. Infertility
13. Irregular periods
14. Menopausal counselling
15. Pap test counselling
16. Pelvic pain – acute and chronic
17. Post-gynaecologic surgery complications
18. Sexual disorders
19. Urogenital prolapse/disorder
20. Vaginal discharge
21. Vulvar lesion or pruritis

Obstetrical:

1. Antepartum haemorrhage
2. Assisted birth (vacuum, forceps, Caesarean delivery)
3. Fetal well-being issues:
    a. Genetic screening and prenatal diagnosis
    b. Small/large for gestation age fetus
    c. Management of Rh negative status
    d. Fetal demise
4. Diabetes in pregnancy
5. Hypertension in pregnancy
6. Induction of labour
7. Labour progression – normal and abnormal
8. Pain management in labour
9. Preterm labour
10. Preterm premature rupture of membranes
11. Nausea and vomiting in pregnancy
12. Postpartum care and complications:
    a. Postpartum hemorrhage
    b. Postpartum fever
    c. Postpartum mood disorder
13. Obstetrical emergencies
14. Obstetrical ultrasound

TEXTBOOK/LEARNING RESOURCES

- Essentials of Obstetrics and Gynecology, 5th Edition, Hacker and Moore; W. B. Saunders, 2010
- Basic Gynaecology and Obstetrics, Normal F. Gant, F. Gary Cunningham; Appleton and Lange, 1993
- Clinical Gynaecology, Endocrinology, and Infertility, 7th Edition, Leon Speroff and Marc A. Fritz; Lippincott Williams & Willkins, 2005
- Novak's Textbook of Gynaecology, 12th Edition, Jones, Wentz, Burnett; Williams and Wilkins, 1996
- Williams Obstetrics, 23nd Edition, Cunningham, Leveno, Bloom, Hauth, Rouse; The McGraw-Hill Companies, Inc, 2010
- www.sogc.org

COURSE DESCRIPTIONS

Year 3 Core Clinical Rotation: OPHTHALMOLOGY (1 week)

Course Director	Course Administrator
Dr. Daniel Weisbrod dan.weisbrod@utoronto.ca	Dela Muhundrajah educationdovs@utoronto.ca 416-978-6294

Site Directors/Assistants:

Site	Director (Faculty)	Assistant
TWH	Dr. Marisa Sit marisa.sit@gmail.com	Mirella Marcantonio mirella.marcantonio@uhn.ca
SHSC	Dr. Radha Kohly radha.kohly@utoronto.ca	Charlene Muller charlene.muller@sunnybrook.ca
SMH	Dr. Filberto Altomare altomaref@smh.ca	Helen Son sonh@smh.ca
MSH	Dr. Paul Sanghera gpsanghera@gmail.com	Rebecca Scott rscott@mtsinai.on.ca
HSC	Dr. Nasrin Tehrani nasrin.tehrani@sickkids.ca	Karen Martin karen.martin@sickkids.ca
MAM	Dr. Devesh Varma deveshvarma@me.com	Lorraine Ferraro lferraro@thc.on.ca

COURSE OVERVIEW

The one-week Ophthalmology course is part of the Anesthesia / Emergency Medicine / Ophthalmology / Otolaryngology rotation. During the Ophthalmology block, students are exposed to a variety of ambulatory ophthalmology patients by attending the eye clinics of their Academy or in the offices of attending ophthalmologists during the first four days. On the first day (Monday morning), there will be a clinical skills review and orientation session where students review the history and physical examination relevant to ophthalmology. On the fifth day (Friday morning), all students attend seminars on paediatric ophthalmology at the Hospital for Sick Children (HSC). This paediatric teaching half-day is shared with Otolaryngology. On the fourth Friday of the combined rotation, students take separate written examinations in Ophthalmology, Otolaryngology, and Anesthesia.

Students are expected to review the course syllabus independently. It is provided on the course portal and covers the following topics: cornea and anterior segment (the red eye), lens and optics, glaucoma, retina, uveitis and inflammatory diseases, neuroophthalmology, oculoplastics and orbital diseases, paediatric ophthalmology and strabismus, and ocular emergencies and trauma.

In clinic, students are responsible for examining patients, which may involve taking an ophthalmic history and performing a relevant ocular examination, as well as formulating a differential diagnosis and plan of management. All patients seen in the clinic are reviewed by an ophthalmology staff, fellow or resident. Students are expected to research each assigned patient's disease using appropriate texts and journals. Students may also be scheduled to attend the operating room for a half day. Otherwise, attendance in the operating room may be arranged at their Academy and/or with a supervisor at the beginning of the rotation if it has not already been formally scheduled. Students are not expected to take call, but if interested, they may request to do so through the ophthalmology residents at their hospital or Academy.

(Ophthalmology, continued)

ASSESSMENT

- Written examination (65%)
- Clinical performance evaluation, based on assessment of student's clinical work during the rotation (35%)
- Professionalism evaluation (Credit/No Credit)
- Case Log requirements (Credit/No Credit)

The final mark is transcribed in Credit/No Credit format. In order to pass the course, a grade of 60% of higher on both the written examination and the clinical performance evaluation must be obtained. Failure to meet these criteria will result in the student being presented to the Board of Examiners for consideration of remediation.

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

NB: In order to receive credit for Ophthalmology, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME.*

COURSE OBJECTIVES

By the end of the Ophthalmology clerkship rotation, the clinical clerk will demonstrate the foundation of knowledge, skills, and attitudes necessary for the practice of Ophthalmology from the perspective of the primary care physician.

A. GENERAL COMPETENCIES

The clinical clerk will be able to:

[Medical Expert/ Skilled Clinical Decision Maker]

- Demonstrate the ability to initially assess and manage common ophthalmic problems presenting to the primary care physician (see B.II below)
- Demonstrate
    - The ability to rapidly recognize and initiate management of ocular emergencies and trauma.
    - A systematic, prioritized approach diagnosing common ophthalmic presentations.
    - The ability to distinguish those ophthalmic conditions requiring immediate referral to an ophthalmologist.
- Take a focused history and perform a physical examination for patients presenting with common ocular symptoms.
- Develop a working differential diagnosis and management plan.
- Develop plans for investigations and interpret these investigations.
- Understand and explain the risks and benefits of investigations and treatments.
- Demonstrate competency in basic diagnostic and procedural skills relevant to ophthalmic conditions (see B.I below)

[Communicator/Doctor-Patient Relationship]

- Communicate effectively and empathetically with patients and their families.

(Ophthalmology, continued)

- Demonstrate thorough and clear documentation and charting, with concise recording of pertinent positive and negative findings.
- Demonstrate the ability to manage difficult or violent patients in the eye clinic.
- Demonstrate the ability to council and educate patients and families in the eye clinic.
- Provide clear discharge instructions for patients and ensure appropriate follow-up care.
- Demonstrate the ability to present a patient case in a clear, concise, and complete manner.

[Collaborator]
- Establish and maintain effective working relationships with colleagues and other health care professionals.
- Discuss the roles of the various providers of hospital care and the role of the ophthalmologist in triaging consults from the emergency department, operating room, and in-patient units.
- Demonstrate knowledge of community resources available to the ophthalmologist.
- Respect the role of the patient's primary care physician by soliciting input in the assessment, the development of the care plan, and follow-up.

[Manager]
- Demonstrate appropriate and cost-effective use of investigations and treatments.
- Develop organizational skills and efficiency in managing patients and maintaining patient flow.
- Develop an understanding of the factors contributing to resource issues in the eye clinic.

[Health Advocate/Community Resources]
- Demonstrate an awareness of the underlying psychosocial and socioeconomic problems that may precipitate an eye clinic visit.
- Discuss the role of the ophthalmologist in the health care system and how it relates to other hospital and community health services.
- Demonstrate an understanding of legal and ethical issues surrounding ophthalmic care.
- Identify opportunities for primary and secondary prevention in the eye clinic and council patients accordingly.

[Scholar]
- Access and critically appraise the literature relevant to ophthalmic care.
- Understand the many unique learning and teaching opportunities available in ophthalmology.

[Professional]
- Recognize and accept his or her limitations and know when to ask for help.
- Protect information provided by or about patients, keeping it confidential, and divulge it only with the patient's permission except when otherwise required by law.
- Be reliable and responsible in fulfilling obligations.
- Recognize situations where common medical errors may occur in the eye clinic.

B. EDUCATIONAL CORE OBJECTIVES

I. Skills

By the end of the Ophthalmology Clerkship rotation, the student should be able to demonstrate basic proficiency in the following skills.

(Ophthalmology, continued)

Clinical Examination Skills:
1. Visual acuity measurement
2. Confrontation visual fields
3. Pupil examination
4. Extraocular motility/strabismus examination
5. External/adnexal examination
6. Slit lamp examination
7. Direct fundoscopy

Technical Skills:
1. Application of eye patch
2. Eversion of eyelid

II. Problem based

By the end of the Ophthalmology Clerkship rotation, the student should understand the following concepts and/or be able to demonstrate an approach to patients presenting to the Emergency Department (based on real or simulated encounters) with the following problems or conditions (including differential diagnosis, investigations, and initial treatments):

1. Structure and Basic physiology of the eye (from BRB)
   a. Anterior and posterior segment
   b. Eyelids, orbit and lacrimal system
   c. Extraocular muscles and cranial nerves
2. Cornea and Anterior Segment (The Red Eye)
   a. Redness of the ocular adnexa
   b. Redness of the globe (eg. conjunctivitis, iritis)
   c. Corneal disorders
3. Lens and Optics
   a. Myopia, hyperopia, astigmatism and presbyopia
   b. Cataracts
4. Glaucoma
   a. Primary open angle glaucoma
   b. Acute angle closure glaucoma
   c. Secondary glaucoma
5. Retina
   a. Diabetic retinopathy
   b. Hypertensive retinopathy
   c. Retinal vascular occlusive diseases
   d. Retinal detachment
   e. Age-related macular degeneration (AMD)
6. Uveitis and Inflammatory Conditions
   a. Iritis
   b. Seronegative spondyloarthropathies, juvenile rheumatoid arthritis (JRA), collegen vascular diseases and sarcoidosis
   c. Infectious causes of uveitis
   d. Leukemia and lymphoma
   e. Choroidal tumours
7. Neuroophthalmology
   a. Diseases of the optic nerve (e.g. optic neuritis, optic neuropathies, optic atrophy)
   b. Anisocoria
   c. Diplopia & ocular misalignment
   d. Cranial neuropathies
   e. Myasthenia gravis
   f. Migraine and headaches
8. Oculoplastics and Orbital Diseases
   a. Inflammatory diseases of the eyelids
   b. Eyelid malpositions and tumours
   c. Graves disease
   d. Inflammatory diseases of the orbit
   e. Preseptal and orbital cellulitis
   f. Orbital tumours
   g. Inflammatory diseases of the lacrimal system
9. Pediatric Ophthalmology
   a. Amblyopia and strabismus
   b. Congenital cataracts
   c. Orbital cellulitis
   d. Leukocoria
10. Ocular Emergencies and Trauma
    a. Blunt trauma (including hyphema)
    b. Penetrating injuries
    c. Foreign bodies
    d. Alkali injuries
11. Ocular pharmacology
    a. Diagnostic agents
    b. Therapeutic agents: Glaucoma medications, anti-infectives and immunosuppressives (steroids)

TEXTBOOKS/LEARNING RESOURCES

The recommended text for the ophthalmology Clerkship is:
"Basic Ophthalmology for Medical Students and Primary Care Residents, 8th ed", by CA Bradford, American Academy of Ophthalmology 2004. Students should also review their ophthalmology notes/materials from Brain and Behaviour (Year 1), Mechanisms, Manifestations, & Management of Disease (Year 2), and the Ocular Examination from ASCM-1 and -2 prior to the start of the rotation. Year 3 students have online portal access to the course syllabus and ophthalmology case scenarios, as well as useful external links.

COURSE DESCRIPTIONS

Year 3 Core Clinical Rotation: OTOLARYNGOLOGY – HEAD & NECK SURGERY (1 week)

Course Director	Course Administrator
Dr. Allan Vescan avescan@mtsinai.on.ca	Michael Figueiredo mike.figueiredo@utoronto.ca 416-946-8743

Site Directors/Assistants

Site	Director (Faculty)	Assistant
HSC	Dr. Evan Propst evan.propst@utoronto.ca	Aja Dykes aja.dykes@sickkids.ca
MAM	Dr. Yvonne Chan y.chan@utoronto.ca	Michael Figueiredo mike.figueiredo@utoronto.ca
MSH	Dr. Al Vescan avescan@mtsinai.on.ca	Dorian Lucchetta dlucchetta@mtsinai.on.ca
SHSC	Dr. Jean Davidson jean.davidson@sunnybrook.ca	Lyn Snelling lyn.snelling@sunnybrook.ca
SMH	Dr. John Lee jlee.ut@gmail.com	Julia Chapman chapmanj@smh.ca
UHN – PMH	Dr. Dale Brown dale.brown@uhn.ca	Natalie Fredericks natalie.fredericks@uhn.ca
TEGH	Dr. Al Chiodo achiodo@rogers.com Dr. Bradley Hubbard brad.hubbard@mail.utoronto.ca	Michael Figueiredo mike.figueiredo@utoronto.ca
TSH	Dr. Deron Brown deronbrown@gmail.com	Michael Figueiredo mike.figueiredo@utoronto.ca
NYGH	Dr. Manish Shah manish.shah@nygh.on.ca Dr. Everton Gooden evertongooden@gmail.com	Michael Figueiredo mike.figueiredo@utoronto.ca
Markham-Stouffville	Dr. Jeff Werger doc@drwerger.ca Dr. Bosco Lui luibosco@outlook.com	Michael Figueiredo mike.figueiredo@utoronto.ca
William Osler – Etobicoke	Dr. David Hacker dhacker@nasalcosmetic.com Dr. Jason Atlas atlas.jason@gmail.com	Michael Figueiredo mike.figueiredo@utoronto.ca
Humber River Regional	Dr. Raewyn Seaberg raewyn.seaberg@mail.utoronto.ca	Michael Figueiredo mike.figueiredo@utoronto.ca

(Otolaryngology – Head & Neck Surgery, continued)

COURSE OVERVIEW

The one-week Otolaryngology block is part of the Anesthesia / Emergency Medicine / Ophthalmology / Otolaryngology rotation. The Otolaryngology portion takes place at the otolaryngology clinics at the University Health Network, Sunnybrook Health Sciences Centre, St. Michael's Hospital, and Mount Sinai Hospital. This year, some students will be completing their week rotation in a community site such as Toronto East General Hospital, North York General Hospital, Humber River Regional Hospital, Markham-Stouffville Hospital, William Osler Hospital (Etobicoke Site), or The Scarborough Hospital. Each hospital develops and distributes a site-specific schedule of teaching sessions and clinical experience in the outpatient clinics. The remainder of the time will be spent on the wards, in the operating room, on seminars and self-directed learning with otoscopy and nasal packing simulators and online cases. The rotation includes a series of online seminars, covering common and important topics in otolaryngology including hearing loss, vertigo, epistaxis, rhinosinusitis, emergencies, and head and neck malignancies. Students are also given a paediatrics otolaryngology seminar, an Otosim seminar, and an audiology lecture at the Hospital for Sick Children.

In clinic, students will be responsible for taking complete otolaryngologic histories and performing relevant head and neck examinations on patients, as well as formulating differential diagnoses and plans of management which will be presented to preceptors.

Attendance in the operating room is available to students and may be arranged at their Academy with the site director at the beginning of their rotation.

Students are not expected to take call, but may do so if interested. Call may be arranged with the otolaryngology residents at each hospital/Academy.

ASSESSMENT

Evaluations are based on performance on a written exam in multiple-choice question format (80%) and preceptor evaluations (20%). The written exam is given on the final day of the combined four-week Otolaryngology / Ophthalmology / Anesthesia block. The written exam is one hour in duration and is separate from the Ophthalmology and Anesthesia examinations. In order to obtain Credit in the Otolaryngology course, students must receive a grade greater than 60% on both the written examination and preceptor evaluation.

Students must also receive a satisfactory Professionalism evaluation (Credit/No Credit) and complete all Case Log requirements (Credit/No Credit) in order to pass the Otolaryngology clerkship.

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

NB: In order to receive credit for Otolaryngology – Head & Neck Surgery, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME*.

COURSE OBJECTIVES

GOALS: By the end of the Otolaryngology clerkship rotation, the clinical clerk will demonstrate the foundation of knowledge of medical conditions involving the ears, nose, neck, and upper aerodigestive tract

(Otolaryngology – Head & Neck Surgery, continued)

necessary for the practice of otolaryngology from the perspective of the primary care physician. In addition, the clinical clerk will demonstrate the skills necessary to perform a thorough head and neck examination.

The Otolarygology clerkship course follows the CanMEDS Guidelines through both didactic and clinical teaching. The course also provides an opportunity to develop Collaborator and Manager skills through interprofessional collaboration with nursing, audiology, and speech-language pathology services.

A. GENERAL COMPETENCIES
By the end of the Otolaryngology clerkship, the clinical clerk will be able to:

[Medical Expert/ Skilled Clinical Decision Maker]
- Demonstrate the ability to evaluate and manage common ear, nose and throat problems presenting to the primary care physician
- Demonstrate the ability to rapidly recognize airway and head and neck oncologic emergencies that require immediate referral to an otolaryngologist
- Demonstrate a focused history and physical examination for patients presenting with common ear, nose and throat symptoms.
- Develop plans for investigations (diagnostic imaging and audiometry) and interpret those investigations.
- Develop a differential diagnosis and management plan.

[Communicator/Doctor-Patient Relationship]
- Communicate effectively and empathetically with patients and their families.
- Demonstrate thorough and clear documentation and charting, with concise recording of pertinent positive and negative findings.
- Demonstrate the ability to council and educate patients and families.
- Demonstrate the ability to present a patient case in a clear, concise and complete manner.

[Collaborator]
- Establish and maintain effective working relationships with colleagues and other health care professionals commonly treating otolaryngology patients (nursing, audiology, speech language pathology).
- Demonstrate knowledge of community resources available to the otolaryngologist.

[Manager]
- Demonstrate appropriate and cost-effective use of investigations and treatments.
- Develop organizational skills and efficiency in managing patients and maintaining patient flow.
- Develop an understanding of the factors contributing to resource issues in the otolaryngology clinic.

[Health Advocate/Community Resources]
- Demonstrate an awareness of the underlying psychosocial and socioeconomic problems that contribute to otolaryngologic problems.
- Identify opportunities for primary and secondary prevention strategies (smoking cessation, alcohol intake, etc.).

[Scholar]
- Access and critically appraise the literature relevant to otolaryngology.
- Understand the many unique learning and teaching opportunities available in otolaryngology.

(Otolaryngology – Head & Neck Surgery, continued)

[Professional]

- Recognize and accept his or her limitations and know when to ask for help.
- Protect information provided by or about patients, keeping it confidential, and divulge it only with the patient's permission except when otherwise required by law.
- Be reliable and responsible in fulfilling obligations.
- Recognize situations where common medical errors may occur in the otolaryngology clinic.

B. EDUCATIONAL CORE OBJECTIVES

I. Skills

By the end of the Otolaryngology Clerkship rotation, the student should be able to demonstrate basic proficiency in the following skills.

Clinical Examination Skills:

1. Head and neck examination
2. Thyroid examination
3. Oral examination
4. Cranial nerve examination
5. Balance testing

Technical Skills:

1. Otoscopy
2. Nasal packing (simulation)

II. Problem based

By the end of the Otolaryngology Clerkship rotation, the student should understand the following concepts and/or be able to demonstrate an approach to patients presenting to the Emergency Department (based on real or simulated encounters) with the following problems or conditions:

1. Hearing Loss
2. Vertigo
3. Nasal Obstruction
4. Epistaxis
5. Neck Mass
6. Stridor

TEXTBOOKS/LEARNING RESOURCES

Required Reading

The Otolaryngology course syllabus, available on the Portal in the Lecture Notes section, contains the core material on which the written examination is based. Clerks must also review the interactive cases posted on the portal site.

Recommended Reading

Textbooks: Head and Neck Surgery – Otolaryngology. Byron J Bailey and Jonas T Johnson eds.

Online resources available through the OTL310 Portal site:

- Baylor College of Medicine: https://mediasrc.bcm.edu/documents/2013/ec/otolaryngology-core-curriculum.pdf
- Otolaryngology Houston: http://www.ghorayeb.com/pictures.html
    - Martindale's The "Virtual" Medical Centre: http://www.martindalecenter.com/http://www.md.utoronto.ca/registration-requirements-requestsMedicalAudio_2_C.html

Also, visit the Canadian Society of Otolaryngology – Head and Neck Surgery website at www.entcanada.org and follow the link for "Undergraduate Education."

COURSE DESCRIPTIONS

Year 3 Core Clinical Rotation: PAEDIATRICS (6 weeks)

Course Director	Course Administrator
Dr. Angela Punnett angela.punnett@sickkids.ca	Mary Antonopoulos mary.antonopoulos@sickkids.ca 416-813-6277

Site Directors/Assistants

Site	Director (Faculty)	Assistant
HSC – Inpatient Medicine	Dr. Hosanna Au hosanna.au@sickkids.ca	Mary Antonopoulos mary.antonopoulos@sickkids.ca
HSC – ER	Dr. Talya Wise talya.wise@sickkids.ca Dr. Claudio Fregonas claudio.fregonas@sickkids.ca	Angie Frisk angie.frisk@sickkids.ca
HRRH	Dr. Joseph Porepa j.porepa@rogers.com	Angella Chamber achambers@hrrh.on.ca
Mackenzie Health	Dr. Jeff Weisbrot jfweisbrot@rogers.com	Mirella Puopolo mpuopolo@yorkcentral.on.ca
NYGH	Dr. Shawna Silver shawna.silver@nygh.on.ca Dr. Clare Hutchinson claremhutchinson@gmail.com	Lisa Lindsay-Rose llrose@nygh.on.ca
RVCH	Dr. Yehuda Mozes mozes@rogers.com	Tobi Odueke todueke@rougevalley.ca
TSH – Birchmount	Dr. Raymond Shu raymond.shu@Rogers.com	Anne Davies adavies@tsh.to
TSH – General	Dr. Peter Azzopardi petera@idirect.com	Brenda McCormick coachnine9@yahoo.ca
SJHC	Dr. Nirit Bernhard nirit.bernhard@utoronto.ca Dr. Sharon Naymark snaymark@yahoo.ca	Axelle Pellerin pellea@stjoe.on.ca
SMH	Dr. Ra Han hanra@smh.ca	Kathleen Hollamby hollambyk@smh.on.ca
TEGH	Dr. Janet Saunderson janet.saunderson@sympatico.ca	Joanne Mount family.tegh@utoronto.ca
THO – Credit Valley Hospital	Dr. Dror Koltin dror.koltin@trilliumhealthpartners.ca	Kay Pantarotto kay.pantarotto@trilliumhealthpartners.ca
THP – Mississauga	Dr. Kate Gwiazda katarzyna.gwiazda@trilliumhealthpartners.ca	Nicole Gaertner nicole.gaertner@trilliumhealthpartners.ca

WOHC – Brampton	Dr. Gaugan Saund gagan30@gmail.com Dr. Anna Selliah pselliah@rogers.com	Carla Dovigo carla.dovigo@williamoslerhs.ca

COURSE OVERVIEW

Students will be exposed to a combination of ambulatory and inpatient paediatrics by placements in **ONE** of the following paediatrics practice settings:

1. A six- week rotation in a Community Hospital – paediatric setting
2. A six- week rotation which will include three weeks at The Hospital for Sick Children on the paediatric wards, and three weeks in an ambulatory Paediatric practice (s).
3. A six-week rotation which will include three weeks at The Hospital for Sick Children on the Paediatric Emergency Department, and three weeks in an ambulatory Paediatric practice (s).

COURSE REQUIREMENTS

a. **Seminars:** Two full days will be devoted to an academic teaching program at SickKids at the start of the six-week rotation. **Attendance is mandatory**. Students placed at MAM sites and WOSH will have a core Neonatal Teaching for one half day at either THP–Credit Valley, or THP–Mississauga Hospital. Students placed at SickKids will have Neonatology Teaching on one full day back. Students at St. Joseph's Health Centre and North York General Hospital receive core teaching on rotation at their own hospital. Students at the other Community Hospitals will join SickKids for the core teaching in the morning (half day) and can return to their sites for the afternoon.

b. **Observed History and Physical:** Students must be observed while doing a complete history and physical examination in order to complete their Paediatric rotation.

c. **CLIPP Cases:** Computer Assisted Learning in Pediatrics Cases (CLIPP) offer students 32 comprehensive interactive cases that cover important core topics (www.med-u.org). **All third year clerks must complete ten cases, of which seven cases are required (cases 1, 11, 16, 17, 21, 23, and 26)** during the six-week rotation.

d. **Case Logs:** Students are provided with the required list of encounters and procedures to be completed during the course. Students must log the required encounters/procedures on MedSIS . At mid-rotation, **it is mandatory** to review progress toward completion of the Case Logs as part of their mid-rotation feedback conversation. The Education Office will review all Case Logs at the end of the rotation for completion.

ASSESSMENT

Student evaluations will be based on:

- Clinical performance assessments (50%),
- Written examination at the end of the rotation (50%)
- Observed history and physical examination (Credit/No Credit)
- Completion of 10 CLIPP cases (Credit/No Credit)
- Professionalism evaluation (Credit/No Credit)
- Case Log requirements (Credit/No Credit)

Students are required to obtain a pass (60%) in both the clinical evaluations and the written examination and to complete the other components in order to obtain a grade of Credit in Paediatrics. Failure to complete the Credit/No Credit components of the course will result in a final grade of "incomplete."

(Paediatrics, continued)

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

NB: In order to receive credit for Paediatrics, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME*.

COURSE OBJECTIVES

[Medical Expert/ Skilled Clinical Decision Maker]
The medical graduate will be able to:

Objective	
1.1	Apply a science-based approach to the diagnosis and management of common clinical problems in childhood and adolescence and demonstrate an empathic approach appropriate to clinical paediatric practice, in relation to children, parents, health professionals, peers, others and self. *See content list below
1.2	Demonstrate a thorough knowledge of normal growth and development of infants, children and adolescents; their interaction with common paediatric clinical problems and their management, including the immunizations and anticipatory guidance necessary for the promotion of well-being and optimal development, and the prevention of infections and unintentional injury; as well as the recognition and management of life-threatening illness in these age groups.
1.3	Demonstrate:
a	The ability to obtain and document a comprehensive and focused medical and psychosocial history from a caregiver and a child/adolescent regarding the health and illness of infants, children and adolescents.
b	The ability to perform and document an opportunistic, comprehensive and focused physical and developmental examinations of infants, children and adolescent, as the situation requires.
c	The ability to select and interpret commonly-employed laboratory tests, including tests of blood and other body fluids, various imaging modalities, and other specific tests in infants, children and adolescents.
d	The ability to synthesize the data derived from the history, physical and laboratory assessments and formulate a problem-oriented approach to the infant's, child's or adolescent's health problems.
e	An approach to the common health problems of infants, children and adolescents including their treatment and ongoing management.
1.4	Retrieve, analyze, and synthesize relevant and current data and literature, using information technologies and library resources, to supplement information provided in syllabus and seminars in order to address clinical paediatric problems.
1.5	Apply an approach based on evidence and clinical expertise integrated with family values to the diagnosis and management of common paediatric clinical problems.

(Paediatrics, Continued)

***Content [1.1]:** Students are expected to know the approach, signs and symptoms, differential diagnosis, and management of the following common paediatric presentations. These are derived from the Canadian Undergraduate Paediatric Directors CANUC PAEDS curriculum. See www.pupdoc.ca for supporting resources.

Core Clinical Presentations	Key Conditions
Paediatric Health Supervision	Nutrition, Growth, Hypertension, Active living, Mental health, Development, Immunizations, Anticipatory guidance, Injury Prevention, Vision/hearing, Dental health, Discipline/parenting, Sleep issues, SIDS, Crying/colic, Sexual development/health, Adolescent (HEADDSSS), Social/home context
Newborn	Birth trauma, Depressed newborn, Prematurity, Respiratory distress, Sepsis, Hypothermia, Hypoglycemia, Dysmorphic features (T21, FAS, FASD), Congenital infections, SGA/LGA, Neonatal abstinence syndrome, Abnormal newborn screen, Abnormal exam (developmental dysplasia of the hip, undescended testes, ambiguous genitalia, absent red reflex), Vitamin K deficiency, Hypotonia
Neonatal Jaundice	Physiologic, Breastfeeding/Breastmilk, Biliary atresia, Hemolytic anemia, Kernicterus
Fever	UTI, Meningitis, Occult bacteremia/sepsis, Viral illness, Kawasaki disease
Dehydration	Mild/mod/severe, hypo/hypernatremia, DKA
Respiratory Distress/Cough	Asthma, Croup, Bronchiolitis, Pneumonia, Pertussis, Epiglottitis, Tracheitis, CF, CHF, Anaphylaxis, Foreign Body
Developmental and Behavioural Problems	Global delay, Delay in 1 domain, Specific patterns (ASD, ADHD), School refusal, Common issues (temper tantrums, sleep problems)
Growth Problems	Tall stature, Short stature, FTT, Anorexia, Obesity
Inadequately Explained Injury	Physical abuse, Neglect, Sexual abuse, Domestic violence
Abdominal Pain	Constipation, Functional, IBD, Infection (gastro, UTI), Instussusception, HSP, Gyne/GU
Vomiting	GER/GERD, Pyloric stenosis, Malrotation/volvulus, Intussusception, Intestinal atresia, Gastro, Meningitis, Pyelonephritis, Increased ICP
Diarrhea	Gastro, Celiac disease, HUS, IBD, Toddler's diarrhea, CF
Altered Level of Consciousness	Poisoning/intoxication, Seizure, Head injury, Meningoencephalitis, Hypoglycemia, Metabolic ds
Seizure/Paroxysmal Event	Febrile vs non-febrile, General vs focal, Status epilepticus, ALTE, Syncope, Breath-holding spell
Headache	Migraine, Brain tumour, Increased ICP, Concussion/trauma
Murmur	Innocent, CHD, Acyanotic (VSD, PDA, CoA)
Rash	Eczema, Viral exanthems, Diaper rashes, Seborrheic dermatitis, Impetigo, Cellulitis, Scarlet fever, Urticaria, Drug eruption, Scabies, Acne
Bruising and Bleeding	ITP, HSP, Haemophilia, Meningococcemia
Pallor/Anemia	Iron deficiency, Haemoglobinopathies, Hemolysis, Leukemia
Lymphadenopathy	Reactive, Benign, Cervical adenitis, Mononucleosis, Leukemia/Lymphoma
Limp/Extremity Pain	Growing pains, Trauma, Osteomyelitis, Septic arthritis, JIA, Reactive arthritis (RF, post-infectious, transient synovitis), Legg-Calve-Perthes, SCFE, Osgood-Schlatter, Malignancy (bone tumour, leukemia)
Urinary Complaints (polyuria, frequency, dysuria, hematuria)	UTI/VUR, Post-infectious GN, IgA nephropathy, DM, Wilm's tumour, Enuresis
Edema	Nephritic/Nephrotic syndromes, Cow's milk protein allergy, Renal failure
Sore Ear	Otitis media, Otitis externa
Sore Throat/Sore Mouth	Pharyngitis, Peritonsillar abscess, Dental disease, Retropharyngeal abscess, Stomatitis, Thrush
Sore Eye/Red Eye	Periorbital cellulitis, Orbital cellulitis, Conjunctivitis

(Paediatrics, continued)

[Communicator/Doctor-Patient Relationship]
The medical graduate will be able to:

Objective	
2.1	Communicate effectively with infants, children and adolescents, their families and the community, through verbal, written and other non-verbal means of communication, demonstrating an understanding of the influence of family, community, society and their values on the infant's/ child's/ adolescent's health and respecting the differences in developmental stages, beliefs and backgrounds among patients and students.
2.2	Establish professional relationships with infants, children and adolescents, their families (when appropriate) and community that demonstrate the attitudes, professional behaviours and ethics appropriate for clinical paediatric practice, in relation to children, parents, health professionals, peers, others and self and respecting the confidentiality inherent in these relationships..
2.3	Deliver information to the child and adolescent and his/her family (as appropriate) in a humane manner, and in such a way that it is easily understood, encourages discussion and promotes the young person's and family's participation in decision-making keeping in mind the developmental evolution of young person's capacity to consent.
2.4	Gather information, negotiate a common agenda, and develop and interpret a treatment plan, while considering the influence of factors such as the infant's/ child's /adolescent's age and gender, and the family's and community's ethnicity, cultural and spiritual values, socioeconomic background, medical conditions, and communication challenges.
2.5	Demonstrate the importance of cooperation and communication among health professionals in the care of the infant, child and adolescent so as to maximize the benefits to patient care and outcomes, and minimize the risk of errors.

[Collaborator]
The medical graduate will be able to:

Objective	
3.1	Demonstrate an understanding of the role of others in providing optimal interdisciplinary care to infants, children, adolescents and their families in research and educational tasks.
3.2	Synthesize the data derived from the history, physical and laboratory assessments and formulate a problem-oriented approach to the infant's, child's or adolescent's presenting problems, in collaboration with the youth, family and members of the interdisciplinary team.
3.3	Participate in interdisciplinary team discussions, demonstrating the ability to accept, consider and respect the opinions of the youth, the family and other team members, while contributing an appropriate level of expertise to the care of infants, children and adolescents.

(Paediatrics, continued)

[Manager]
The medical graduate will be able to:

Objective	
4.1	Participate effectively in health care organizations, ranging from individual clinical practices to academic health sciences centres and the child health network, exerting a positive influence on clinical practice and policy-making in one's professional community.
4.2	Describe the governance, structure, financing, and operation of the health care system, its facilities and networks and how these influences patient care, research and educational activities at a local, provincial, regional, and national level.
4.3	Apply a broad base of information to the care of infants, children, adolescents and their families in ambulatory care, hospitals and other health care settings.
4.4	Demonstrate an awareness of the need for wise stewardship of available resources for child health care with a focus on preventive health care.
4.5	Participate actively in team building function by demonstrating the necessary attitudes, professional behaviours and ethics.
4.6	Apply population-based approaches to child health care and illness prevention as appropriate.
4.7	Participate in evaluation and outcome of patient care and educational programs.
4.8	Participate in innovative approaches to clinical child health care at an appropriate level of expertise.

[Health Advocate/Community Resources]
The medical graduate will be able to:

Objective	
5.1	Apply the determinants of health and principles of disease prevention and behaviour change to child health care responsibilities and broader patient care initiatives based on an understanding of the normal growth and development of infants, children and adolescents and their common health problems.
5.2	Be aware of diverse characteristics and needs of different cultural groups and specific populations, i.e., immigrants and minority or marginalized groups
5.3	Respect diversity, be willing to work through systems, such as child welfare, collaborate with other members of the health care team, and accept appropriate responsibility for the health of infants, children, adolescents and their families.
5.4	Participate at the appropriate level of expertise in community activities directed at improving health of infants, children, adolescents and their families, utilizing the best evidence, effective teamwork and communication skills.
5.5	Demonstrate an understanding of infants, children and adolescents and their families and apply that understanding to achieve a physician/ patient relationship that is likely to identify and implement individual health and disease management strategies on an individual basis.
5.6	Achieve a sufficient fund of knowledge and an ability to appraise the available knowledge critically so as to challenge the limitations of clinical orthodoxy or identify threats to population health and advocate for their amelioration in a reasoned manner.

(Paediatrics, continued)

[Scholar]
The medical graduate will be able to contribute to the following scholarly activities:

Objective	
6.1	Research: Develop an awareness of how research questions are formulated and how protocols are elaborated to address them. Understand the unique aspects of research with infants, children and adolescents and the ethical issues it raises.
6.2	Education:
a	Demonstrate the ability to engage in life-long, self-directed learning and critical inquiry.
b	Compare and contrast the diverse learning approaches of peers, patients and others, in order to interact and collaborate effectively.
c	Assist in teaching others and facilitating learning where appropriate
d	Understand the importance of being mentors to those less experienced members of the health care teams
6.3	Creative Professional Activity: The medical graduate will be able to describe the importance of, and contribute to professional innovations, creative excellence, and exemplary professional practice. The graduate will also demonstrate leadership potential by participating in the development of professional practices in child health, such as practice guidelines or health policy development, and participation in professional organizations at the appropriate level of expertise.

[Professional]
The medical graduate will be able to:

Objective	
7.1	Recognize and accept the need for self-care and personal development as necessary to fulfilling one's professional obligations and leadership role.
7.2	Demonstrate altruism, honesty and integrity and respect in all interactions with infants, children, adolescents and their families, colleagues, and others with whom physicians must interact in their professional lives.
7.3	Demonstrate compassionate treatment of infants, children and adolescents and their families and respect for their privacy and dignity and beliefs
7.4	Be reliable and responsible in fulfilling obligations.
7.5	Recognize and accept the limitations in his/her knowledge and clinical skills, and demonstrate a commitment to continuously improve his/her knowledge, ability and skills and leadership, always striving for excellence.
7.6	Describe and abide by the University/Faculty codes of professional conduct, and the relevant professional regulatory requirements concerning medical practice.
7.7	Describe the threats to medical professionalism posed by the conflicts of interest which can occur in the practice of medicine.
7.8	Demonstrate a sound grasp of the theories and principles governing ethical decision-making, the major ethical dilemmas in the care of infants, children and adolescents, and an approach to resolving these.
7.9	Demonstrates an understanding of the principles and practice of law as they apply to the practice of paediatrics.
7.10	Develop the capacity to recognize common medical errors, report them to the required bodies, and discuss them appropriately with infants, children and adolescents and their families.

(Paediatrics, continued)

REQUIRED RESOURCES

1. SickKids/UofT Paediatric **Syllabus** 2015-2016 – available on the Portal.
2. Sickkids/UofT Paeds **On-The-Go Handbook** – available on the Portal and provided to students during course.

RECOMMENDED TEXTBOOKS/LEARNING RESOURCES

1. ***Nelson Textbook of Pediatrics - 19th Edition**. Kliegman, Robert - W.B.Stanton, St Geme, Schor & Behrman – Elsevier/Saunders 2011.
2. ***Rudolph's Pediatrics – 22nd Edition.** Rudolph, Rudolph, Lister, First & Gershon. McGraw Hill Professional, 2011.

***** Both of the above textbooks have condensed soft-cover versions (Essentials)

3. **Pediatric Clinical Skills – 4th Edition.** Goldbloom, R.B. Philadelphia, PA: Saunders/Elsevier, 2011
4. **Red Book: 2012 Report of the Committee on Infectious Diseases – Pickering LK, ed., 29th Edition.** American Academy of Pediatrics, 2012.

www.pupdoc.ca	Educational resources to support the PUPDOC Curriculum
www.pedsinreview.org	Pediatrics in review journal. Excellent review articles that are easy to understand
www.cps.ca	Canadian Paediatric Society website. Position statements of CPS on important topics. Access to CPS journal-"Paediatrics and Child Health. Information sheets for parents.
www.aap.org	Website of American Academy of Pediatrics
www.med-u.org.	Computer Assisted Learning in Pediatrics Cases (CLIPP). 32 comprehensive interactive cases that cover important core topics.
www.comsep.org	Website of Council on Medical School Education in Pediatrics. They have a video on their website on the pediatric physical exam under the "Multimedia Teaching Resources" section
www.pedscases.com	Free interactive website created for medical students by medical students. Provides an opportunity for active self-directed learning in Paediatrics.
www.aboutkidshealth.ca	Evidence-based, peer-reviewed information for parents regarding a wide variety of paediatric issues. Topics can be printed and distributed to families.
www.kidsnewtocanada.ca	*Caring for Kids New to Canada*. Co-editors Drs. Tony Barozzino of St. Michael's Hospital and Chuck Hui of the Children's Hospital of Eastern Ontario.

COURSE DESCRIPTIONS

Year 3 Core Clinical Rotation: PSYCHIATRY (6 weeks)

Course Director	Course Administrator
Dr. Raed Hawa raed.hawa@uhn.ca	undergrad.psych@utoronto.ca 416-979-6838

Site Directors/Assistants

Site	Director (Faculty)	Assistant
CAMH	Dr. Chloe Leon chloe.leon@camh.ca	Zach Fraser zach.fraser@camh.ca
MSH	Dr. Ellen Margolese emargolese@mtsinai.on.ca	Jeanette Villapando jvillapando@mtsinai.on.ca
OS (Ontario Shores)	Dr. Hoa Pham phamh@ontarioshores.ca	Marsha Bryan bryanma@ontarioshores.ca
SMH	Dr. Kien Dang dangk@smh.ca	Jeff Loudermilk loudermilkj@smh.ca
SHSC	Dr. Eileen LaCroix eileen.lacroix@sunnybrook.ca	Nancy Gribben nancy.gribben@sunnybrook.ca
THP	Dr. Ariel Shafro ariel.shafro@trilliumhealthpartners.ca Dr. Mandeep Singh mandeep.singh@trilliumhealthpartners.ca	Jennifer Reid jennifer.reid@trilliumhealthpartners.ca Keith Leung keith.leung@trilliumhealthpartners.ca
UHN	Dr. Patricia Colton patricia.colton@uhn.ca	Tammy Cadue tammy.cadue@uhn.ca

COURSE OVERVIEW

Didactic teaching is centralized and occurs during the first three days of Week 1 of the rotation. All didactic teaching is held at a central location on or near the University campus and presented to the students from all sites for each rotation. Interviewing patients and/or standardized patients with anxiety, mood, psychosis, cognitive, and substance disorders with focus on symptomatology, diagnosis, and basic treatment principles is an integral component of the course.

The basic clinical experience with direct patient care responsibility will take place in a variety of settings including inpatient units, the clerk supportive psychotherapy clinic, ambulatory clinics, consultation liaison teams, emergency settings and psychotherapy clinic. Each clerk will be assigned a supervisor who will ensure that the clerk obtains the suitable clinical experiences necessary to fulfill the objectives. It is mandatory for clerks to keep up-to-date records through the Case Logs function on MedSIS to ensure clinical objectives are met.

All clerks will have exposure to psychiatric emergencies mostly by taking night and weekend on-call not exceeding 1 in 5, until 11 PM.

(Psychiatry, continued)

Clinical experience with children and families will take place during two half-days (per rotation) at each Academy or in a child psychiatry setting under the direct supervision of a child psychiatrist.

The following seminars will be held weekly at each hospital site:

1. An Interviewing Skills seminar designed to meet the interviewing skills objectives through practice with feedback.
2. A Personality Disorders course generally consisting of sessions in which clerks have a chance to practice interviewing patients or standardized patients. The course introduces diagnostic and interviewing skills related to difficult patient interactions. Most sessions are conducted by residents in psychiatry.

NOTE: Students are responsible for covering all of the material taught centrally, the locally delivered Personality Disorders course, the course syllabi with specific objectives, and the required textbook (see below).

ASSESSMENT

1. Global Evaluation Form (GEF), MiniACE/CBD – 40%
At mid rotation, each clerk will be given qualitative feedback regarding their progress to date in writing by their Primary Supervisors. At the end of the rotation, each clinical supervisor will also complete a standardized quantitative Global Evaluation through MedSIS for the Clerk he/she worked with. Clerks are also required to submit at least six Mini-ACE/CBD evaluation forms to their Primary Supervisors from six observed interviews they have had during their rotation. These forms are formative only, but collectively will contribute to the mark assigned on the Global Evaluation by the Primary Supervisor, completed online through MedSIS.

2. Clerkship Professionalism Evaluation Form – Credit/No Credit
Clerks are evaluated on their professionalism through MedSIS. The Primary Supervisor will complete standardized Professionalism form for the clerk with whom he/she worked. Lapses such as delinquency, missed call, and unexplained absences will be documented and sent to the Undergraduate Medical Education office.

3. Narrative Reflective Competence – 10%
The Narrative Medicine assignment will be handed in to the original Primary Supervisor the day after the written/OSCE exams in Week 6 so it can be marked and included in the final grade. It is worth 10% of the overall final grade, and it is a mandatory component of evaluation.

4. OSCE & Written Exam – 50%
In Week 6, clerks will participate in a comprehensive examination that consists of a written exam (25%) and an Objective Structured Clinical Examination (OSCE) (25%).

Clerks must pass each of the OSCE, the written exam, and the clinical assessment (Global Evaluation). Clerks who fail the rotation (i.e. receive a global rating of "Not Competent" on two OSCE stations or receive below 60% on either the OSCE or written exams or the Global Evaluation) will be presented to the Board of Examiners for consideration of remediation, which may include up to a four-week remediation rotation.

5. Case Log Requirements – Credit/No Credit
Students must log all requirements for the Psychiatry clerkship in MedSIS to obtain credit.

(Psychiatry, continued)

For details, including grading regulations, see the Psychiatry webpage on, the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

NB: In order to receive credit for Psychiatry, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME*.

COURSE OBJECTIVES

GOALS: The Psychiatry Clerkship is designed to consolidate the knowledge, skills, and attitudes acquired in the Preclerkship and, relying heavily on clinical experience, develop clinical competence in approaching common and important presenting problems in psychiatry. The Psychiatry clerkship course follows the CanMEDS Guidelines through both didactic and clinical teaching during the six-week rotation.

A. GENERAL COMPETENCIES

By the end of the Psychiatry clerkship, the clinical clerk will be able to:

[Medical Expert/Skilled Clinical Decision Maker]

- Demonstrate the ability to assess and manage common psychiatric presentations, including assessment of suicidal and homicidal risk. (The relevant disorders are listed below under "Educational Objectives/Problem-based.")
- Conduct a focused, relevant, empathic, and accurate clinical history. (Further details related to this are found below under "Educational Core Objectives/Skills".)
- Conduct a relevant mental status examination including cognitive testing.
- Establish a working differential diagnosis.
- Outline a management plan that incorporates biological, psychological, and social investigations and interventions where appropriate.

[Communicator/Doctor-Patient Relationship]

- Communicate effectively and empathetically with patients and their families.
- Demonstrate a thorough and clear documentation and charting, with concise recording of pertinent findings.
- Demonstrate the ability to communicate and educate patients with mental illness and their families.
- Demonstrate the ability to present a clinical case in a clear, concise, and complete manner.

[Collaborator]

- Establish and maintain effective working relationships with colleagues and other health care professionals.
- Discuss the roles of the various providers of care and the role of allied health professionals.
- Demonstrate knowledge of community resources available to help patients with mental illness and their families if outpatient supports are needed.
- Respect the role of the patient's primary care physician by soliciting input in the assessment, in the development of the care plan, and in follow-up.

(Psychiatry, continued)

[Manager]
- Demonstrate appropriate and cost-effective use of investigations and treatments.
- Develop organizational skills and efficiency in managing patients.
- Develop an understanding of the factors contributing to resource issues in the care of patients with mental illness.

[Health Advocate/Community Resources]
- Demonstrate an awareness of the underlying psychosocial and socioeconomic problems that may precipitate a mental health contact.
- Discuss the role of the psychiatrist in the health care system and how it relates to other hospital and community health services.
- Demonstrate an understanding of legal and ethical issues surrounding the care of patients with mental illness.

[Scholar]
- Access and critically appraise the literature relevant to psychiatric care, management, and treatment.
- Understand the many unique learning and teaching opportunities available in Psychiatry.

[Professional]
- Be respectful of interactions with patients and their families
- Recognize the legal and ethical issues inherent in interactions with patients
- Appreciate the cultural and social stigma towards psychiatric patients
- Demonstrate professionalism as per professionalism form
- Respect confidentiality in emergency and non-emergency settings.
- Be aware of deficiencies in knowledge or skills and implement the necessary steps to improve in these areas

B. EDUCATIONAL CORE OBJECTIVES:

I. Skills:
By the end of the Psychiatry clerkship rotation, the clinical clerk should be able to demonstrate basic proficiency in the following skills. Competencies to complete these skills may be acquired during clinical encounters, core lectures, interviewing skills seminar, personality disorders sessions, being on call, or on other rotations.

Interviewing Skills:
As the psychiatric interview is the foremost diagnostic and therapeutic tool, special emphasis will be placed on this skill. A clerk should be able to:

1. Assess the danger of a clinical situation and respond to reduce the danger to an acceptable level
2. Understand and use a variety of questioning techniques to elicit information (open-ended, closed ended) in an interview
3. Practice awareness of one's own emotional responses to patients to further one's understanding of a patient
4. Conduct an interview with a child and a family with the above goals
5. Conduct a brief focused interview in an interval of 10-15 minutes, characteristic of an assessment in family practice

(Psychiatry, continued)

Psychiatric Skills:
1. Assessment of capacity
2. Assessment of violence/agitation
3. Assessment of suicide risk
4. Legal certification forms
5. Mini mental status examination – MMSE and/or MOCA

II. Problem-based
By the end of the Psychiatry clerkship rotation, the clinical clerk should be able to demonstrate an approach to patients presenting with the following problems (including differential diagnosis, investigations and initial management):

- Mood Disorders
- Psychotic Disorders
- Personality Disorders
- Anxiety Disorders
- Neurocognitive Disorders
- Substance Use Disorders
- Eating Disorders
- Somatic Symptom Disorders
- Suicidal and/or homicidal risk
- Consideration for psychotherapy treatment
- Consideration for psychopharmacological treatment

TEXTBOOKS/LEARNING RESOURCES

Course Textbook:
- Black and Andreasen, Introductory Textbook of Psychiatry – 6th Edition, 2014
  (chapters 1-3, 5-9, 15-17, 20-21)

Suggested Readings:
- Diagnostic and Statistical Manual of Mental Disorders, 5th Edition, American Psychiatric Association, 2013.
- Zimmerman, Interview Guide for Evaluating DSM-5 Psychiatric Disorders and the Mental Status Examination, Psych Products Press, 2013

COURSE DESCRIPTIONS

Year 3 Core Clinical Rotation: SURGERY (8 weeks)

Course Director	Course Administrator
Dr. George Christakis george.christakis@sunnybrook.ca	Shibu Thomas shibu.thomas@utoronto.ca 416-978-6431

Site Directors/Assistants

Site	Director (Faculty)	Assistant
UHN	Dr. Fred Gentili fred.gentili@uhn.ca	Liz Doherty elizabeth.doherty@uhn.ca
SMH	Dr. Robert Stewart rob.stewart@utoronto.ca	Michelle Dominey domineym@smh.ca
SHSC	Dr. Fuad Moussa fuad.moussa@sunnybrook.ca	Ashley Rosen rosenas@smh.ca
MSH	Dr. Helen MacRae hmacrae@mtsinai.on.ca	Firdeza Mustafovski-Vujaklija fmustafovski@mtsinai.on.ca
HSC	Dr. Walid Farhat walid.farhat@sickkids.ca	Lisa Abreu lisa.abreu@sickkids.ca
HRRH	Dr. John Hagen jhagen@hrrh.on.ca	Angella Chambers achambers@hrrh.on.ca
SJHC	Dr. Christopher Compeau compec@stjoe.on.ca	Erika Unell unelle@stjoe.on.ca
TEGH	Dr. Paul Bernick (Med. Director) bernickp@sympatico.ca	Joanne Mount j.mount@utoronto.ca
WCH	Dr. Fuad Moussa fuad.moussa@sunnybrook.ca	Ashley Rosen rosenas@smh.ca
THP – CVH	Dr. Abdollah Behzadi abdollah.behzadi@trilliumhealthpartners.ca	Yvonne McVeigh yvonne.mcveigh@trilliumhealthpartners.ca
THP – MH	Dr. Christiane Werneck chriswerneck@gmail.com	Yvonne McVeigh yvonne.mcveigh@trilliumhealthpartners.ca

COURSE OVERVIEW

The Surgical Clerkship is an eight-week rotation that is sub-divided into four sections.

1. All students commence the rotation with a one-week centralized seminar and surgical skills program called "A Crash Course in Surgery." This takes place in the University of Toronto Surgical Skills Centre at Mount Sinai Hospital. It provides an excellent opportunity for orientation and introduction to fundamental skills and seminars.
2. **Following the Crash Course, students then perform** three sub-rotations: One three-week sub-rotation and two two-week sub-rotations. The three-week sub-rotation must be in General Surgery and may occur in the beginning of the rotation or at the end of the rotation. **Students have input into their choice of sub-rotation specialty and the site Surgical Education offices always do their best to accommodate.**
3. **General Surgery** is the lone mandatory sub-rotation. The three-week sub-rotations must be in General Surgery.

(Surgery, continued)

Each student is assigned to a surgeon preceptor for each of their three sub-rotations. The student is expected to contribute to the admissions and daily patient care and to attend the operating room and the clinic /office of their preceptor or team.

On Call: The on-call schedule is one night in four for students. This provides the opportunity to see patients in the ER as well as taking call to the ward and OR, where appropriate. Please see the complete Department of Surgery Call Policy on the Surgical Clerkship website on the Portal (https://portal.utoronto.ca)

ASSESSMENT

- NBME Shelf Examination – multiple-choice format (33.3%)
- Performance-based Structured Oral Examination – 4 stations (33.3%)
- Clinical performance evaluation, based on an assessment of the student's clinical work during the rotation (33.3%)
- Professionalism evaluation (Credit/No Credit)
- Case Log requirements (Credit/No Credit)

Note: A score of greater than 60% on each of the Clinical Performance Evaluation, the Structured Oral Exam, and the NBME Shelf Exam must be achieved in order to pass the rotation. Students must achieve credit in each component of the assessment in order to achieve credit in the course.

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

NB: In order to receive credit for Surgery, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME*.

COURSE OBJECTIVES

At the conclusion of the Surgical Clerkship, students should be able to:

[Medical Expert/Skilled Clinical Decision Maker]

- Describe the relevant aspects of *common and/or life-threatening surgical illnesses*.
- Provide an approach to the diagnosis of the *major presenting problems* encountered in surgery.
- Understand appropriate use and interpretation of *diagnostic tests* relevant to surgical decision-making.
- Make use of evidence-based medicine (EBM) so they can better diagnose and manage patient problems.
- Make use of the basic science principles relevant to surgery, as learned during the Preclerkship and expanded on during Clerkship, in order to more rationally diagnose and manage the various factors contributing to the patient's illness.
- Describe the properties of *medical and surgical* therapies, in terms of their indications, contraindications, mechanisms of action, side effects, and monitoring.

(Surgery, continued)

[Communicator/Doctor-Patient Relationship]
- Communicate effectively and empathetically with patients and their families.
- Demonstrate thorough and clear documentation and charting, with concise recording of pertinent positive and negative findings.
- Demonstrate the ability to obtain informed consent for surgical procedures
- Demonstrate the ability to council and educate patients and families in the inpatient as well as outpatient environments.
- Provide clear discharge instructions for patients and ensure appropriate follow-up care.

[Collaborator]
- Establish and maintain effective working relationships with colleagues and other health care professionals including nurses, physiotherapists, social workers, and other allied health care workers.
- Demonstrate an understanding of the concept of triage and prioritization of care in management of multiple patients simultaneously.
- Demonstrate knowledge of community resources available to the surgical patients on an outpatient basis.
- Understand the critical role of the patient's primary care physician.

[Manager]
- Demonstrate appropriate and cost-effective use of investigations including medical imaging and laboratory studies.
- Develop an understanding of the factors contributing to resource issues in the operating room and outpatient environments.

[Health Advocate/Community Resources]
- Demonstrate an awareness of the underlying psychosocial and socioeconomic problems that may complicate discharge from hospital following elective or emergent surgery.
- Discuss the role of the surgeon in the health care system and how it relates to other hospital and community health services.
- Demonstrate an understanding of legal and ethical issues surrounding surgical care.
- Identify opportunities for primary prevention in the outpatient environment and council patients accordingly.

[Scholar]
- Access and critically appraise the literature relevant to surgical care.
- Understand the many unique learning and teaching opportunities available on the outpatient and inpatient surgical service.

[Professional]
- Recognize and accept his or her limitations and know when to ask for help.
- Protect information provided by or about patients, keeping it confidential, and divulge it only with the patient's permission except when otherwise required by law.
- Be reliable and responsible in fulfilling obligations.
- Recognize situations where common medical errors may occur in the outpatient and inpatient environment.

(Surgery, continued)

B. EDUCATIONAL CORE OBJECTIVES
By the conclusion of the Surgical clerkship, students are expected to have had the following experiences:

Encounters

1. Acute abdomen
2. Post-op fever
3. Post-op electrolyte management
4. Post-op urine output management
5. Trauma
6. Tumour/ malignancy
7. Wound care

Procedures

1. Casting/ splinting (perform individually)
2. Chest tube insertion (observe procedure)
3. Laparotomy (perform with assistance/ assist)
4. Suturing/ knot tying (perform with assistance/ assist)
5. Wound closure/ dressing (perform with assistance/ assist)

COURSE DESCRIPTIONS

Year 3: PORTFOLIO

Director	Administrator
Dr. Nirit Bernhard portfolio.director@utoronto.ca Dr. Susanna Talarico (Associate Course Director) susanna.talarico@sickkids.ca	Melissa Casco portfolio.ume@utoronto.ca 416-978-7327

COURSE OVERVIEW

UME Portfolio in third year, PFL 310Y, has been designed to facilitate students' professional development through guided reflection, focused on all their activities in the clinical phase of the UME-MD journey and how they relate to the six "Intrinsic" (i.e. non-Medical Expert) CanMEDS roles of Collaborator, Communicator, Manager, Health Advocate, Scholar, and Professional.

This course has two main components: the "Process" component and the "Final Portfolio Submission" component.

Process Component
The Process Component of the course consists of one large-group introductory session, and seven mandatory small-group meetings throughout the academic year. The students are given protected time away from their rotations to attend the small-group meetings. Students will meet in small groups of up to seven or eight, with one resident (Junior Academy Scholar) and one faculty member (Academy Scholar) to support them in reflecting on their experiences in the clinical setting, and the resulting effects on their professional development.

Each meeting will have a theme. The first meeting develops the students' ability to tell a story and decide upon its significance for the CanMEDS roles. The remaining meetings are each devoted to one of the six CanMEDS roles described above. For each meeting, students must bring a story of themselves in that role, which they present to their peers, followed by appreciative feedback and discussion. The purpose of the discussion is to help each student develop their reflections upon the story they told.

Small-group meetings take place in the Academies, with the capability for a limited number of students to connect from remote sites either by telephone or web connection when on a distant rotation. Students are expected to attend all meetings. Students unable to attend a meeting are expected to notify their Academy Scholar AND submit a Petition for Consideration for missing a mandatory academic event.

For the meeting schedule, please refer to the Portfolio course handbook or to the course portal.

Final Portfolio Submission

This course takes the view that committing a reflection to written or other recorded form encourages it to be more complete and critical, and enhances its meaning to the student. For this reason, students must develop their stories into reflections that express the meaning of the story to the student, and how they integrate their CanMEDS roles into their professional identity.

(Portfolio Year 3, continued)

By the end of the course, students will submit their final versions of their six reflections for final assessment. Each student's Final Portfolio will contain six sections, each one a reflection centered on one of the CanMEDS roles discussed. Creation of these six sections constitutes the development of the student's reflections to their greatest extent, in terms of the student's analysis of the personal meaning of the experience described, and their personalized understanding of the CanMEDS role in light of that experience. Students submit their reflections throughout the year for feedback. If they are deemed satisfactory (see Assessment, below), then no further work on that section is required. If improvements are requested, the student must resubmit the section.

For the submission deadlines, please refer to the Portfolio course handbook or to the course portal.

ASSESSMENT

Students are assessed both for the Process Component and for the Final Portfolio Submission. Students must pass each component in order to achieve Credit for the entire Course. Each component is considered equal in importance.

Process Component

Students will be assessed by their Academy Scholar after each of the group meetings. A simple assessment rubric will provide feedback on students' preparedness, story presentation, attentiveness to their colleagues, and feedback on others' stories. Students must be rated as "Adequate" or "Superior" on all four dimensions, in at least five of the seven meetings, in order to pass the Process Component. Feedback on how to improve will be given for any areas marked "Insufficient." Achievement of a pass on the Process Component will comprise 50% of the student's standing for the entire course.

Final Portfolio Submission

The Final Portfolio is submitted electronically in stages. Each Portfolio is assessed anonymously by a different Academy Scholar and Junior Academy Scholar from those in the student's Portfolio Group.

Satisfactory performance on each Portfolio Section requires:

1. A story of the student's personal involvement with the role, based upon a real clinical experience;

AND

2. Evidence of reflection on the meaning of the story to the student;

AND

3. Evidence of a "personalized" integration of the CanMEDS role in the student's story.

In order to achieve a pass on the Final Portfolio Submission, students must submit a total of six Portfolio Sections, and at least five of the six Sections must be rated Satisfactory.

Students receiving "Unsatisfactory" on any of their Sections will be able to improve their standing by acting on the feedback received, and showing their Academy Scholar that they have done so. The deadline for acting on the feedback is July 21, 2016. Students who have acted on their initial Sections' feedback need not resubmit them in August.

Achievement of a pass on the Process Component will comprise 50% of the student's standing for the entire course.

(Portfolio Year 3, continued)

For more information on Assessment, please refer to the Portfolio course handbook. For grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

NB: In order to receive credit for Portfolio Year 3, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME*.

COURSE OBJECTIVES

GOAL: The goal of the course is to promote greater professional self-awareness, as students enter the clinical world, specifically related to the six "Intrinsic" (i.e. non-Medical Expert) CanMEDS roles of Collaborator, Communicator, Manager, Health Advocate, Scholar, and Professional, using the specific skill of reflection.

A. GENERAL OBJECTIVES:

At the end of this course, each student will:

- Be able to reflect on the personal meaning of a clinical experience, in terms of how it illustrates the student's developing professional identity;
- Demonstrate understanding of the CanMEDS roles, and how they relate to each other in clinical examples;
- Be able to describe their own personalized development in each of the CanMEDS roles, as illustrated by their own experiences;
- Be able to create reflective writing or other materials to demonstrate and document their professional development in the CanMEDS roles to faculty and peers;
- Provide appreciative and developmental feedback to peers on their reflections;
- Be able to analyze his/her own learning needs as they look ahead to further training, e.g. residency.

B. COMPETENCIES:

The student will:

[Professional]

- Display respectful and supportive behaviour towards the stories, and feelings, of their classmates within the Portfolio Group meetings.
- Safeguard the confidentiality of all discussions within Portfolio Groups, meaning that no information divulged there may be discussed or disclosed outside the meeting, except when creating a Final Portfolio, which shall itself be confidential (see below).
- Create reflective writing or other materials for the Final Portfolio that demonstrate respect for the privacy of patients, colleagues, and other individuals, while still telling an authentic story that is personally meaningful to the student.
- Be able to identify clinical experiences which illustrate aspects of professional behaviour, whether through observed lapses or through positive role modelling.
- Reflect on the impact of these experiences on the student's understanding of himself/herself as a Professional.

(Portfolio Year 3, continued)

[Communicator]

- Be able to convey a story of himself/herself in a clinical situation, related to the CanMEDS Role under discussion, clearly and with appropriate emphasis on its meaning.
- Be able to provide appreciative feedback to peers about their stories within the Portfolio Groups.
- Be able to develop a written reflection on their story which shows evidence of the personal meaning of the experience and its relation to one or more of the CanMEDS roles.
- Be able to identify clinical experiences in which communication was crucial to a positive or adverse outcome for a patient or team.
- Reflect on the impact of these experiences on the student's understanding of himself/herself in the role of Communicator.

[Collaborator]

- Work within his/her Portfolio group to enable the participation of all members, and to enhance the climate for learning for the entire group.
- Be able to identify clinical experiences in which effective collaboration between members of a health care team was either instrumental in achieving a good patient outcome, or was deficient and contributed to a negative patient outcome.
- Reflect on the impact of these experiences on the student's understanding of himself/herself in the role of Collaborator.

[Health Advocate]

- Identify situations where patient outcomes may have been less than optimal as a result of inequities and/or system issues, or where advocacy prevented such a suboptimal outcome.
- Reflect upon his/her personal role in advocating for patient care, including impact upon self, patients and their significant others, as well as other members of the interprofessional and health care teams.

[Manager]

- Critique aspects of personal practice, interprofessional teamwork or system change, based upon specific clinical experiences related to the Manager role.
- Reflect on how he/she has developed as a Manager in light of these experiences.

[Scholar]

- Develop and use reflection skills in the analysis of the personal meaning of the stories described, while creating their Portfolio Sections.
- Act on feedback to improve their Portfolio reflections as required.
- Identify a clinical example where aspects of self-directed learning, teaching others, appraising evidence, or developing new knowledge were important for improving practice or care.
- Reflect on how these clinical experiences have influenced the student's conception of himself/herself as a Scholar.

TEXTBOOKS/LEARNING RESOURCES

There are no required reading materials for this course. Exemplars of satisfactory reflections will be provided to students. Students may find the following recommended reading helpful in developing their reflections:

Aronson L. (2011). Twelve tips for teaching reflection at all levels of medical education. Med Teach; 33: 200-205

COURSE DESCRIPTIONS

Year 3: INTEGRATED OSCE (iOSCE)

Director	Chief Examiner	Administrator
Dr. Stacey Bernstein stacey.bernstein@sickkids.ca	Dr. Brian Simmons brian.simmons@utoronto.ca	Samantha Fortunato samantha.fortunato@utoronto.ca 416-946-5208

COURSE DESCRIPTION

The integrated OSCE is a transcripted course and constitutes a summative assessment all components of which must be passed which is required for graduation and has the following format:

1. Interim iOSCE: held after first 24 weeks of Year 3 Clerkship: 6 (six) OSCE stations linked to the curriculum covered to date – first 24 week block of:
   - Family Medicine / Dermatology / Obstetrics & Gynaecology / Paediatrics / Psychiatry

   or
   - Medicine / Surgery / Otolaryngology / Ophthalmology / Anesthesia / Emergency Medicine.

2. Final iOSCE: after 48 weeks of Year 3 Clerkship: 10 (ten) OSCE stations – 6 (six) stations linked to the previous 24 weeks of curriculum and 4 (four) integrated stations reflecting the entire third-year curriculum.
   - Medicine/Surgery/Otolaryngology/Ophthalmology/Anesthesia/Emergency Medicine

   or
   - Family Medicine/Dermatology/Obstetrics & Gynaecology/ Paediatrics /Psychiatry

COURSE OBJECTIVES

The goals of the integrated Objective Structured Clinical Examination (iOSCE) are to:

1. Assess the medical students knowledge base in a performance setting (the OSCE) on the 48 weeks (each 24 week block) of 3rd year clerkship.
2. Assess the medical student's progress towards integrating the 3rd year clerkship and application of knowledge as medical graduate ready for postgraduate training.
3. To identify students in academic difficulty not related to (for example) communication, collaboration and professionalism.

ASSESSMENT

a. Overview of Assessment

Students will be assessed according to the following CanMEDS competencies:

[Medical Expert/Skilled Clinical Decision Maker]

- History taking and data collection: acquires chronologic, medically logical description of pertinent events; acquires information in sufficient breadth and depth to permit clear definition of patient's problem(s)
- Physical examination: elicits physical findings in an efficient logical sequence and demonstrates appropriate technique, sensitive to patient's comfort and modesty, explains actions to the patient
- Information synthesis and problem formulation: organizes pertinent data in a logical manner and synthesizes the data into an integrated concept that defines the problem; discriminates important from unimportant information and reaches a reasonable diagnosis based on sound clinical knowledge
- Diagnostic and management plan: able to generate diagnostic and therapeutic management plan

(Integrated OSCE, continued)

[Collaborator]
- Allied health professionals: understands and utilizes the expertise of other health care professionals

[Communicator]
- Counselling: explains rationale for test/treatment approach; counsels regarding management; considers risks and benefits; establishes rapport
- Verbal expression: demonstrates fluency in verbal communications e.g. grammar, vocabulary, tone, volume
- Non-verbal expression: demonstrates responsiveness; demonstrates appropriate non-verbal communications e.g. eye contact, gesture, posture, use of silence

[Professional/Ethical Behaviour]
- Responds to patient's needs in a timely and respectful manner, demonstrating attitudes and professional behaviours appropriate to the clinical situation e.g. inappropriate draping, inappropriate touching, abusive communication

b. Details of Assessment:

[Interim iOSCE]
- Constitutes a summative assessment
- 6 (six) OSCE stations linked to the curriculum covered to date – first 24 week block
- Passing grade (meets expectations) 60%
- If not reaching the minimal passing grade, students will be offered extra work to help improve performance on final iOSCE
- The score on this examination will be a total of 20% of the overall iOSCE mark

[Final iOSCE]
- Constitutes a summative assessment
- 10 (ten) OSCE stations – 6 (six) stations linked to the second 24 week block of the curriculum and four integrated station reflecting the entire third-year curriculum.
- Passing grade (meets expectations) 60%
- The scores on this examination will be a total of 80% of the overall iOSCE mark

[Remedial iOSCE]
- Students not reaching a total pass of 60% on the iOSCE (interim + final) will be offered remediation and will be required to perform to the required standard on a remedial examination to be held after the completion of Year 3 and prior to the end of Year 4

[Final standing]
- Marks from both the interim and final iOSCE will be used to calculate the final iOSCE grade

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

COURSE DESCRIPTIONS

Year 4: ELECTIVES

Director	Administrator (Electives Officer)
Dr. Seetha Radhakrishnan seetha.radhakrishnan@sickkids.ca	Eva Lagan eva.lagan@utoronto.ca 416-978-0416

COURSE OBJECTIVES

The goal of the Electives program in UME is to provide students with the opportunity to explore career possibilities, to gain experience in aspects of medicine beyond the core curriculum, and to study subjects in greater depth. Knowledge, skills, and attitudes are further developed in a clinical context selected by students.

Fourth-year students are expected to set up their individualized Elective experiences at the University of Toronto or at other recognized sites of practice, such as other medical schools across Canada as well as in northern and non-urban practices. Students may also undertake Global Health Electives in accordance with University of Toronto regulations.

The student and the supervisor are responsible for ensuring a clear, mutual understanding of the learning activities designed to meet the objectives of the Elective.

By the end of the Electives block, the student should have a greater depth of knowledge and appreciation for chosen specialties and the ways in which these specialties tie into their future career choices.

COURSE OVERVIEW

The Elective course spans a total of 14 weeks in duration, of which 12 weeks count towards curricular time and two weeks are designated as vacation. The UME Electives Office strongly encourages students to take the allotted vacation time during their Electives block. However, should a student choose to pursue 13 or 14 weeks of Elective time, they are required to register these additional weeks.

The minimum number of weeks for each Elective is two. One week electives will be considered in specific circumstances, proposals will be reviewed by the Electives Director according to established guidelines. There is no formal maximum number of weeks for an Elective; however an Elective greater than six weeks in duration would need to be discussed with the Electives Director.

In accordance with the AFMC guidelines for Electives, students are expected to complete Elective experiences in a minimum of three of the CaRMS first-level entry residency programs. The requirement for three disciplines may be achieved through any combination of Electives and the selective components of the Transition to Residency course.

For more information on CaRMS first-level entry programs, please visit the following site: https://www.carms.ca.

(Electives, continued)

ASSESSMENT

Students are evaluated by their supervisors in each Elective using the Clerkship Clinical Evaluation and Professionalism Evaluation forms. Students who receive evaluations of Unsatisfactory or Below Expectations will be required to meet with the Electives Director and may be required to do extra work or remediation.

Failure to meet the professionalism standards may result in failure of the Elective.

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

COURSE DESCRIPTIONS

Year 4 Transition Course: TRANSITION TO RESIDENCY (TTR)

Director	Administrator
Dr. Seetha Radhakrishnan (Co-Director – Selectives) Seetha.radhakrishnan@sickkids.ca Dr. Tatiana Freire-Lizama (Co-Director- Campus-Based Teaching) Freire-LizamaT@smh.ca	Ezhil Mohanraj ttr.ume@utoronto.ca 416-978-2763

COURSE OVERVIEW

This course consists of the final 14 weeks of the MD training program, and is designed to bring together and build upon many of the concepts students have learned about functioning as doctors. The course has two main themes:

1. Understanding the health care needs individual members of diverse groups within the Canadian population, and
2. Learning to use the health care system to meet those needs.

There are three components to this course.

1. The two Central Weeks, one in December and one in February, contain both independent and classroom based learning activities about concepts such as complex care, poverty, health of Indigenous peoples, medical-legal and licensure issues, complementary medicine, fitness to drive, and a number of other topics. These topics are meant to build upon students' basic knowledge of clinical practice from their Core clerkship rotations.

2. The Selectives are three clinical placements over nine weeks, and promote workplace-based learning, where students have increased (graded) responsibility under supervision. They allow the students to bring together many different areas of knowledge and skill in patient care, as they get ready for the increased responsibility of their PGY1 programs. Selectives will also serve as a resource for students to complete specific self-directed learning activities for course credit, in addition to an evaluation performed by their supervisor(s). Students must do at least one of the Selectives in a community setting, and at least one in either a Department of Medicine or Department of Surgery-sponsored selective. It is possible that a single Selective can satisfy both requirements. Students may use two of their Selectives to satisfy the graduation requirement for 3 CaRMS direct-entry electives in their UME program.

3. The Fusion period will bring the students back together for review of previously learned clinical material in preparation for the MCCQE Part 1.

(Transition to Residency, continued)

ASSESSMENT

Students MUST PASS all of the four components below. While the four components are weighted, as shown below, for the purpose of calculating overall course score, and the minimum course score to pass is 60%, students cannot compensate for poor performance on one component by better performance on another.

1. Selectives (Weight: 40%)
   In order to pass the Selectives,
   - Students must be successful in all three professionalism forms

   AND
   - Students must at least achieve a rating of MEETS EXPECTATIONS on all elements of all three clinical performance evaluation forms. (Items scored any lower will be scrutinized by the course director, and may lead to extra work.)

   AND
   - The three Selectives forms will be weighted according to the number of weeks for each Selective, and their scores averaged. The minimum average score to pass is 60%
2. Health Equity Assignment (Weight: 25%)
   - The minimum score to pass is 60%.
3. Health Systems Assignment (Weight: 25%)
   - The minimum score to pass is 60%.
4. Campus Weeks Quizzes and Case Assignments (Weight: 10%)
   - Students must take all end-of-day quizzes in both Campus Weeks. However, the scores in the quizzes are formative and will not count towards the mark in the course.
   - The score for the case assignment component is calculated as a simple average of all the case assignment scores. The minimum score to pass the case assignments is 60%.

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

NB: In order to receive credit for Transition to Residency, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME*.

COURSE OBJECTIVES

At the end of the Transition to Residency course, students will be able to:

[Medical Expert/Skilled Decision Maker]

- Describe and recognize the health issues experienced by the following groups of people:
  - Indigenous peoples of Canada
  - People with disabilities
  - People with occupational injury and disease
  - People from the LGBT community
  - People newly arrived in Canada (Immigrants and Refugees)
  - Elderly people

(Transition to Residency, continued)

  - People living with addictions
  - People at end of life
  - People living in poverty
  - People requiring complex community care
  - Medical students and residents
- Describe commonly used herbal medications, their indications, efficacy, complications, and potential interactions with prescribed medications
- Describe the efficacy and use of homeopathy, acupuncture, naturopathy, and Mindfulness Based Stress Reduction alongside standard allopathic practice
- Identify common conditions affecting driving privileges, and describe the measures necessary to assess patients' ability to drive who have these conditions
- Develop strategies for patients at end of life to intervene with appropriate palliative care
- Employ strategies to maintain their own health and wellness as they move into the world of postgraduate training.

[Communicator/Doctor-Patient Relationship]

- Describe an approach to communication with members of Indigenous communities about health care issues
- Use a strategy to inquire about patients' use of non-standard treatments
- Employ a strategy to communicate both with providers and with patients about medical errors and associated harms
- Understand the communication needs of patients with physical disadvantages
- Demonstrate an approach to interviewing patients with various types of addictions
- Use an approach to interviewing patients with a variety of gender orientations
- Demonstrate an approach to communicating with patients about loss of driving privileges
- Demonstrate an approach to communication with patients and families at the end of life
- Understand an approach to communicating sensitively and appropriately with people who have varying culturally based understandings of health, illness, and health care.

[Collaborator]

- Discuss an approach to incorporating the recommendations of alternative or traditional practitioners into the care of their patients
- Describe the relationship between front line practitioners and public health professionals in the identification and management of emerging public health problems (eg. exposures, epidemics)
- Practice effective interprofessional communication in response to, and in prevention of, medical error
- Incorporate the recommendations of rehabilitation professionals into the care of patients with physical disabilities
- Use the skills of a broad range of health care practitioners to improve the care of patients at end of life
- Employ best practices in transferring information between physicians, and with other professionals, at times of transfer of care, to maximize patient safety
- Understand and demonstrate an approach to interprofessional conflict over patient care issues
- Use the principles of negotiation in leadership and cooperative work with others.

(Transition to Residency, continued)

[Health Advocate/Community Resources]

- Identify the specific needs of populations within their practices, and the varying needs of individuals within those populations
- Connect people to resources according to their needs, taking into account cultural, social, and personal preferences, and local factors influencing feasibility
- Demonstrate how they apply disease prevention principles in everyday clinical practice
- Demonstrate the appropriate use of government reports and forms to improve patients' health, safety, and access to legally entitled benefits
- Address the barriers to care of the elderly
- Engage in practices within their institutional environment to improve patient safety
- Demonstrate the principles of physician advocacy specifically for patients of low socioeconomic status.
- Create a critical analysis of a real life health equity issue, and create recommendations for change

[Manager]

- Engage in constructive management with other professionals towards optimizing the complex system they work in
- Demonstrate an approach to efficiency in diverse clinical settings
- Understand the issues involved in managing the health human resources of Ontario
- Show critical analysis of a real life health systems issue, and create recommendations for change
- Show awareness of how management of personal time and stress can influence personal and professional well-being

[Scholar]

- Describe the idea of "evidence" as it may or may not apply to traditional or alternative health care practices
- Describe how to use the published and "grey" literature to understand emerging public health scenarios and problems
- Describe an approach to continuous self guided learning while in practice

[Professional]

- Describe their legal and professional obligations with regards to reporting patients with conditions impacting their ability to drive
- Describe their legal and professional obligations with regards to aiding patients entitled to financial support as a result of workplace or other injury
- Describe the common medical-legal issues which are seen in residency, including best practices to avoid medical-legal difficulty
- Demonstrate professional behaviour in all health care environments, with regard to comportment, responsibility for completing tasks assigned, reporting errors and omissions, due regard for patients' and colleagues' well being, and other aspects of professionalism
- Describe an approach to the balancing of professional obligations and personal wellness in maintaining a sustainable work life in residency.

LEARNING MATERIALS

Required and recommended learning materials will be provided to students throughout the course.

COURSE DESCRIPTIONS

Year 4: PORTFOLIO

Director	Administrator
Dr. Nirit Bernhard portfolio.director@utoronto.ca Dr. Susanna Talarico (Associate Course Director) susanna.talarico@sickkids.ca	Melissa Casco portfolio.ume@utoronto.ca 416-978-7327

COURSE OVERVIEW

UME Portfolio in fourth year, PFL 410Y, takes the introductory experiences of the third-year Portfolio Course and builds upon them to help students assess, discuss, and reflect on their overall evolution into newly graduating physicians.

This course has two main components: the "Process" component and the "Final Portfolio Submission" component.

Process Component

The Process Component of the course consists of three mandatory small group meetings scheduled around other organized central teaching during the academic year. Students will meet in small groups of up to seven or eight, with one resident (Junior Academy Scholar) and one faculty member (Academy Scholar) to support them in reflecting on their experiences in the clinical setting, and the resulting effects on their professional development. Students will continue with the same group of peers that they worked with in third year, and for the most part will work with the same Academy Scholars.

Each of the three meetings will have a theme. Students are asked to prepare for the meetings by developing a story of themselves in a clinical situation, which depicts the theme of the meeting. Small-group meetings will take place in the Academies. Students are expected to attend all meetings. Students unable to attend a meeting are expected to notify their Academy Scholar AND submit a Petition for Consideration for missing a mandatory academic event.

For the meeting schedule, please refer to the Portfolio course handbook or to the course portal.

Final Portfolio Submission

This course takes the view that committing a reflection to written or other recorded form encourages it to be more complete and critical, and enhances its meaning for the student.

By the end of the course, students will submit their final versions of their reflections for final assessment. Each student's portfolio will contain three sections, each one a reflection centered on one of the meeting themes discussed. Creation of these three sections constitutes the development of the student's reflections to their greatest extent, in terms of the student's analysis of the personal meaning of the experience described, and their personalized understanding of their evolving professional role in light of that experience. Students will submit their reflections throughout the year for feedback. If they are deemed satisfactory (see Assessment below), then no further work on that section is required. If improvements are requested, the student must resubmit the section.

(Portfolio Year 4, continued)

The Portfolio section themes are as follows:

First section theme: "Where I Have Been"
Second section theme: "The Physician I aspire to be"
Final section theme: "Where I am Now"

For the submission deadlines, please refer to the Portfolio course handbook or to the course portal.

ASSESSMENT
Students are assessed both for the Process Component and for the Final Portfolio Submission. Students must pass each component in order to achieve credit for the entire course. Each component is considered equal in importance.

Process Component
Students will be assessed by their Academy Scholar after each of the group meetings. A simple assessment rubric will provide feedback on students' preparedness, story presentation, attentiveness to their colleagues, and feedback on others' stories. Students must be rated as "Adequate" or "Superior" on all four dimensions, in at least two of the three meetings, in order to pass the Process Component. Feedback on how to improve will be given for any areas marked "Insufficient". Achievement of a pass on the Process Component will have equal status with their result in the Final Portfolio Submission.

Final Portfolio Submission
The Final Portfolio will be submitted electronically in stages. Each Portfolio will be assessed anonymously by a different Academy Scholar and Junior Academy Scholar from those in the student's Portfolio Group.

Satisfactory assessment for each Portfolio Section requires evidence that the student showed:
1. Critical reflection on the meaning of the story to them; AND
2. Analysis of the personal relevance of the pertinent theme for the story as told.

In order to achieve a pass on the Final Portfolio Submission, all three of the submitted Sections must be rated "Satisfactory." Students receiving "Unsatisfactory" on any of their initial two Sections will be able to improve their standing by acting on the feedback received, and showing their Academy Scholar that they have done so.

Students will be offered the opportunity, on a voluntary basis, to select one of their Reflections from either third or fourth year Portfolio for publication in a text for the incoming first-year and third-year classes.

For details, including grading regulations, see the course website on the U of T portal (http://portal.utoronto.ca – registered users only), and the program policies related to examination and assessment (http://www.md.utoronto.ca/policies).

NB: In order to receive credit for Portfolio Year 4, students must also complete the required evaluations of teachers and of the course, as specified in the course outline, in conformity with the *Principles and Expectations for Student Completion of Teacher and Course Evaluations in UME*.

(Portfolio Year 4, continued)

COURSE OBJECTIVES

Goal: The goal of the course is to build upon students' work in PFL310Y, in that they will use critical reflection to assess their progress as professionals in the final year of their undergraduate medical education, and to forecast their needs as they enter postgraduate training, with regards to the complexities of the CanMEDS roles.

A. General Objectives: At the end of this course, the student will:

- Be able to reflect critically on their professional trajectory over their undergraduate medical education.
- Demonstrate fluency with the CanMEDS roles, in particular the ways in which they inter-relate and overlap.
- Be able to describe their ongoing personalization and enactment of the CanMEDS roles, as illustrated by recent clinical experiences.
- Be able to write clearly about their global professional development.
- Provide appreciative and developmental feedback to peers on their reflections.
- Forecast their future needs for development within their planned postgraduate and practice careers.
- Contribute their perspective on medical training to the newest members of the incoming class.

B. Competencies:
The student will:

[Professional]

- Display respectful and supportive behaviour towards the stories, and feelings, of their classmates within the Portfolio Group meetings.
- Safeguard the confidentiality of all discussions within Portfolio Groups, meaning that no information divulged there may be discussed or disclosed outside the meeting, except when creating a Final Portfolio, which shall itself be confidential (see below).
- Create reflective writing or other materials for the Final Portfolio that demonstrate respect for the privacy of patients, colleagues, and other individuals, while still telling an authentic story that is personally meaningful to the student.
- Be able to critique his/her own development as a Professional.
- Be able to forecast his/her learning needs as a Professional.

[Communicator]

- Convey a story of himself/herself in a clinical situation that relates to the topic under discussion. The story will be conveyed clearly and with appropriate emphasis on its meaning, in both verbal form and written (or otherwise recorded) form.
- Provide appreciative feedback to peers in reflection upon the stories presented within the Portfolio Groups.
- Be able to critique his/her own development as a Communicator.
- Be able to forecast his/her learning needs as a Communicator.

[Collaborator]

- Work well with peers and promote participation of all members to enhance the climate for learning for the entire group.
- Be able to critique his/her own development as a Collaborator.
- Be able to forecast his/her learning needs as a Collaborator.

(Portfolio Year 4, continued)

[Health Advocate]
- Be able to critique his/her own development as a Health Advocate.
- Be able to forecast his/her learning needs as a Health Advocate.

[Manager]
- Be able to critique his/her own development as a Manager.
- Be able to forecast his/her learning needs as a Manager.

[Scholar]
- Develop and use critical reflection skills in the analysis of the importance of the stories described, while creating their Portfolio Sections (see below).
- Act on feedback to improve their Portfolio as required.
- Reflect on how they can use their experiences to guide or mentor more junior learners.
- Be able to critique his/her own development as a Scholar.
- Be able to forecast his/her learning needs as a Scholar.

TEXTBOOKS/LEARNING RESOURCES

There are no required reading materials for this course. Exemplars of satisfactory reflections will be provided to students. Students may find the following recommended reading helpful in developing their reflections:

Aronson L. (2011). Twelve tips for teaching reflection at all levels of medical education. Med Teach; 33: 200-205.

Overview of the Interprofessional Education (IPE) Curriculum and Requirements

Interprofessional education (IPE) is defined as learning with, from, and about other health professional students. The IPE curriculum was developed through collaboration between the Faculty of Medicine and ten other health science programs at the University of Toronto, under the auspices of the Centre for Interprofessional Education.

For more information, please visit:
http://ipe.utoronto.ca/

University of Toronto medical students are required to complete the IPE curriculum, which consists of the following components:

- Four core learning activities
  Core activities constitute part of the regular curriculum for all medical students.
  - Year 1: Teamwork: Your Future in Health learning activity in October of first year
  - Year 2: Interfaculty Pain Curriculum during Mechanisms, Manifestations, & Management of Disease
  - Year 2: Conflict in Interprofessional Life
  - IPE Component in Clinical Placement, which contains three components:
    - Shadowing (completed during TTC)
    - Team rounds (completed through Portfolio)
    - Team education (completed through Portfolio)

- Elective Learning Activities
  There are a large variety of these available each academic year. Details are available on each student's Portal page, under UT Interprofessional Education (IPE) Program/Curriculum. Elective learning activities vary in content and depth of immersion. These are classified into "colours" dependent on the depth of immersion and competencies, where introductory (exposure) activities are 'red' and the more immersive activities are 'orange' and 'green'. The 'red' and 'orange' activities are weighted as 1 credit and the 'green' are weighted as 2 credits. Medical students who entered UME prior to 2012 are required to complete a total of 2 elective learning activities (i.e., 2 'red' or 1 of the 'orange' or 'green'). For students who entered in fall 2012-2014, a total of four elective learning activities are required. Students who entered in fall 2015 must complete a total of 6 elective learning activities. The credits can be a combination of any colour. All students are required to complete the IPE curriculum by the end of the four-year UME program.

  For details on elective learning activities offered within the IPE Curriculum, please see:
  http://ipe.utoronto.ca/curriculum/learning-activities-calendar/learning-activities-catalogue

(Overview of the Interprofessional Education (IPE) Curriculum and Requirements, continued)

Interprofessional Certificates of Distinction

Over the years, students and faculty have expressed an interest in longitudinal interprofessional relationships and learning experiences. As well, they have identified the value of engaging in enhanced opportunities within specific themes. Although the development of Interprofessional Education (IPE) competencies are embedded in the uniprofessional-professional programs and recognized by the Centre for Interprofessional Education, additional formalized learning activities will provide opportunities to enhance collaborative learning within particular areas of interest. The Interprofessional Certificates of Distinction are not a requisite component of the IPE Curriculum but are available to any student who is interested in broadening their exposure to IPE.

Upon completion of identified requirements within a themed certificate program, students will receive a Certificate of Distinction from the Centre for Interprofessional Education, University of Toronto.

Certificate of Distinction Core Requirements

In order to receive a Certificate of Distinction, students must complete an introductory module or activity, a specified number of elective learning activities (recognized by the Centre for Interprofessional Education), a leadership/professionalism module or activity, and a group project with an outreach component.

Certificates of Distinction Areas of Interest

1. Interprofessional Management of Chronic Health Challenges

The Interprofessional Management of Chronic Health Challenges Certificate Program provides a deeper understanding of the complexity of health issues and best practices for addressing concerns in an interprofessional manner. When students learn with, from and about each other they are able to collaboratively determine how this new perspective will enhance team relationships and patient/client-centred care.

2. Interprofessional Health, Arts & Humanities

The Interprofessional Education Curriculum/Program, in conjunction with the Health, Arts and Humanities Program (www.health-humanties.com) at the University of Toronto advances a deeper understanding of health illness, suffering, disability and the provision of healthcare by creating a community of scholars in the arts, humanities and clinical sciences.

A growing international literature has demonstrated that health professionals who seek out exposure to the humanities and arts-based learning improve their capacity to think critically and bring enhanced sensitivity, curiosity and creativity to their work with patients/clients (Peterkin, 2008). They will learn to challenge personal assumptions and biases, to stretch their worldview and to become more reflective practitioners.

Humanities scholars can be enriched by an ongoing dialogue with colleagues from clinical disciplines and by having direct access to clinical/teaching settings which link to their areas of study or critical theory. They will be invited to help shape the discourse around perceptions of health and illness in our learning community and society at large. Although the central focus of the Program is on increasing the role of humanities in the provision of good patient/client care, another goal will be to widen its focus significantly by understanding health care in the context of the humanities.

3. Interprofessional Quality and Safety

The Interprofessional Quality and Safety Certificate Program advances a deeper understanding of quality process improvement, optimization of safe practices, prevention of adverse errors, team problem-solving and decision-making to provide client centred collaborative care by creating a community of scholars in the quality, safety and clinical sciences at the University of Toronto.

Research focused on team interactions indicates that interdisciplinary teams often fall short of the expectations of their members, clinical leaders, and managers (Pearson, 2001). The result is a practice environment that too often exhibits a lack of cooperation with disciplines defending their authority at the expense of the overall system - a process characterized as sub – optimization - resulting in patient suffering due to the lack of care continuity, redundant and wasteful processes, excess costs, and miscommunication (Larson, 1999; Institute of Medicine, 2001).

Most process improvement, measurement, or design activities necessitate interdisciplinary teamwork (Weingart, 1996). In most cases, clinicians cannot function on their own independent of a system. The complex needs of patient/clients with chronic health challenges, in critical acute care, in geriatric settings, or in care at the end of life necessitate smooth team functioning. Health professionals must be educated in a "systems thinking" environment where they think of themselves as part of larger cross-functional teams dedicated to meeting the needs of patients/clients.

All health professionals will benefit from a study of quality and safety. When students learn with, from and about each other's professions in the context of quality and safety, they are able to collaboratively determine how this new perspective will enhance team relationships and patient/client-centred care.

For further information on the IPE Curriculum, please see:
http://ipe.utoronto.ca/interprofessional-education-curriculum

For general inquiries, please contact us at ipe.utoronto@utoronto.ca

Learning Modalities

The following descriptions capture the major types of learning modalities employed in the UME curriculum. They are presented in roughly chronological order as they are employed over the course of the program.

LECTURES

Lectures delivered to the entire class are a core activity in the Preclerkship curriculum. There are generally between ten and twelve hours of lectures per week during both Year 1 and Year 2. Each lecture is scheduled for 50 minutes, beginning at ten minutes after the hour and concluding on the hour.

Outside of the Preclerkship, lectures are also included in some clinical clerkship rotations. In this case, the lecture is given multiple times throughout the year to each group of students on a given rotation.

Typically, the individual responsible for delivering a lecture is also responsible for preparing the lecture materials. The course director or other faculty leader in the course should provide direction to the lecturer on the general content and expectations of the session.

Most lecturers use PowerPoint to present their lecture materials. In the Preclerkship lecture theatres, a digital "document camera" is also available, and can be used in the same way as an overhead projector. Lecture materials must be submitted to the course director or administrator at least ten business days beforehand to allow time for technical testing, online posting, and printing (if applicable).

Every lecturer must include a declaration of potential conflicts of interest due to commercial or professional interests. Declarations of no conflict should also be made. UME requires that these declarations be included as the second slide in any PowerPoint presentation, using a template supplied by the program.

All lectures are digitally recorded using video-capture and are posted online on the secure portal for later review by students, provided permission is granted by the lecturer. The slides used during each lecture are included in the posted materials.

Videoconferencing is used throughout the curriculum. Students at both the St. George (Toronto) and UTM (Mississauga) campuses view and participate interactively in lectures. Approximately 20% of Preclerkship lectures feature a live lecturer in Mississauga, linked by video to the Medical Sciences Building (MSB) on the St. George campus, while in the remainder of lectures, the lecturer is located at the MSB.

SEMINARS (PRECLERKSHIP & CLERKSHIP)

These are case-based sessions delivered by content experts to groups varying in size from ten to thirty students in the Preclerkship, or as low as two or three students in the Clerkship. Seminars are characterized by a significant emphasis on the approach to clinical problems, often based on a clinical case. During seminars, students are encouraged to answer questions about the problems. They are also given the opportunity to ask questions about material covered in other parts of the specific course. Seminar materials for the students and additional information in the form of a confidential tutor guide are typically prepared by the course committee or an appropriate teacher, and provided to all seminar leaders to ensure a consistent student experience.

CPPH-1 TUTORIALS

In the CPPH-1 course, these sessions address a variety of issues related to community health, and are co-led by a physician and an allied health professional.

FIELD EXPERIENCES DURING CPPH-1

Major learning opportunities in CPPH-1 involve students taking part in field experiences to city schools, on accompanied home care visits to the clients of Community Care Access Centres (CCACs), and to a variety of community-based organizations. These visits allow students to observe and reflect on population health, on the social and physical determinates of health, and to gain a perspective on how community-based initiatives can improve the health of populations.

GROSS ANATOMY LABORATORIES

Gross anatomy instruction is a core component of the first-year curriculum. Students take part in approximately 39 gross anatomy dissection laboratories in the Structure & Function course, in groups of eight. Four groups of eight are assigned to a single laboratory, and they are supervised by a demonstrator from the Division of Anatomy. In addition to teaching anatomy, the dissection component of STF provides students with an early opportunity for collaborative group work and peer teaching, since students are frequently expected to divide the dissection tasks and then present their findings to the other members of the group.

NEW CURRICULUM MODEL – PHASE 2 (STF & MMMD)

A case-based integrative approach will be introduced during weeks 12 to 14 of the STF course and weeks 1 to 3 of the MMMD course. In STF, basic principles of thoracic anatomy, cardiovascular and respiratory physiology will be studied in the context of patients with hypertension, chronic obstructive pulmonary disease, and congestive heart failure. Content will be integrated throughout the module with concurrent ASCM-1 and CPPH-1 sessions. The approach will include a combination of online resources for fundamental anatomical and physiological content, summary lectures, labs, and small group sessions led by residents in Family Medicine and by faculty members from a variety of clinical departments. Students will be introduced to concepts of reflective practice, integrated learning, and the use of formative evaluation to direct learning in a mid-module scholar session. There will be compulsory weekly formative evaluations. The summative assessment of the content from weeks 12 to 14 will be included in the examinations of week 17. In MMMD, students will learn about the concepts of the mechanisms of disease in relation to cell pathology, environmental pathology, and neoplasia, together with teaching in pharmacology, medical imaging, ethics and professionalism, related clinical skills, clinical contexts and relevant community and population and psychosocial material. Material will be organized around the currently used PBL cases – The Dead Zone, Runaway Train, and Red Sky at Morning. Students will participate in a scholar session mid-module. There will be compulsory weekly formative evaluations. The summative assessment of the content from weeks 1 to 3 will be included in the examinations of week 9.

Prior to a typical week in the case-based curriculum, each student will be provided with links to sources of fundamental information required for the following weeks. Students are expected to review this material prior to the start of the week. The lectures, small group sessions, and formative assessments will assume that students have reviewed the online content.

PROBLEM-BASED LEARNING (PBL)

PBL tutorials are a significant part of the Metabolism and Nutrition (MNU) and Brain and Behaviour (BRB) courses in Year 1, and the Mechanisms, Manifestations and Management of Disease (MMMD) course in Year 2. PBL tutorials are delivered in groups of six to nine students, and are facilitated by a faculty tutor. Each PBL tutorial centres around a fictional clinical case designed to stimulate student learning on the topic of the week in the course.

Groups meet twice for each case. The purpose of the first session is to introduce the case and define the learning issues. At this first tutorial, the case is distributed to the students "one page at a time" in order to simulate the process of real-life data-gathering. As each page is distributed, the students define what they

(Problem-Based Learning (PBL), continued)

understand about the case, their hypotheses about diagnosis and management, and their learning requirements to better understand the case. In so doing, they generate a set of learning objectives in the form of questions. The "homework" after the first session is then to research these questions on their own (or in groups). At the second tutorial, the students share with their peers and their tutor what they have learned since the first session, and in particular how they went about trying to answer the questions: what sources they used, how they found them, and the strengths and drawbacks of each.

Throughout the PBL tutorial process, emphasis is placed on both the "Medical Expert" and also other categories of objectives, in order to encourage students to appreciate the variety of roles physicians need to play and the range of psychosocial contributors to illness. They also consider ethical and organizational aspects of clinical practice.

PBL cases are developed and refined centrally, and all tutors are provided with both the learning materials to be given to the students and a confidential set of tutor materials that are used to prompt discussion and ensure that there is general uniformity among the groups with regard to the learning objectives that are attained by the end of the second tutorial. Where possible, PBL tutors are assigned to cases whose content is relatively close to their clinical domain of interest.

CLINICAL SKILLS INSTRUCTION IN THE PRECLERKSHIP (ASCM)

For one half-day per week throughout the first and second years of the program, in the ASCM-1 and ASCM-2 courses, students learn the clinical skills of interviewing, history-taking, and physical examination, as well as how to interpret the data in a diagnostic formulation, and then document and present it. Instruction takes place in groups of five to six students, with one tutor (or occasionally two tutors) per group. The tutors are responsible for teaching the basic clinical skills to the students, who often initially practice the skills on each other or sometimes on "standardized patients." The students are assigned particular tasks in each tutorial, and the tutors are responsible for observing the students' performance and correcting any deficits. The key learning activity of each tutorial involves students interviewing and examining patients. They receive feedback from their tutors throughout the courses, based on both direct observation and submitted written work. For more details, please see the course descriptions under Program → Preclerkship

FAMILY MEDICINE CLINICAL EXPERIENCES IN FMLE

In the second-year Family Medicine Longitudinal Experience (FMLE) course, students attend six half-day family medicine clinics in the community, observe the family doctor, and practice the history-taking and physical examination skills that they have acquired in ASCM. Placements are one-on-one, which enables students to spend time with their preceptor's patients longitudinally during clinic and to receive focused feedback. For details, please see the course description under Program → Preclerkship → FMLE

CLINICAL SUPERVISION IN THE CLERKSHIP

Students in Years 3 and 4 spend the majority of their time in clinical settings, under the supervision of experienced physicians from a variety of disciplines. Supervision of clerks entails a number of activities, including observing their interactions with patients, demonstrating new skills to them, discussing all issues related to patient care, hearing reports from the student, appraising his/her level of knowledge and clinical abilities, and serving as an example and mentor in the provision of care. Individual rotations will naturally focus on teaching skills that are particularly relevant to their specific domain. Constant formative feedback to the student is paramount at this stage of their training, to ensure that they progress as expected.

(Clinical Supervision in the Clerkship, continued)

All seven CanMEDS roles (see p. 11) take on new meaning for the student who is assuming clinical responsibilities for the first time, and supervisors should ensure that they are familiar with the expectations in this framework for the program as a whole and for the specific course in which they are teaching.

In cases where residents, allied health professionals, or others are also involved in clinical clerk supervision, the primary faculty supervisor holds overall responsibility for the education and well-being of the student, and should ensure that the other team members understand all expectations related to the student.

PORTFOLIO TUTORIALS

These take place on seven occasions during the third year of Clerkship and three times in fourth year. They are led by a faculty member (Academy Scholar) and a senior resident (Junior Academy Scholar) and involve students in groups of approximately eight sharing accounts of their experiences during their Clerkship in relation to the "Intrinsic" (i.e. non-Medical Expert) CanMEDS roles. Students discuss and reflect on these experiences and provide feedback to each other, guided by the Academy Scholars. For details, please see the Portfolio course description. Portfolio tutorials also take place in Year 1 as part of ASCM-1 and in Year 2 as part of ASCM-2 (see course descriptions).

SIMULATION AND WEB-BASED LEARNING

Simulation is employed in several settings during the undergraduate program, and includes a variety of technologies including computer models, mannequins, online cases, standardized patients, etc. Simulation allows students to learn a variety of skills effectively and receive structured feedback prior to patient contact. Simulation also provides opportunities for students to tackle clinical tasks that they would not otherwise see.

Web-based learning in the program includes the "virtual microscope laboratories" in Structure & Function (http://histology.med.utoronto.ca – username and password are provided to students). Other examples include CLIPP cases in Paediatrics and IHI modules in Transition to Clerkship. Web-based exercises are generally completed independently, although class time may be set aside for students to work on the exercises and/or seek assistance with them.

INDEPENDENT LEARNING

An essential category of educational modalities is independent learning or self-study. Time is reserved for this each week during the Preclerkship. Students often use these timeslots to arrange "shadowing" opportunities (see Enriching Educational Experiences), participate in service learning, or pursue other interests. Otherwise, this time can be used to study their course material, complete written assignments, and prepare for upcoming sessions. A variety of resources in print and online are provided to students for study, including recorded lectures, and they receive instruction in the use of these resources during each of the first three years of the program.

During the Clerkship, the amount of independent learning time varies from rotation to rotation, but UME policy places restrictions on the number of hours students can be assigned to clinical and didactic activities, in order to ensure that they have adequate time for study and personal matters.

Grading System & Assessment of Students

Students are assessed in different ways throughout the program. It is important to understand both the purpose of each assessment and the expectations for competence on each occasion. If you have any questions about an assessment, please contact your course director or supervising teacher/tutor.

TRANSCRIPTING PRACTICE

All courses in all four years of the MD program at the University of Toronto are transcripted Credit/No Credit (CR/NC), which is commonly referred to as "Pass/Fail" at other institutions. This policy was introduced beginning with the 2009-10 academic year. Up to 2008-09, all courses with the exception of the first-year clinical skills course, ASCM-1, had been transcripted as Honours/Pass/Fail (H/P/F).

This change is congruent with our competency-based curriculum and approaches to student assessment. It is also in line with the trend in grading policy across Canada.

Our shift from an Honours/Pass/Fail system to Credit/No Credit came about thanks in large part to a concerted student effort facilitated by the Faculty. In response to feedback about the H/P/F system, the leadership of Undergraduate Medical Education (UME) invited the student body to conduct a formal dialogue on grading policy. Following a public debate, student townhall meetings, position papers, podcasts, and other strategies, students voted overwhelmingly in a referendum in 2008 to replace H/P/F with CR/NC. The Undergraduate Medical Education Curriculum Committee (UMECC) unanimously agreed to support the students' stance, and after review and acceptance by the Faculty's Education Committee, the policy change was granted final approval by Faculty Council in March 2009.

A note about numerical results:

Individual assessment components (e.g. exams) may be given a numerical mark, which is shared with the student. As component marks, these results will never appear on transcripts or other documentation provided by UME to external individuals or organizations.

Furthermore, UME will calculate numerical grades for each course for the purpose of determining the recipients of academic awards and identifying students whose performance is below expected standards and who may therefore require either extra work, remediation, or repetition of a course or year. These confidential numerical final grades will never appear on transcripts or other documentation, but will be reserved exclusively for internal use.

According to UME policy, individual teachers are also prohibited from disclosing students' numerical marks or evaluation results in reference letters or other documentation.

What information about student grades is sent to CARMS when students apply for postgraduate training programs?

UME sends three kinds of information:

1. The **transcript** of course grades, indicating whether the student received "Credit" or "No credit" for each course in the first three years of the MD program. Individual components are not listed.
2. The Medical Student Performance Record (MSPR, also known as the "Dean's Letter"), which provides a summary of the student's ratings in each of the competencies for each of the clerkship rotations of two weeks' length or greater, based on their final clinical evaluation form. (See Clinical Performance Evaluations below)
3. A statement that the student has met the medical school's expectations regarding professional behaviour.

GRADING REGULATIONS IN UME

Each UME course assesses students on at least two occasions, as required by University policy. The methods of assessment used in the various courses are described below under "Assessment Modalities." Course directors are responsible for selecting both appropriate assessment modalities to best measure how students perform in relation to the program and course objectives, and appropriate criteria for students at this level of training.

As described in the Transcripting section above, many assessments receive a numerical mark while others are simply denoted Credit or Non-Credit. For numerical assessments, 60% is generally a passing grade. In most courses, all assessments must be passed in order to receive credit in the course. Details and exceptions are provided in the official course descriptions for each course.

Furthermore, students must demonstrate satisfactory professional behaviours, as described under Professionalism of UME Students. In the clinical clerkships, they must also achieve satisfactory results on each competency on the clinical evaluation and complete all required encounters and procedures.

Outcomes of Course Assessments: The *Standards for Grading and Promotion of Undergraduate Medical Students*, the *Standards for the Requirement of Extra Work in the Preclerkship*, and a summary of the *Guidelines for the Assessment of Undergraduate Medical Trainees in Academic Difficulty* are available under Key Policies, Statements, & Guidelines; the *Standards for the Requirement of Extra Work in the Preclerkship* is available on the UME website (www.md.utoronto.ca/policies). Briefly, there are three possible outcomes in relation to a student's status at the conclusion of a course:

- A "clear pass": the student demonstrates satisfactory performance on every assessment, and scores at a satisfactory level in the course as a whole (generally 60% overall, calculated based on the numeric assessments), and meets all other specific requirements of the course.
    - **Credit** is obtained in the course.
- "Borderline" performance: the student demonstrates performance on one or more components that does not meet the standards of the course, and/or is generally weak (typically 60-70% overall)
    - **Credit** is temporarily withheld.
    - Course director assigns the student **extra work** (additional study and a written assignment or new exam) in the area(s) of weakness.
    - If the extra work is completed satisfactorily, the original marks are permitted to stand and **credit** is obtained in the course.
- A "clear failure": the student's performance on one or more assessments is sufficiently low that the student's calculated grade in the course is below 60% and/or other specific requirements of the course are not met.
    - **Credit** is temporarily withheld.
    - Student is brought forward to the Board of Examiners, who will typically require the student to complete formal remediation.
    - If the remediation is completed satisfactorily, the course mark is raised to 60% and **credit** is obtained in the course.

Board of Examiners: All academic programs in the Faculty of Medicine have a Board of Examiners, a standing committee of Faculty Council. The UME Board of Examiners consists of 13 members, including two students. The Board of Examiners is responsible for approving all course grades, and makes the ultimate decisions about student promotion, requirements to do remedial work, and dismissal from the program, e.g. for repeated failures of an entire year or egregious lapses in professionalism. Students have the right to appeal decisions made against them by the Board of Examiners.

(Grading Regulations in UME, continued)

Criteria for graduation: In order to graduate from the program, students must achieve a standing of "Credit" in every course, based on the requirements of each course. They must also have satisfactory professionalism evaluations.

ASSESSMENT MODALITIES

The following descriptions capture the major types of assessment employed in the UME curriculum.

Multiple-choice examinations:
Examinations featuring multiple-choice questions are used extensively throughout the program, most prominently in the Preclerkship block courses to verify students' knowledge of the course content, but also in the Clerkship and other Preclerkship courses. These questions are typically written by a group of teachers with content expertise, and marked by computer.

Short-answer questions:
These are generally used in combination with multiple-choice questions on written examinations. They require the student to demonstrate a thorough understanding of the topic at hand and an ability to reason through a problem. These questions are used in many Preclerkship and Clerkship courses; they are usually composed and marked by teachers with specific content expertise.

Written assignments:
Written assignments range in scope and purpose across the program, from case reports (ASCM-1 and ASCM-2), a team-based problem-solving assignment (Manager theme), a continuous patient profile (Psychiatry rotation), reflections on the student's personal experiences in clinical settings (Portfolio), and a number of others. While the specific objectives of these assignments vary, they generally do involve an assessment of the student's ability to communicate effectively in writing, including presenting their findings or argument in a logical, well-organized manner. Creation of the assignments usually rests with the course committees.

Oral presentations:
These are a key component of small-group learning in the Preclerkship, in particular in the ASCM courses (as case reports), in the CPPH courses, in which they relate to the students' experiences in community field visits, or their research-related assignments in the Health Science Research course. Students also make presentations to their teachers and classmates in other settings such as Portfolio sessions and PBL (problem-based learning) tutorials in the Preclerkship block courses, although these activities are not always graded. Oral presentations are generally marked by the student's tutor, using criteria established by the course committee.

Clinical oral examinations:
Oral exams are a component of many clinical clerkships rotations. Generally, the student will interact with a selected patient (or "Standardized Patient," i.e. an actor) for a period of time, obtaining the history and physical examination, and present this to the examiner(s). The student is then asked questions about the case and other pertinent details, based on the course or assessment objectives. Clinical oral examinations are designed as a summative assessment of a student's acquisition of the required skills of the rotation. The specific expectations are set by the course committees, and marking is conducted by the student's tutor or supervising faculty member (but not by residents).

OSCEs (Objective Structured Clinical Examinations):
OSCEs are station-based clinical skills examinations in which students rotate through a series of rooms, and in each one are required to simulate a real clinical encounter with a Standardized Patient (an actor playing a

(Assessment Modalities, continued)

patient) who is assigned a particular case, while being observed by a faculty examiner. The student is expected to complete specific tasks and, towards the end of each station, may be asked a small number of questions by

the examiner. Students are given a global rating on each OSCE station, and examiners may also be asked to complete a checklist documenting the student's performance on all aspects of the station (for instance, their skills on certain manoeuvres, their communication with the patient, etc.). OSCEs are considered to be more reliable than simple clinical oral examinations because they present each student with identical cases, and because the number of stations translates into assessment of a broader array of tasks and scenarios.

NB: OSCEs are conducted in the ASCM courses in the Preclerkship. In the Clerkship, an Integrated OSCE is conducted for all clinical rotations at the midpoint and end of Year 3 (See Integrated OSCE). The Psychiatry rotation also runs a separate OSCE, and the Medicine and Surgery rotations conduct a "Structured Clinical Examination," which is a similar assessment exercise. In all cases, stations are carefully developed by committee. Examiners may be recruited from the existing teaching pool in a course and/or at the Departmental level, and are given orientation prior to each exam.

Professionalism evaluations:
Student professionalism is assessed in all small-group and clinical activities. In each course, students are required to demonstrate satisfactory professionalism in order to receive credit. The evaluation forms are completed on MedSIS, and prompt the tutor or supervisor to record any lapses in professionalism that the student has made. A small number of minor lapses are considered a normal part of a student's development, but a larger number of lapses, patterns of repeated lapses across courses, or more serious incidents are carefully reviewed by the UME program.

After a teacher has completed a scheduled professionalism evaluation, the student will receive an automated e-mail at the appropriate time from medsis.server@utoronto.ca with instructions to log in and review the evaluation. See Professionalism of UME Students for details.

Clinical performance evaluations:
These are one of the principal methods of assessment in every clinical clerkship rotation. The assessment is captured in all the courses using a secure online form known as the Clinical Skills Evaluation or "ward form." The ward forms in all clinical clerkships feature a standard set of "competencies" under the seven CanMEDS roles. Each competency is assessed on a scale from Unsatisfactory to Outstanding. In some courses, particularly those in which students will encounter a number of different supervisors, the student's preceptor each day is responsible for completing a "daily encounter card" on paper, and these are then submitted to the site director and summarized at the middle or end of the rotation using the ward form. In other courses in which a student has a more continuous experience with a single supervisor, daily encounter cards are not used, and the supervisor himself/herself is typically responsible for completing the online ward form. After a supervisor has completed a Clinical Skills Evaluation, the student will receive an automated e-mail from medsis.server@utoronto.ca with instructions to log in, review the evaluation, and sign off on the evaluation. See the next pages for a sample "ward form."

NB: In all clerkship rotations of two weeks or more, students receive a mid-rotation evaluation for formative feedback only, i.e. to give them a sense of how they are performing, so that adjustments can be made as needed in the second half of the rotation. Although this mid-rotation evaluation does not contribute to the student's grade, it is a mandatory aspect of these courses. A mid-rotation meeting is also generally scheduled for students to meet with their supervisor or site director to review their progress towards completion of the mandatory clinical encounters and procedures for that course.

SAMPLE WARD FORM

UNIVERSITY OF TORONTO
FACULTY OF MEDICINE

Clerkship Ward/Clinical Skills Evaluation

Medical Expert/Skilled Clinician

	Unsatisfactory 1	Below Expectations 2	Meets Expectations 3	Exceeds Expectations 4	Outstanding 5	N/A
Knowledge (Basic Science and Clinical)	○ All or most of the knowledge base are observably lower than expected at this level of training; major gaps are present.	○ Large gaps in knowledge base for stage of training.	○ Displays adequate factual knowledge for level of year 3 student.	○ Comprehensive knowledge base; recognizes most issues; very few gaps identified.	○ Displays medical knowledge far beyond level of training.	○
History Taking	○ Sketchy, incomplete, major omissions, lacks focus.	○ Often misses several aspects of history. Provides cursory detail. Not well-organized.	○ Usually complete, accurate and organized.	○ Thorough, logical, complete, elicits some subtle historical points.	○ Comprehensive, accurate problem identification and characterization, excellent interviewing skills.	○
Physical Examination	○ Incomplete, misses obvious findings, major technical deficiencies, lacks focus.	○ Physical examination skills are often less than adequate or inappropriate. Often unable to elicit most of the relevant findings.	○ Carefully done, most findings detected, technically sound, organized approach.	○ Complete, detects some subtle findings, sensitive to patient.	○ Very thorough, well-organized, all important findings detected, often finds subtle or difficult findings.	○
Diagnostic Test Interpretation	○ Grossly inappropriate use of diagnostic tests; unable to interpret or apply results.	○ Use of diagnostic tests often inappropriate. Often unable to interpret or apply results.	○ Usually orders appropriate tests for clinical scenario. Able to interpret and apply results of common investigations to patient care.	○ Consistently orders appropriate tests for clinical scenario. Able to interpret and apply results for nearly all common investigations.	○ Exceptional understanding of diagnostic tests. Able to apply that knowledge in patient care, even in challenging situations.	○
Problem Formulation and Management Plan (Clinical Judgement)	○ Assessments usually incomplete or inaccurate. Great difficulty generating differential diagnosis. Diagnostic and therapeutic plans incomplete and/or not logically derived from data.	○ Assessments often incomplete or inaccurate. Limitations in ability to integrate data and arrive at differential diagnosis, and diagnostic and therapeutic plans.	○ Able to solve common problems and generate reasonable differential diagnosis and management plan.	○ Consistently accurate and thorough in generating differential diagnosis and proposing plan. Able to integrate more complex issues and solve some uncommon problems.	○ Exceptional judgement. Able to generate differential diagnosis, provisional diagnosis, and provide a thorough plan of management even for complex problems.	○
Technical and Procedural Skills	○ Difficulty using proper	○ Techniques and skill often	○ Completes some	○ Completes most procedures	○ Technical expertise well	○

	techniques, inadequate knowledge of procedures; avoids procedural experience.	inadequate. Requires a great deal of assistance with basic procedures.	procedures well, reasonable knowledge of procedures.	without difficulty, good understanding of risks and benefits, sensitive to patient.	beyond expected for year 3 student. Inspires confidence in patients.	
Use of Evidence-Based Medicine	○ Unaware of basic guidelines and EBM tools. Unable to apply evidence to patient's management.	○ Often unaware of basic guidelines and EBM tools. Often unable to apply evidence to patient's management.	○ Aware of basic concepts of evidence-based medicine, and usually able to apply them to patient problems.	○ Proficient ability to find relevant evidence. Regularly incorporates evidence into patient's care. Some awareness of evidence for major medical diagnostic tests and medical therapies.	○ Exceptional ability to consistently apply EBM in patient care. Aware of evidence for many diagnostic tests and medical therapies.	○

Communicator/Doctor-Patient Relationship

	Unsatisfactory 1	Below Expectations 2	Meets Expectations 3	Exceeds Expectations 4	Outstanding 5	N/A
Communication with Patients/Families/Community	○ Remote, insensitive, little rapport. Lack of concern for patients and families. Unable to deal with common or routine situations.	○ Often has difficulty in establishing rapport and relating to patients and families. Often unable to deal with common or routine situations.	○ Conveys interest and concern for patients and families. Establishes rapport. Empathetic and respectful. Culturally sensitive. Uses non-verbal skills effectively.	○ Consistently able to effectively communicate with patients and families. Very effective in establishing rapport.	○ Exceptional ability to establish good rapport with patients and families, even in challenging situations. Exceptionally empathetic. Wins confidence and cooperation.	○
Written Records	○ Incomplete, disorganized, confusing, difficult to trace patient's problems and management.	○ Notes are often incomplete, inaccurate, disorganized, or difficult to read.	○ Generally complete, accurate, legible and organized; reasonably good documentation of diagnosis, therapeutic plans and interventions.	○ Complete, logical, very clear, easy to follow, includes all important information.	○ Outstanding, conscientious and accurate record keeping, well-organized, intelligently written.	○
Oral Reports	○ Presentations usually disorganized, ineffective, incomplete, illogical, lots of errors.	○ Many omissions of relevant information, and/or inaccuracies. Often disorganized.	○ Reasonably clear, complete, accurate, occasional need to pose a few questions to complete or clarify.	○ Concise, clear, organized, accurate, facts presented in a logical manner.	○ Succinct, precise, relevant issues clearly delineated, conveys excellent understanding of complex issues.	○
Patient Education	○ Consistent inability to recognize patient's grasp of clinical situation. Provides incorrect information.	○ Generally does not meet patient's needs. Provides too much or too little information, or incorrect information.	○ Explains diagnosis and management plans such that patient can understand. Provides correct information. Addresses concerns of patients and families.	○ Consistently communicates information to patients and families that is appropriate, clear, comprehensive, and demonstrates an understanding of their needs and concerns.	○ Exceptional ability to communicate appropriate information to patients and families. Handles difficult situations with sensitivity.	○

Collaborator

	Unsatisfactory 1	Below Expectations 2	Meets Expectations 3	Exceeds Expectations 4	Outstanding 5	N/A
Team Participation (Contribution within Interdisciplinary Team)	○ Uncooperative and poorly integrated team member.	○ Often uncooperative or poorly integrated into team.	○ Generally functions well as team member.	○ Consistently makes extra effort to be part of the team in the provision of care.	○ Consistently offers to take on extra tasks to help the team provide effective care.	○
Provision of Patient Care in Collaboration with All Health Care Providers	○ Unaware of need for communication with other health care providers involved in patient care.	○ Often unable to integrate provision of care by medical team with that provided by allied health professionals and consultants.	○ Generally appropriate collaboration with allied health professionals and consultants, in terms of referral to them and follow up.	○ Consistently provides appropriate steps in the referral to and follow up from care provided by other health professionals.	○ Exceptional ability to integrate care of allied health professionals and consultants into overall care of patients.	○

Manager

	Unsatisfactory 1	Below Expectations 2	Meets Expectations 3	Exceeds Expectations 4	Outstanding 5	N/A
Awareness of and Appropriate Use of Healthcare Resources	○ Unaware of appropriate use of health care resources.	○ Often unaware of appropriate use of health care resources.	○ Appropriately aware of the generally available health care resources and knows how to access these.	○ Consistently aware of the generally available health care resources and employs them in appropriate situations.	○ Exceptionally wise stewardship of available resources in the context of resource allocation and individual patient care.	○

Health Advocate

	Unsatisfactory 1	Below Expectations 2	Meets Expectations 3	Exceeds Expectations 4	Outstanding 5	N/A
Recognition of Important Determinants of Health and Principles of Disease Prevention	○ Does not recognize the importance of determinants of health and principles of disease prevention.	○ Often fails to recognize the importance of determinants of health and principles of disease prevention.	○ Usually recognizes and incorporates determinants of health and principles of disease prevention in care of the patients.	○ Consistently recognizes and incorporates determinants of health and principles of disease prevention in care of patients.	○ Exceptional ability to recognize and incorporate determinants of health and principles of disease prevention in care of patients.	○
Patient Advocacy	○ Does not advocate for patients when appropriate situations arise.	○ Often misses the opportunity to provide patient advocacy.	○ Usually advocates on behalf of patients in an appropriate manner and in the right situations.	○ Consistently advocates on behalf of patients in an appropriate manner and in the right situations.	○ Exceptional ability to advocate on behalf of patients in an appropriate manner and in the right situations.	○

Scholar

	Unsatisfactory 1	Below Expectations 2	Meets Expectations 3	Exceeds Expectations 4	Outstanding 5	N/A
Self-Directed Learning	○	○	○	○	○	○

	Does not assume responsibility for learning, resists or fails to respond to constructive feedback, unaware of own inadequacies.	Generally lacking in responsibility for own learning. Not very receptive to constructive feedback.	Assumes responsibility for own learning, shows adequate insight, requests and accepts constructive feedback, reads around cases.	Keenly interested in learning. Consistently learns around cases. Consistently requests, accepts and acts on feedback.	Exceptional interest in learning. Solicits and receives criticism, able to effect change, consistent effort at self-improvement.	
Contribution to Rounds, Seminars and Other Learning Events	○ Makes little or no attempt to contribute to learning events. Unreasonably late or absent for clinical or teaching sessions.	○ Usually requires direction and reminders regarding attendance, contribution and fulfillment of course duties.	○ Consistently takes part in discussions, occasionally volunteers for tasks in learning situations.	○ Makes important contributions to learning events; able to help learning of others.	○ Superior and creative contribution to learning events, volunteers for extra responsibilities; sets an example for peers.	○

COMMENTS

Professionalism Form Completed? ○ Yes ○ No

Strengths:

Suggestions for improvement:

Mid-Term Rotation Evaluation Completed? ○ Yes ○ No

I have reviewed the student's case log reports with them ○ Yes ○ No

Save | Submit

Student Professionalism

PROFESSIONALISM OVERVIEW

Being a professional is of course one of the key attributes of being a physician, and this is reflected by the prominence of the role of professional in the UME goals and objectives (see UME Goals and Objectives).

In order to assist students in their development as future professionals, UME provides students with abundant instruction and feedback, both formal and informal, about professionalism. Formal professionalism instruction is described earlier in this handbook under Curriculum → Themes & Competencies → Ethics & Professionalism. This section deals with expectations for students' professional behaviour.

In all teaching and learning settings where teachers are in a position to make meaningful observations about students' professional behaviour (including all small group settings such as ASCM tutorials, PBL tutorials, and CPPH-1 tutorials, and all clerkship rotations), supervising faculty members complete professionalism evaluation forms. This assessment exercise provides an opportunity for teachers to point out to students occasions when they fell short of expectations in their professional behaviour and also to indicate when they performed exceptionally well. Instances where faculty perceive students to require feedback are recorded as either:

- "minor lapses," where students fall short of expectations to only a minor degree,
- "major lapses," where the deficit is quite significant, or
- "critical incidents," which occur rarely, but are very important as they signify a situation where a student has put a patient or someone else at significant risk because of their behaviour

These terms are described in greater detail below, under "Frequently Asked Questions About Professionalism for UME Students," questions 8 and 9.

Ongoing professionalism assessment is useful to students for formative reasons (i.e., to provide them with feedback about areas for them to work on in order to ensure they meet expectations in future). It is also crucial to UME, since it allows the program's leadership to monitor whether individual students are exhibiting a pattern of unprofessional behaviour, possibly across multiple courses or multiple learning contexts. In such a case, intervention such as remediation in professional behaviour may be required.

FREQUENTLY ASKED QUESTIONS ABOUT PROFESSIONALISM FOR UME STUDENTS

1. How is professionalism evaluated in the Undergraduate Medical Education program at the Faculty of Medicine, University of Toronto?

a) Who completes the forms?
Professionalism evaluation forms are completed online by faculty. In the Preclerkship, professionalism forms are completed by teachers who have had significant contact with students in small group settings. This includes tutors in the ASCM-1 and ASCM-2 courses, gross anatomy demonstrators, problem-based learning tutors, and tutors in Community Population and Public Health. In the Clerkship, forms are generally completed by the site supervisor for each rotation.

b) How are the professionalism forms completed?
Copies of the actual forms used are found elsewhere in this handbook. They evaluate several elements that contribute to professionalism. For each element, the faculty member can indicate that there were no lapses identified, that one or two minor lapses occurred, or that there were three or more minor lapses or a major lapse. Faculty members must provide comments that describe the lapses, if they indicate a minor or major lapse has occurred. At the bottom of the form, there is space for faculty members to indicate if there are any "areas of praise" and/or "areas of concern".

c) Are the professionalism forms monitored?
By having the evaluations online, the UME program has the opportunity to monitor students' professionalism over time. This gives us the ability to identify a pattern of minor lapses and allows us to respond promptly, in the hope of preventing a more significant problem.

d) What happens if a student has several lapses noted?
When three or more evaluations with minor lapses are recorded, and the evaluations are approved and locked by course directors, a graded educational response begins:

- First response: E-mail from the Preclerkship or Clerkship Director to acknowledge identification of professionalism learning issues and offer of assistance
- Second response: With continued minor lapses, students must attend a mandatory appointment with the Preclerkship or Clerkship Director
- Third Response: With continued minor lapses OR with a first major lapse, a formal coaching program in professionalism is instituted
- Fourth response: With continued lapses, a meeting with the Vice Dean MD Program, and consideration of referral to the Board of Examiners
- Fifth response: Referral to Board of Examiners and consideration of a permanent note on transcript or "Dean's letter" (Medical Student Performance Record), and other potential consequence.

2. Can anyone other than faculty members fill in a professionalism evaluation form?

Because students have significant contact with medical education administrative staff, these staff members may also fill in a form if they feel a student has significant learning issues related to professional behaviour. Forms can also be completed on behalf of community preceptors such as CCAC staff.

(Frequently Asked Questions, continued)

3. When the professionalism evaluation forms are completed and there is a tick for a lapse in an area, does that tick box show up on a student's transcript or "Dean's Letter"?

No. The evaluation forms are mainly to be used for education and thus faculty will indicate lapses in order to identify areas that require improvement. All lapses will first be reviewed by the course director. The course director will ensure that clear comments are present for minor lapses, that sufficient evidence is presented for major lapses, and that the student has been notified. The course director when satisfied will approve and lock the evaluations. When a consistent pattern of minor lapse occurs over courses, the Preclerkship and Clerkship Directors are notified. They too have the ability to change the record if they have any concerns. If students persist with learning issues that do not respond to coaching, this eventually will lead to an assessment by the Vice Dean, MD Program. The Vice Dean will present to the Board of Examiners for advice on what to record on the student's transcript.

Information on professional misconduct appears on the student's transcript only if designated by the Board of Examiners and a comment on professionalism will only be put on the "Dean's letter" (Medical Student Performance Record) by the Vice Dean. Hence evidence of lapses will be reviewed at least four times before any recordings can be put on the Dean's letter or transcript and students have multiple opportunities to state their version of events before any such recording would occur.

4. What support is available to students with professionalism lapses?

Students who have had professionalism learning issues identified find this a stressful experience. As future professionals, they may feel quite threatened as if this is an attack on their character. The professionalism evaluation is intended to be educational AND to identify serious concerns. The Associate Dean, Health Professions Student Affairs is available to help students to identify potential mitigating factors with their behaviour: illness, stress, family concerns among others, and can help to develop a plan to deal with these issues. The Associate Dean, Health Professions Student Affairs or their designate will be involved for students' support and will not be involved in any further evaluation process. Students will also be invited to submit their version of events to be considered. When the student's case is reviewed, consideration will be made to any systemic issues that may have influenced the student's behaviour and any such factors will then be addressed by the UME program. If deemed necessary, a formal coaching program in professionalism will be offered so that the student is able to learn from the experience.

5. When the professionalism evaluation forms are completed, where are they stored and who has access to them?

The completed professionalism forms are considered confidential academic material and are thus handled in the same way as records of other academic marks. They only appear on the academic transcript or Dean's letter after the process outlined in question 3.

6. Why are professionalism forms filled out on all students, and not just on those who have lapses? Would it not be more efficient to complete forms only when a lapse occurs?

The forms are primarily meant to be for educating students on proper professional conduct. Completing the forms provides an opportunity for faculty and students to discuss the student's behaviour and make recommendations for improvement. Completing the forms on an "exception" basis would lose this educational process and focus solely on the punitive aspects of this process.

(Frequently Asked Questions, continued)

7. What is the difference between a "major" and a "minor" lapse?

The differentiation is context-specific and may vary from situation to situation. The main contextual issues are the student's underlying *intention* and motivation, and the resulting *impact* on others, including the patient, the student's colleagues, the community of practice and the student themselves.

A *minor* lapse is one that was committed inadvertently and/or did not cause any substantial harm. We recognize that we are all human and do make mistakes. The vast majority of mistakes are minor and if addressed properly can lead to improved professional conduct. A confirmed pattern of repeated minor lapses will trigger a staged educational response.

A *major* lapse is one when there is evidence of full knowledge that this action was not right and/or the lapse does cause harm. In such a case, the course director will follow up with the faculty member and student involved. They will be responsible for approving and locking the evaluation form, which may include changes if appropriate. A confirmed major lapse will trigger a staged educational response. Faculty should initially classify the lapse as being "major" or "minor" based on that person's perception of the event. Comments to direct learning or document major lapses must be provided. Decisions on major versus minor may change over time (be evolutionary) as the faculty reach consensus on these finer definitions of major versus minor.

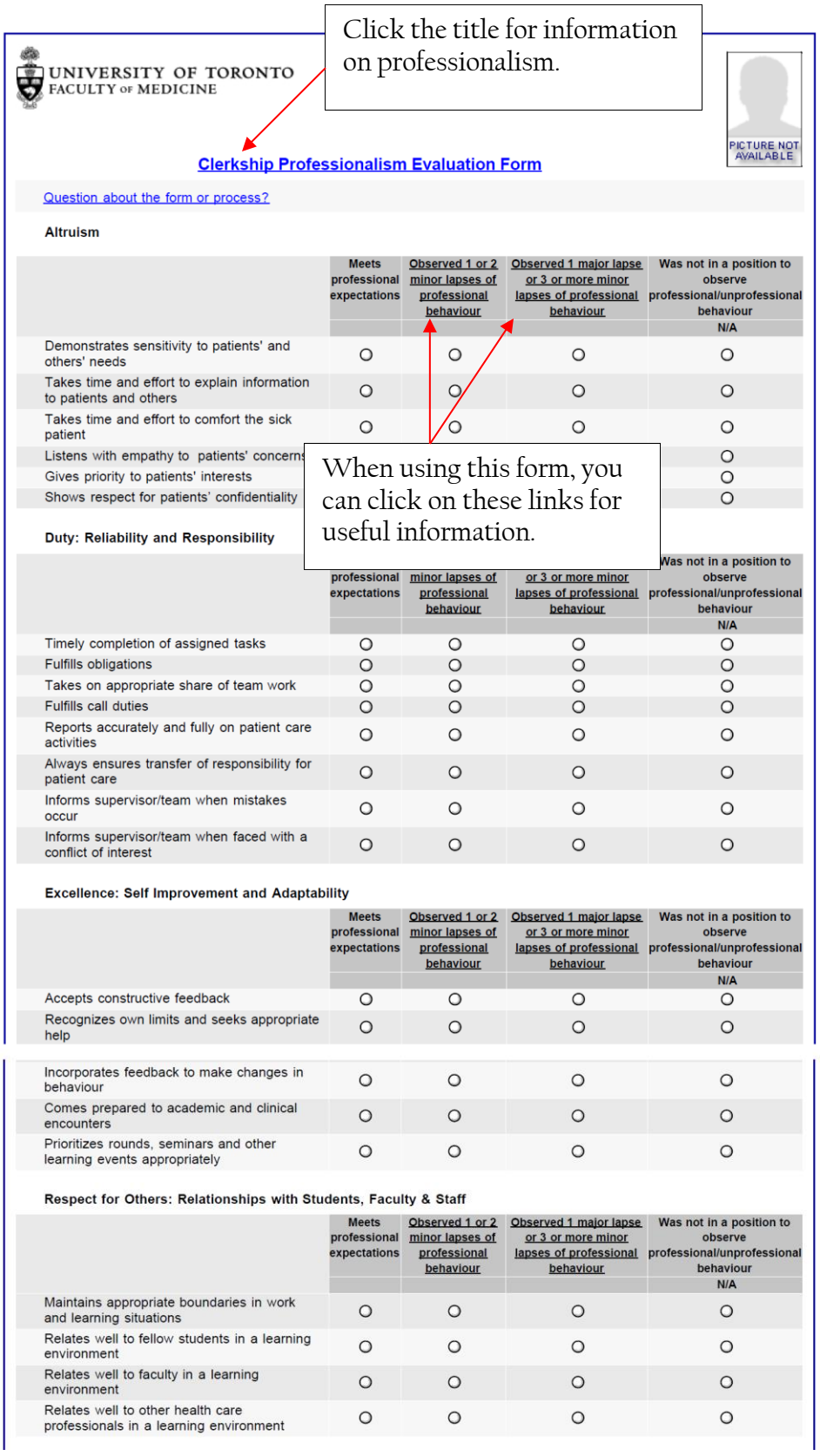
8. What is a critical incident?

Critical events, as defined by the Task Force on Professionalism, are listed below. Any of these events require that faculty take immediate action in reporting these breaches to the course director as soon as possible. Faculty should also ensure patient and student safety at all times.

<u>Critical incidents of unprofessional behaviour</u>

- Referring to oneself as, or holding oneself to be, more qualified than one is
- Participating in a conflict of interest
- Theft of drugs
- Violation of the Criminal Code
- Failure to be available while on call
- Failure to respect a patient's rights
- Breach of confidentiality
- Failure to provide transfer of responsibility for patient care
- Failure to keep proper medical records
- Being disrespectful to patients and other professional staff
- Falsification of medical records
- Assaulting a patient
- Sexual impropriety with a patient
- Being under the influence of alcohol or drugs while participating in patient care or on call
- Any other conduct unbecoming of a practicing physician

SAMPLE PROFESSIONALISM FORM



Click the title for information on professionalism.

When using this form, you can click on these links for useful information.

UNIVERSITY OF TORONTO
FACULTY OF MEDICINE

PICTURE NOT AVAILABLE

Clerkship Professionalism Evaluation Form

Question about the form or process?

Altruism

	Meets professional expectations	Observed 1 or 2 minor lapses of professional behaviour	Observed 1 major lapse or 3 or more minor lapses of professional behaviour	Was not in a position to observe professional/unprofessional behaviour N/A
Demonstrates sensitivity to patients' and others' needs	○	○	○	○
Takes time and effort to explain information to patients and others	○	○	○	○
Takes time and effort to comfort the sick patient	○	○	○	○
Listens with empathy to patients' concerns				○
Gives priority to patients' interests				○
Shows respect for patients' confidentiality				○

Duty: Reliability and Responsibility

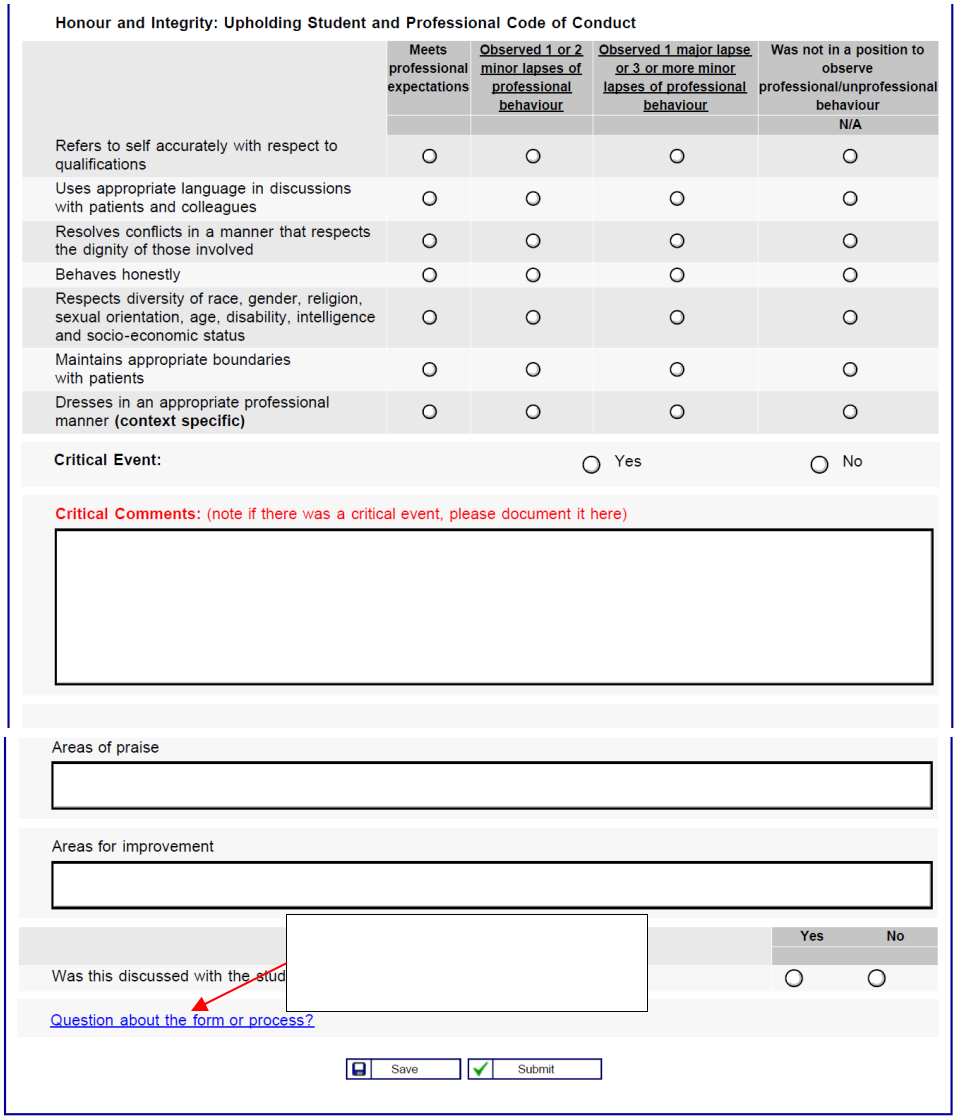
	professional expectations	minor lapses of professional behaviour	or 3 or more minor lapses of professional behaviour	Was not in a position to observe professional/unprofessional behaviour N/A
Timely completion of assigned tasks	○	○	○	○
Fulfills obligations	○	○	○	○
Takes on appropriate share of team work	○	○	○	○
Fulfills call duties	○	○	○	○
Reports accurately and fully on patient care activities	○	○	○	○
Always ensures transfer of responsibility for patient care	○	○	○	○
Informs supervisor/team when mistakes occur	○	○	○	○
Informs supervisor/team when faced with a conflict of interest	○	○	○	○

Excellence: Self Improvement and Adaptability

	Meets professional expectations	Observed 1 or 2 minor lapses of professional behaviour	Observed 1 major lapse or 3 or more minor lapses of professional behaviour	Was not in a position to observe professional/unprofessional behaviour N/A
Accepts constructive feedback	○	○	○	○
Recognizes own limits and seeks appropriate help	○	○	○	○
Incorporates feedback to make changes in behaviour	○	○	○	○
Comes prepared to academic and clinical encounters	○	○	○	○
Prioritizes rounds, seminars and other learning events appropriately	○	○	○	○

Respect for Others: Relationships with Students, Faculty & Staff

	Meets professional expectations	Observed 1 or 2 minor lapses of professional behaviour	Observed 1 major lapse or 3 or more minor lapses of professional behaviour	Was not in a position to observe professional/unprofessional behaviour N/A
Maintains appropriate boundaries in work and learning situations	○	○	○	○
Relates well to fellow students in a learning environment	○	○	○	○
Relates well to faculty in a learning environment	○	○	○	○
Relates well to other health care professionals in a learning environment	○	○	○	○



Honour and Integrity: Upholding Student and Professional Code of Conduct

	Meets professional expectations	Observed 1 or 2 minor lapses of professional behaviour	Observed 1 major lapse or 3 or more minor lapses of professional behaviour	Was not in a position to observe professional/unprofessional behaviour
				N/A
Refers to self accurately with respect to qualifications	○	○	○	○
Uses appropriate language in discussions with patients and colleagues	○	○	○	○
Resolves conflicts in a manner that respects the dignity of those involved	○	○	○	○
Behaves honestly	○	○	○	○
Respects diversity of race, gender, religion, sexual orientation, age, disability, intelligence and socio-economic status	○	○	○	○
Maintains appropriate boundaries with patients	○	○	○	○
Dresses in an appropriate professional manner **(context specific)**	○	○	○	○

Critical Event: ○ Yes ○ No

Critical Comments: (note if there was a critical event, please document it here)

Areas of praise

Areas for improvement

	Yes	No
Was this discussed with the stud	○	○

Question about the form or process?

Save Submit

For more information on professionalism assessment, see our policies page:
http://md.utoronto.ca/policies

The Continuum of Medical Education

The UME program represents the first stage of a career-long process of medical education. The curriculum is intended to provide students with a diversity of opportunities to explore their career options and also emphasizes life-long learning and problem-solving skills that will serve medical trainees as they move through UME into residency and independent practice.

This section of the Handbook briefly describes the application process for entry to Canadian residency programs.

APPLICATION TO POSTGRADUATE TRAINING PROGRAMS

Choosing a residency program is a significant step for medical students, and the UME program provides assistance in a number of ways. Both the Office of Health Professions Student Affairs and the Academies arrange private appointments to help prepare students, and group information sessions are also available, including Career Info Nights and MMMD lunch-time sessions. Interest groups supported by various Clinical Departments are also an excellent source of information. See Services & Assistance for Students.

The process of application to postgraduate training is managed nationally by the "Canadian Residency Matching Service" (CaRMS). In order to participate in the CaRMS process, applicants must have a medical degree or be in their last year of a degree from an appropriately accredited institution; furthermore, to be eligible for residency positions at the University of Toronto and most other medical schools in Canada, applicants must be a Canadian citizen or have permanent resident status. In the autumn of fourth year of UME, students submit to CaRMS a list of the postgraduate training programs for which they wish to be considered. The programs review the applications, and then offer interviews to their preferred candidates. The UME program provides a three-week break in January of fourth year to enable students to attend these interviews.

In contrast to a typical "application" process such as those used for academic programs, the residency match is intended to ensure that graduates are placed in a program that meets their needs as much as the graduate meets those of the program. Therefore, following the interview period, both students and residency programs submit rankings to CaRMS, and these lists are both used to determine the optimal placement or "match" of every student across the country. CaRMS then notifies applicants of the results in March of the fourth year of the UME MD program. Typically, the vast majority of University of Toronto students do match, but any unmatched candidates are able to enter a second round of matching, which is completed in April. The Office of Health Professions Student Affairs provides support to students who learn that they have not matched

University of Toronto graduates historically perform very strongly in the CaRMS match for Canadian residency programs. In each of the last five years, over 90% of our program's graduates have matched to their first choice discipline, a figure that meets or exceeds the national average for every year.

Our graduates enter the full spectrum of postgraduate training. In the last three years, for example, the graduating classes have matched to programs including family medicine, internal medicine, general surgery and surgical sub-specialties, and smaller proportions to a wide variety of programs, including paediatrics, obstetrics and gynaecology, anesthesia, diagnostic radiology, psychiatry, ophthalmology, otolaryngology, laboratory medicine, pathology, radiation oncology, emergency medicine, dermatology, neurology, community medicine, medical genetics, and physical medicine and rehabilitation.

Undergraduate Medical Education

STUDENT INFORMATION & OPPORTUNITIES

Registration Requirements (for New and Returning Students)

UME Enrolment Services is available to assist students with all aspects of their registration at the University of Toronto, Faculty of Medicine. The Director of Enrolment Services & Faculty Registrar is Ms. Janet Hunter, who can be reached at janet.hunter@utoronto.ca / 416-978-7570.

There are a number of specific registration requirements including immunization, police record checks, and tuition fees payment, described below.

IMMUNIZATION

Students are required to be fully immunized and demonstrate proof of immunity before they enter the clinical setting, under Regulation 965 of the Ontario Public Hospitals Act.

- **First time** registrants in the Undergraduate Medical Program must submit a completed Undergraduate Medical Education Year One Student Immunization Form (in accordance with the Council of Ontario Faculties of Medicine (COFM) Policy on Immunization), which requires test and/or vaccination results for tuberculosis, Hepatitis B, measles, mumps, rubella, varicella/zoster, diphtheria, tetanus, acellular pertussis, and polio.
- **Returning students** in subsequent years of the undergraduate medical program must present:
    1. Proof of a one-step Mantoux skin test at registration in all years of the medical program.
    2. A chest x-ray is required if TB test is positive. Students who have a chest x-ray compatible with old or active TB, or are anti- HBS negative after vaccination, must meet with the Associate Dean, Health Professions Student Affairs, before continuing classes.
    3. Students entering second year of undergraduate medical training must present proof of testing for anti-HBS. Students who, after immunization are anti- HBS negative, will be counselled and tested for HBS -Ag.

Students who do not submit the above records are at risk of being suspended from clinical training until proper documentation is submitted to UME Enrolment Services.

The University of Toronto adheres to the *COFM Immunization Policy*.

For details and required forms, see:
http://md.utoronto.ca/registration-requirements-requests

POLICE RECORD CHECK

First-year students:
Given that all medical students have some of their education in settings that deal with vulnerable populations, and that these settings often require criminal record checks, students are required to complete a Police Record Check and Vulnerable Sector Screening, and submit two original copies of the Report as part of the registration process in their first academic year.

Returning students:
All returning students must fill out a Criminal Record Disclosure and Consent Form to be returned to UME Enrolment Services.

For details and required forms, see:
http://md.utoronto.ca/registration-requirements-requests

E-LEARNING MODULES

First-year students:

As part of their registration requirements, all first-year students are now required to complete e-learning modules in Hand Hygiene, Sharps Safety, Privacy and Harassment by the end of September.

Third-year students:

The Hand Hygiene, Sharps Safety, Privacy, Harassment, and WHMIS modules must be completed by all third-year students as part of the Transition to Clerkship course prior to the start of clinical rotations.

WORKPLACE SAFETY AND INSURANCE BOARD (WSIB) REGISTRATION

During the course of medical training, there is a potential for students to become injured during a clinical placement. Medical students are eligible for Workplace Safety and Insurance Board (WSIB) coverage through a Ministry of Training, Colleges, & University (MTCU) Student WSIB program in collaboration with the WSIB. This coverage applies only to official clinical placements, sanctioned by the Faculty of Medicine, including core activities during the Preclerkship, clerkship placements, and approved electives and selectives.

Note: Students are **not** covered through the WSIB for any self-initiated observerships including the EEE Program or clinical activities outside of the program.

To be registered for WSIB coverage, students are required to sign a declaration of understanding at the beginning of Year 1 of the program and submit it to UME Enrolment Services (ES). This form is circulated electronically by ES each year. Signing the form indicates that the student is aware that they have WSIB coverage and that they have a responsibility to report any injury incurred during a clinical placement to the site. Registration in the WSIB program lasts for the duration of UME studies.

For more information about what to do in the event of a clinical workplace injury, please refer to the flowchart in the student assistance section of the UME website (http://md.utoronto.ca/student-assistance) or go to the *Protocol for incidents of medical student workplace injury and exposure to infectious disease in clinical settings*.

Tuition, Fees, & Funding

Please also see Services & Assistance for Students → Student Financial Services for information on accessing financial aid and counselling related to debt management.

FEES FOR THE 2015-2016 ACADEMIC YEAR

Each student enrolled in the medical course and proceeding to the degree of Doctor of Medicine must pay annual fees to the Comptroller's office. Specific dates for fee payment and registration will be sent to all students by UME Enrolment Services (ES).

Note: The schedule below outlines fees for the 2015-2016 academic year and is subject to change.

The Faculty of Medicine is committed to the University of Toronto policy which states that each student will have access (through a system of grants and loans) to the resources necessary to meet his or her needs.

Please contact the Student Financial Services in the UME ES Office if you have any questions or have specific concerns regarding your personal situation.

2015-16	DOMESTIC Students (Canadian Citizens and Permanent Residents)	VISA Students
Tuition Fee (Year 1)	$ 22,180.00	$ 66,070.50
Incidental Fee*	$ 1,540.94	$ 1,540.94
Educational Resource Fee**	$ 456.00	$ 456.00
University Health Insurance Premium		$ 648.00
Total Fee Payable (Year 1)	**$ 24,176.94**	**$ 68,715.44**

* Incidental fees include: Hart House, University of Toronto Students' Union, Athletics, Health Services, and the Medical Society and Student Services Fee. Incidental fees are subject to change.
** The Educational Resource Fee goes toward covering the costs of printed course materials, books, and online resources. The Education Resource Fee is subject to change.

TYPICAL FIRST-YEAR STUDENT BUDGET FOR THE UME PROGRAM

UME Student Financial Services has compiled the following sample cost information. Individual expenses may vary dependent upon living situation and personal spending habits.

For information tailored to your unique circumstances, please contact the Associate Registrar, Student Financial Services.

Sample First-Year Student Budget (2015-16)

Expense category	Estimated Amount
Fees	$ 24, 176.94
Books & Equipment	$ 1,700.00
Rent and Food costs	$ 9,580.00
Other Living Expenses	$ 7,160.00
TOTAL COSTS	**$ 42,616.94**

FIRST-YEAR FUNDING SCENARIO

The chart below outlines the average funding received during the last session (2014-2015) by students who qualified for Faculty of Medicine/University of Toronto Grant Assistance. During 2014-2015, 74% of all students enrolled in the MD program at U of T qualified for grant assistance.

Funding Source	Average Amount
Average Provincial Loan Amount *	$ 13,884.00
Average Grant Amount	$ 6,910.00
TOTAL FUNDING	**$ 20,794.00**

*The Province of Ontario continues to provide Ontario Student Opportunity Grants to recipients of OSAP funding that limit the amount of Canada-Ontario Integrated Student Loan debt that an eligible student has to repay to $7,300 for two-terms of study. Using the example above, the total funding of $13,884.00 would be comprised of a loan in the amount of $7,300.00 and an Ontario Student Opportunity Grant in the amount of $6,584.00. To learn more, visit the OSAP web site: http://osap.gov.on.ca

For information on accessing financial aid and counselling or to speak with any of the Student Financial Services staff, please see Services & Assistance for Students → Student Financial Services.

DISABILITY INSURANCE

All students in the UME program are strongly encouraged to obtain disability insurance in order to have insurance coverage in the event of illness or injury. Students who receive financial aid are required to purchase disability coverage and provide proof of coverage.

Disability insurance can be obtained from various providers. Information is available during Orientation Week.

E-Resources & IT Services Used in UME

The UME program employs a number of different online resources. Each plays an important role in the program. Students should have some familiarity with all of them. For any questions about the resources, the Discovery Commons will generally be able to assist or to redirect users to the appropriate supporting office.

UME WEBSITE

http://www.md.utoronto.ca

This is the public website for the UME program, and has been designed to meet the needs of several specific user groups: students, teachers, course directors, and applicants. Full descriptions of all aspects of the program and the resources that are available to students are described on the site. In addition, all UME policies are posted, as well as links to other important information maintained by the Faculty of Medicine, the University of Toronto, and outside organizations.

The website also has several new features including a student assistance section. By clicking on the student assistance 'button', students can: view information and resources to help during urgent or crisis situations; access an incident report form to report distressing events that they experience or witness; and, access resources related to absences from the program that they may need to take. (For more information, see Services & Assistance for Students)

The latest version of this *Student Handbook* is also posted on the website, under the "Students" menu.

UTORid

All University of Toronto students are assigned a "UTORid," the unique username for a variety of online services including the Portal, the University of Toronto Library system, University of Toronto e-mail, and WiFi access across the campus on the UofT network.

UTORids are typically eight characters long and take the first part (or all) of your last name, usually followed by the first letters of your first name and/or random numbers. E.g., singh516, leungden, etc.

Students are assigned a UTORid when they obtain a "TCard" (University of Toronto identification card). For all assistance related to your UTORid, start by visiting the Information Commons website at: http://help.ic.utoronto.ca/category/2/accounts-and-passwords.html (or just go to the main University of Toronto website, www.utoronto.ca and type "utorid" in the search line).

For additional assistance, please contact the Information Commons Help Desk at help.desk@utoronto.ca or 416-978-4357.

A note about security: Once you have logged into one UTORid-based online service (e.g. the Portal), you will remain logged in for all other UTORid-based services as long as you keep at least one browser window open on your computer. To end your secure session (i.e. to log out), you **must** close all browser windows.

UofT WIFI

Networks: UofT, eduroam (login: UTORid and password)

There are two wireless networks available on campus, including "UofT," and "eduroam":

- The UofT wireless network is intended for day-to-day usage. It supports wireless b, g, and n, and does not require a browser-based login each time you connect. For devices capable of wireless n, it is faster and has increased range.
- The eduroam network at U of T is intended for visiting scholars from other participating eduroam institutions. Likewise, U of T faculty and students can log into eduroam at other universities using their U of T credentials.

Before you can access the UofT network, you will need to register your UTORid by using the verify tool. This must be done *even if your UTORid is working for other services.* To verify, use this link:

https://www.utorid.utoronto.ca/cgi-bin/utorid/verify.pl

There will be a short delay between verifying and being able to access UofT. Please note that the device will be configured with the UTORid and password that was used to set it up, and it is therefore not recommended for shared computers or devices.

For help with using the UofT WiFi network, call the Information Commons helpdesk at 416-978-HELP (4357_ or visit: http://help.ic.utoronto.ca/category/20/wireless-access-utorcwn.html.

STUDENT WEB SERVICE (SWS): REPOSITORY OF STUDENT INFORMATION (ROSI) AND ACCESSIBLE CAMPUS ONLINE RESOURCE NETWORK (ACORN)

www.rosi.utoronto.ca (login: student number and 6-digit numeric PIN)

ROSI is the University-wide repository of data relating to a student's registration and academic record at the University of Toronto. Students access ROSI by logging on to the address provided above. For first-time login, the password is the user's birth date in the format of YYMMDD.

Three failed login attempts will result in an account being "locked." It is recommended that students set up PIN reactivation security questions (available through the "Maintain your PIN" link within their ROSI account). These questions will allow students to access their account in the event that they have forgotten their PIN. Otherwise, students must visit UME Enrolment Service to have their ROSI password reset.

It is very important that medical students keep their ROSI record up-to-date, in particular their permanent and mailing addresses and their official University of Toronto e-mail address. Other information on ROSI that students can access include financial account details with the University (showing payments received, outstanding balances, etc.) and downloadable income tax slips.

Note: ROSI is unavailable daily from approximately 11:45 PM to 12:15AM for system maintenance, and for longer periods on weekends. The current hours of operation are available on the ROSI website.

www.acorn.utoronto.ca (login: UTORid and password)

ACORN is the University's new online student services platform, which was launched on June 22, 2015, and will replace ROSI over the next few months. For more information about ACORN, please refer to http://introducting.acorn.utoronto.ca/

MedSIS

http://medsis.utoronto.ca (login: student number and password)

MedSIS is the secure online system that UME uses to record and calculate student assessments by teachers in all courses, obtain student feedback on their teachers and courses, maintain student registration information, and perform course scheduling in all Preclerkship and some Clerkship courses.

By logging on to MedSIS, students can access:

- Their personalized timetables and, if available, daily class schedules and locations (this feature is not available in certain Clerkship courses)
- Any evaluation forms completed to date by teachers for activities such as clinical assessments in the Clerkship and professionalism in all courses.
- Teacher and course evaluations for students to complete confidentially
- Grades for all completed assessments and completed courses*
- The results of other assessments, such as professionalism evaluations, that involve teachers completing a teacher and course evaluation forms, where they have the opportunity to provide both numerical ratings and comments on essentially all of their teachers and every learning activity
- An iCalendar utility to sync the personal MedSIS schedule to the calendar in a mobile device
- Locker information

* Grades that appear in MedSIS are unofficial pending approval by the Board of Examiners at the end of the academic year.

An automated e-mail from medsis.server@utoronto.ca is sent to students whenever an evaluation form for a teacher or course has become available for them to complete or if an evaluation completed about them is available for their review and comment. E-mails may also be sent from MedSIS with a notification to check examination results or other information.

New students receive their MedSIS login information just before the start of Year 1. To retrieve a lost username or password, go to the MedSIS website, choose "Login to MedSIS," and then "Forgot your password?" On the request page, the same e-mail recorded in ROSI/SWS must be provided. An e-mail message including both the username and password will be sent within minutes. For security reasons, if you have requested the password to be sent over e-mail, it is strongly recommended that you change it the next time you log in.

For assistance, contact the MedSIS Help Desk at Knowledge4You (the company that developed and supports MedSIS) at: medsis@knowledge4you.com or 905-947-9924 ext. 223.

E-MAIL: U of T E-MAIL ADDRESS and ONE-MAIL DIRECT

https://mail.utoronto.ca (login: UTORid and password)

University of Toronto student e-mail addresses (UTMail+) are in the form @mail.utoronto.ca. The University of Toronto e-mail address is the official mode of communication on all matters related to your status as a student. All students are required to use this address and check it regularly, as described in the University's *Policy on Official Correspondence with Students* (www.governingcouncil.utoronto.ca/policies).

Information about UTMail+ is available at: http://help.ic.utoronto.ca/category/3/UTmail.html. For additional technical support, contact the University's Information Commons helpdesk at help.desk@utoronto.ca or 416-978-4357.

Note: You must ensure that this e-mail address is recorded in ROSI or ACORN (see below) to ensure that all University services have your correct contact information.

For medical students, an additional e-mail service is available for use in clinical settings. ONE Mail Direct will provide students with secure email for clinical communications with their supervisors, fellow students, and other members of the health care team. It is required and intended solely for clinical communications; all other academic, course-related, and personal communication should be done through UTMail+ or a personal email account. ONE Mail Direct is run by eHealth Ontario. Soon after the term begins, each student will receive an invitation email that will be sent to their UTMail+ account – simply follow the instructions in the email to activate your ONE Mail Direct account, which will be yours for as long as you practice medicine in Ontario. The address will be in the form firstname.lastname@one-mail.on.ca.

If you have questions about your ONE Mail Direct account or haven't received an invitation for the service, please contact onemail.help@utoronto.ca.

PORTAL

http://portal.utoronto.ca (login: UTORid and password)

The Portal (powered by an application called Blackboard®) is a secure website used across the University as a hub for course websites, including those in UME. Login is via UTORid (see above). Unlike the UME website (see above), the Portal is designed for internal use only. At a minimum, all UME courses post their learning materials on the Portal or on MedSIS, and many courses use additional features such as announcements as well.

Upon login, students will see a link to every current and previous UME course in which they have enrolled. The Office of Health Professions Student Affairs (OHPSA) also has a portal site appearing in the "My Organizations Plus" section of the start page., as well as information about the OHPSA's services. Some students may see additional organizations for groups such as committees.

Portal websites are maintained individually by each course, office, or other sponsoring group. If you encounter a problem locating or using any of the resources on the portal, please contact the responsible administrator (see the course listings in this handbook or the directory).

E-LEARNING

In various courses in both the Preclerkship and Clerkship, online resources are used to complement more traditional learning methods. For example, students have an opportunity to learn through simulated microscope labs (e.g., STF), detailed clinical case scenarios (e.g., Paediatrics), and e-modules on patient safety (e.g., TTC). Some e-learning resources are available on or via the Portal (see above) while others are accessed at different sites, sometimes with login information provided by the course. While in some courses, e-learning resources are provided as an optional study aid, in many cases, they constitute mandatory content and/or assessments that all students must complete; therefore, students should familiarize themselves with all course expectations. (See the course descriptions in this handbook and further details on the individual portal sites for each course.)

For questions about course-specific online resources, contact the course director or course administrator, unless other instructions are provided.

CASE LOGS

All Year 3 clinical clerks are required to log the required experiences defined in each core clerkship rotation using an online system called "Case Logs."The "Case Logs" tab is visible on the left-hand-sided menu that appears as soon as you log into MedSIS. Every course has defined the "encounters" (the patients' presenting problems or diagnoses) and "procedures" that all students must log as part of the rotation. In order to achieve credit in any core clerkship rotation, students must complete, in full, all requirements on the encounter and procedure list. It should be noted that in most cases, each experience need be completed only once, but some encounters or procedures have a higher requirement. Details of the logging and review process are described in the policy *Required clinical experiences in the core clerkship rotations: Responsibilities of students, faculty, and UME curriculum leaders* . The following instructions explain how to use the system:

Logging Activities

1. After logging in, click on "Add a Case Log." The entry will default to your current rotation, assigned hospital site and today's date. You are able to change the field if you are logging, for example, retroactively.
2. Fill in all the applicable fields. Click on "Add" if you wish to enter another encounter or procedure. You may include up to 8 encounters and procedures in one entry.
3. You may optionally enter any private notes. Note that any personal and or confidential information should not be included in these notes. Click "Save as draft" if you wish to complete the log at a later time. It will not be calculated towards the tally until submitted.
4. Finally, click on the "Submit" button.

Viewing Activities and Printing Reports

1. Click on "Reports" which can be found on the Case Log menu on the left hand side of MedSIS. It will default to your current rotation.
2. On the left-hand-side, a check mark beside the encounter or procedure means you have met the expectation. A red "X" indicates that encounters and procedures are still outstanding. The right-hand-sided columns indicate how many cases you have logged and what the goal/requirement is, as well as how many encounters or procedures are still outstanding/missing.
3. "Print PDF" to create a hard copy report, or review the summary online with your supervisor.

UME CURRICULUM MAP (CMAP)

http://medsis.utoronto.ca (login: MedSIS PIN and password)

The curricular content of all teaching and learning events across the four-year Undergraduate Medical Education (UME) program is described and classified in the Curriculum Mapping module in MedSIS. This searchable reference tool is accessible to UME teachers and curriculum planners, and to all medical students, past and present. The Curriculum Mapping module is intended to support all aspects of the design, implementation and analysis of the curriculum. Each MedSIS event (lecture, seminar, lab, PBL case, etc.) is captured and classified according to the following parameters:

- Location in the program (year, course, date (for scheduled pre-clerkship events))
- Keywords (including a weighting for levels of coverage)
- UME Goals and Objectives supported by the activity (weighted for levels of coverage)
- Medical Council of Canada Objectives (weighted for levels of coverage)
- Special topics (traditionally under-represented topics, often outside of traditional domains)

The curriculum mapping description for many events, particularly lectures in the Preclerkship block courses, are linked to the full PowerPoint slide presentation delivered in the event. This feature enables students, teachers and others to review the content of entire events of interest.

The map can be searched either by keywords or by one of the learning parameters listed above. For example, a user may perform a keyword search on a term such as 'asthma' to locate the sessions in the program where asthma is a prominent topic. One can also, for instance, search for events that provide the material required by a UME Objective such as Communicator-3 (deliver information to the patient and family in a humane manner), or by an MCC objective/presentation such as 'Cough'.

This tool is available to members of the Faculty of Medicine community with valid MedSIS user accounts. To access the Curriculum Mapping module, users simply login to MedSIS with their MedSIS PIN and password and select Curriculum Mapping from the left side-bar. To access associated PowerPoint slides, users must be logged in to the U of T portal https://portal.utoronto.ca/ in a separate tab before clicking on the link to the slides.

ELECTIVES CATALOGUE AND REGISTRATION SYSTEM

Catalogue: http://medsis.utoronto.ca/electives/
Registration system: https://medsis.med.utoronto.ca/
AFMC National Portal: http://www.afmcstudentportal.ca

Elective experiences offered by University of Toronto faculty members are available to University of Toronto students at the first link above, as well as the experiences that UofT clerkship students have registered in ROUTE on MedSIS (second link above). Students are also free to arrange electives outside these sources by contacting faculty members directly.

ROUTE on MedSIS is the current registration system used by U of T students to propose and register electives offered through UofT. When a U of T student proposes an elective with a particular supervisor, a notification is sent by e-mail to the designated Placement Contact (administrator or supervisor) with a request to review the submission. The Placement Contact may then accept, edit or decline the elective. Notification of this decision is sent to the student. If there are submissions that do not comply to present policy, they will first be validated by the Electives Office before notification is sent to the Placement

Contact. When a student confirms an elective, it is considered registered. Notifications of confirmed or cancelled electives are sent to the Placement Contact, and to the Medical Education Office where applicable.

A similar process is followed for visiting electives. The AFMC National Portal is used to register electives with medical schools in Canada (third link above).

DISCOVERY COMMONS

The Discovery Commons is the Faculty of Medicine's information technology support unit, and its many activities include audio-visual services (e.g. videoconferencing and recording Preclerkship lectures), application development , application and computer support (e.g. troubleshooting assistance for staff, students, and faculty), and facilities and infrastructure (e.g. running computer labs, maintaining administrative networks, etc.).

For students, the services offered by the Discovery Commons are most visible in four respects:

1. Service Desk, which provides direct access to any of our services
   Open during regular business hours
   MSB 3172 / 416-978-8504 / discovery.commons@utoronto.ca
2. Computer labs featuring a total of 100 laptop workstations plus a foyer with eight computers and a high-capacity printer
   Open during regular business hours (when not booked for classes)
   One 20-station lab is available overnight and on weekends to medical students only
   Entry through MSB 3172 (Discovery Commons main entrance)
3. Meeting rooms and classrooms available for booking by students and other groups in the Faculty of Medicine, including support for videoconference and teleconference as requested
   To request a booking, contact the Service Desk, as described above
4. Videoconferencing and recording of lectures conducted in MSB 3153 and 3154 and the lecture theatres at the Mississauga Academy of Medicine.

More information about Discovery Commons services is available at: http://dc.med.utoronto.ca/

UNIVERSITY OF TORONTO LIBRARIES

http://www.library.utoronto.ca (login: UTORid and password, or library card barcode and password)

The University of Toronto library system has one of the most comprehensive collections of both print and online resources in the world. The Gerstein Science Information Centre is of particular importance in health sciences education. Online resources for Gerstein and the other U of T libraries are accessible to students as well as all other members of the University of Toronto via their UTORid.

For quick access to resources in the biomedical sciences, go to the Gerstein homepage:
http://www.library.utoronto.ca/gerstein/index.html

Through its website, the library makes available a number of support services, including live chat and instant messaging with librarians who can provide users with research assistance. The library also conducts periodic in-person group training workshops and offers one-on-one research consultation appointments for interested students and faculty. See the Research section of the website for details.

Study Space

There is a wealth of study space available to students in the UME program, to accommodate the full range of study practices, whatever the subject, group size, or hours!

ST. GEORGE CAMPUS

Undergraduate Medical Student Study Space

Students on the St. George campus benefit from the new Undergraduate Medical Student Study Space located at 263 McCaul Street, which opened in 2012 based directly on student feedback. This space, which is available 24/7 exclusively for medical student and PA student use, is equipped with a mixture of study carrels, open seating, small-group study rooms, and "ASCM" rooms for physical examination practice, as well as a small lunch room. Wireless access is available throughout the space, and there are a number of laptops provided for students who do not bring their own. The Study Space is secure and accessed by card keys issued to medical students only. Located on the fifth floor of 263 McCaul Street, the space is easily accessed by walking across the street from the MSB, and through the Health Sciences Building (155 College St.), via the second-floor walkway.

Discovery Commons

Through an agreement with the Discovery Commons (DC), the computer lab 3172 is available for after-hours and weekend use exclusively for medical students. Students from various programs are also welcome to use the computers in the DC foyer 24/7, and may also use the computer labs when not booked for classes or meetings.

Gerstein Science Information Centre and other University of Toronto libraries

Like all students at the University of Toronto, medical students have access to all University of Toronto libraries for study purposes. A range of group and individual seating options are available on a first-come, first-served basis. The UME program has arranged with the Gerstein Science Information Centre for earlier opening times on Sundays and extended hours on the Fridays prior to Preclerkship exams. For library hours, please see http://www.library.utoronto.ca.

UTM CAMPUS

Terrence Donnelly Health Science Complex

MAM students have exclusive 24/7 access to the Academy space in the TDHSC and are welcome to use the small-group / clinical skills rooms on a first come, first served basis or whenever they are not booked. Upon request to MAM administrative staff, additional available classroom space will be unlocked.

UTM Library (Hazel McCallion Academic Learning Centre)

As UTM students, MAM students have access to the considerable study space available at the HMALC. A range of group and individual seating options are available on a first-come, first-served basis. For library hours, please see http://www.library.utoronto.ca.

Elsewhere on the UTM Campus

There are various study locations available for students on campus. They are categorized and described (by noise level, time, and location) at http://www.utm.utoronto.ca/study-space/.

ACADEMIES

All of the Academy sites provide study space to their students, including both group and individual seating options

Research Opportunities

The University of Toronto has the most extensive biomedical and health research resources in Canada and among the best in the world. Medical students are encouraged to explore their interest in research through opportunities organized within the UME program and through other initiatives offered by individual Departments and Hospital Research Institutes affiliated with the University. The majority of such opportunities are offered during the summer, when Preclerkship students in particular are able to devote large blocks of time to research projects.

COMPREHENSIVE RESEARCH EXPERIENCE FOR MEDICAL STUDENTS (CREMS)

CREMS is an umbrella program that allows interested medical students to gain extracurricular research experience in various structured sub-programs without interrupting their medical studies. CREMS aims to provide participating students with an opportunity to:

- explore their research interests
- gain valuable hands-on research experience
- prepare for a clinical career with a good research foundation and understanding of biomedical research
- Consider a career as a clinician-scientist

For a complete description, please see: http://md.utoronto.ca/research

Students participating in any of the CREMS programs undertake an original research project under the supervision of a member from the University of Toronto Faculty of Medicine. The research may be in the basic, clinical, applied biomedical, or epidemiological sciences, or in social sciences/humanities related to medicine or medical practice. Projects are diverse and may involve laboratory experiments, prospective, or retrospective clinical or social studies. All potential supervisors and research projects must be approved by the CREMS Director and Advisory Committee prior to commencement of the particular CREMS program of choice.

The CREMS programs are not part of the required medical curriculum. Students participating in the CREMS programs do so in addition to the regular official curriculum and electives as set forth by the Faculty of Medicine. Moreover, students must be in good academic standing (i.e. have passing grades in all courses) both to participate and continue in any of the CREMS programs. Failure to satisfy administrative requirements of the CREMS program may also lead to dismissal from this extra-curricular activity.

For all CREMS programs, participating students are expected to present their work at the Medical Students Research Day held in late winter/early spring of the following year.

The various CREMS programs are described on the next pages.

1. CREMS Research Scholar Program

The Research Scholar program is a 20-month longitudinal program that begins in January of first year of medical school with a modest commitment of time (up to ten hours per week) for the rest of the first year. It extends as a full-time block throughout the summer between first and second year, continues during second year (again up to ten hours per week), and then concludes with a second full-time block in the summer between second and third year. A stipend of $15,000 for the entire program is provided. The CREMS Research

Scholar program accommodates up to 30 students at one time. Supervisors must be full or associate
(Comprehensive Research Experience for Medical Students (CREMS), continued)

members of the University of Toronto School of Graduate Studies. Please check the website for deadlines and information on the application process: http://md.utoronto.ca/research-scholar-programs

2. CREMS Summer Program

This is a 10-to-12-week full-time program that can be completed either during the summer between first and second year or during the summer between second and third year. Students may seek out a mentor independently or select from a list of potential mentors provided by the CREMS program. The chosen supervisor does not need to be affiliated with a University of Toronto graduate program. Students are selected through a competitive application process, and each receives a stipend of $5,500. Please check the website for deadlines and information on the application process: http://md.utoronto.ca/summer-research-programs

3. MAA International Health-Related Scholarships (in partnership with CREMS)

This international health program is a 10-to-12-week summer experience that enables students to conduct research in a developing country. There are usually eight to ten positions available for the summer. The scholarship are offered by the Medical Alumni Association (MAA) and are intended to cover return airfare and a modest stipend. There are two options:

- The supervisor is a U of T faculty member who has an ongoing global health project. or
- The project can be self-initiated, provided that the student is able to secure both a U of T faculty supervisor and an in-country supervisor.

The quality of proposed projects is adjudicated by a CREMS program committee, and the top-ranked projects will be supported. Please check the website for deadlines and information on the application process: http://md.utoronto.ca/medical-alumni-association-crems-programs

4. MAA Scholarships in Humanities and Social Sciences (in partnership with CREMS)

This program provides a 10-to-12-week summer opportunity for two students to pursue research interests in the humanities or social sciences related to medicine. Preference will be given to one project related to the history of medicine. Supervisors do not have to be from the Faculty of Medicine but must be from the University of Toronto. A stipend of $5500 is provided. Please check the website for deadlines and information on the application process: http://md.utoronto.ca/medical-alumni-association-crems-programs

OTHER EXTRA-CURRICULAR RESEARCH OPPORTUNITIES

In addition to research under the umbrella of the CREMS programs, students may participate in other research opportunities made available by individual University Departments and Institutes or by hospitals. These include pure research programs as well as combined research/clinical experiences such as the Department of Paediatrics "PeRCS" (Pediatric Research and Clinical Summer) program. Please note that the application procedures, funding practices, expected time commitment, and eligibility restrictions are at the discretion of the sponsoring Department or institution.

THE MD/PhD PROGRAM

The goal of the MD/PhD program is to generate physician scientists who are well prepared, highly competitive, and productive. Students enrolled in this program complete all requirements of the four-year MD program and also fulfill the expectations set by the School of Graduate studies for all PhD candidates. In most cases, MD/PhD students complete Year 1 of the UME program, exit medicine to pursue the PhD – generally for four to five years, depending on the research topic and the outcome of their investigations – and return to complete Years 2, 3, and 4 of the MD degree after the PhD thesis has been completed.

The program is described in full at:
http://md.utoronto.ca/mdphd

In-Course Admission to the MD/PhD Program

Most MD/PhD students apply and are admitted to the joint degree as part of their application to medical school. However, the MD/PhD Admissions Committee also welcomes applications from students currently in the Preclerkship who wish to convert from the regular MD stream to the MD/PhD. Potential applicants may wish to meet with the Director of the MD/PhD Program / Associate Dean Physician Scientist Training, Dr. Norman Rosenblum, during the application process.

The Admissions Committee of the MD/PhD Program seeks applicants with demonstrated academic excellence, evidence of sustained and productive research experience, and strong potential to become a physician scientist. Applications are due October 15 each year. Instructions about the application process are available on the website at the URL provided above.

Applications are reviewed by members of the MD/PhD Admissions Committee by early January, and highly ranked candidates are invited to interview in January and February. Final decisions are made by May 31.

Research in the MD/PhD Program

MD/PhD students may pursue research in any field related to medicine. The Program is eager to support research training across the breadth of disciplines extending across biomedical science, clinical research, population health, and health policy and services. The research projects of current MD/PhD students are described on the website, along with short profiles of the students themselves.

Students in the joint program participate in a bi-weekly seminar series for the entire duration of their studies, and also meet periodically with the Director.

Career Exploration

During their time in the UME program, students have multiple avenues to explore possible career options, including electives and selectives, the FMLE course, extra-curricular observerships and other shadowing opportunities (particularly those under the Enriching Educational Experiences program), career counselling offered by the Office of Health Professions Student Affairs, and experiences available at each Academy.

These opportunities are presented in roughly chronological order below.

CAREER EXPLORATION - ENRICHING EDUCATION EXPERIENCES (EEE)

The Faculty of Medicine recognizes that many students set up various "shadowing" and related clinical activities outside of regularly scheduled curriculum time. These events are referred to as Enriching Educational Experiences (EEE).

Website: OHPSA website - http://md.utoronto.ca/career-exploration
EEE website coming online late summer/early fall 2015

For more information, contact Dr. Jon Novick, Career Exploration Faculty Lead – jon.novick@utoronto.ca

CAREER COUNSELLING AND INFORMATION SESSIONS

Career counselling appointments and group information sessions are offered to medical students by the professional counsellors in the Office of Health Professions Student Affairs (OHPSA), beginning in Year 1. The goal of career counselling is to help guide students to determine what kind of physician they aspire to become and manage their career development. Career development is a process of self-assessment, exploration, decision-making, and implementation that begins on the first day of medical school and continues through the following four years. The OHPSA offers:

Individual sessions

- Self-assessment sessions
- Medical specialty career exploration
- CaRMS application assistance
- CV and personal statement critique
- Interview practice and support

Group sessions

- Lunch-time career talks in the second-year course, MMMD (with the participation of faculty)
- Career panels
- Presentations

Resources

- http://md.utoronto.ca/career-counselling-resources
- Access to the online AAMC Careers in Medicine website: https://services.aamc.org/careersinmedicine/

For details, please see the OHPSA website at http://md.utoronto.ca/OHPSA.

To make an appointment with a career counsellor, submit a request through the website or contact OHPSA at 416-978-2764 / ohpsa.reception@utoronto.ca

FAMILY MEDICINE LONGITUDINAL EXPERIENCE (FMLE) (curricular)

The mandatory FMLE course in second year is designed to introduce students to a career in family medicine, among other objectives. Over six half-day sessions, students experience a variety of patients, practice the clinical skills acquired in the ASCM courses, and discuss the role of primary care physicians in health care with their preceptor in a one-on-one setting. While not all students will choose to enter family medicine, FMLE provides a valuable early experience in primary care and models how all specialities intersect at the core of the patient's medical home.

OTHER DEPARTMENTAL AND ACADEMY PROGRAMS (extra-curricular)

Several Departments organize optional experiences that are similar to the FMLE or other types of faculty mentorship in the area of career advising and exploration; for example, Paediatrics offers "PedLE" and Psychiatry offers "PsychLE". These programs require an application or expression of interest, and are announced via listserv and/or in-class announcements. The four Academies also offer a variety of supports around career selection, including mentorship programs, information sessions, private appointments with the Academy Director, and practice interviews.

ENRICHING EDUCATIONAL EXPERIENCE (EEE) PROGRAM (non-curricular)

The EEE Program is now located within MedSIS.

An Enriching Educational Experience (EEE) is a clinical experience that is not part of a medical student's formal core curriculum, whether it occurs during Preclerkship or Clerkship. These activities are usually taken to explore different career options and bring relevance to classroom learning; students in all 4 years may be involved in these non-curricular clinical activities. EEE activities are often referred to as "shadowing," "observing," and "preceptorships," and the EEE Program can help students organize and carry out an activity in a manner that is fair and informed. This Program is overseen by the Faculty Lead for Career Exploration.

It is expected that all clinical experiences undertaken outside the curriculum by a student in any year of the program, either with a supervisor in the current database or any other faculty member, be logged with the EEE Program. The EEE Program in housed within MedSIS and contains a catalogue of past activities that students can use as a starting point for organizing experiences. The Program also contains important information for students and supervisors about how these activities are to be carried out, and information about insurance coverage.

Please direct all questions about the program to Dr. Jon Novick, Career Exploration Faculty Lead, at jon.novick@utoronto.ca

U OF T MEDICAL STUDENT OBSERVERSHIP EXPERIENCE WITH ICHA PHYSICIANS

The Inner City Health Associates (ICHA) is a group of over 60 family physicians, internists and psychiatrists working in over 40 shelters and drop-in facilities across Toronto. ICHA provides primary, mental health and palliative care to those who do not otherwise have access to care. This organization serves people living on the street and in shelters as well as those who are precariously housed.

Each year, OHPSA works with ICHA to provide medical students (mainly those in preclerkship) with an opportunity to shadow ICHA physicians for a single half-day experience. This serves as an introduction to learning about the complex medical, social and financial challenges facing some of the most vulnerable members of our society. This experience will reinforce some of the learning objectives pertaining to the determinants of health taught in the Community, Populations and Public Health (CPPH) courses, and allow

(U of T Medical Student Observership Experience With ICHA Physicians, continued)

students to gain insight into the various agencies and organizations working with specific populations in Toronto.

Physicians will be directly responsible for supervision of observers as per the "Enriching Educational Experience" program guidelines. Interested students should contact Ike Okafor Senior Officer, Service Learning and Diversity Outreach at ike.okafor@utoronto.ca

FRANCO DOC SHADOWING EXPERIENCES

OHPSA, along with the U of T Medicine Communauté Francaise (student group) and Réseau franco-santé du Sud de l'Ontario, are working together on the AFMC Franco Doc initiative to increase French usage amongst future physicians by organizing and supporting clinical and experiential activities in French and Bilingual environments.

Funding is available throughout the school year and summer to support shadowing and clinical rotations in French and Bilingual clinical settings. Interested students should contact Ike Okafor Senior Officer, Service Learning and Diversity Outreach at ike.okafor@utoronto.ca

CORE CLERKSHIP ROTATIONS (curricular)

Although core clerkships are designed to ensure that all students graduate from the program with a foundation in all of the major disciplines of medicine, they do of course have a career exploration element as well. In 2010-11, a new Clerkship structure was launched, and one of the motivating factors was a desire to provide students with all of the core clerkship rotations prior to the CaRMS application deadline in the fall of Year 4.

Individualized career exploration is especially possible on rotations that offer sub-rotations or special experiences such as Surgery, Obstetrics & Gynaecology, and Family & Community Medicine. Students are encouraged to think about personal interests or objectives that they have on each rotation and avail themselves of opportunities to fulfill them.

Descriptions of the core clerkship rotations begins here

ELECTIVES (curricular)

The objectives of the Electives program are to provide flexibility and opportunities to explore career possibilities, gain experience in aspects of medicine beyond the core curriculum, and study subjects of interest in greater depth. To ensure that all students experience a sufficient breadth of experiences, all medical schools in Canada have agreed to a "three-discipline rule": by the time of graduation, each student must have completed elective or selective experiences in a minimum of three different disciplines with direct-entry residency programs from medical school.

For more information on Electives, see the course description here.

Special Interests

LEADERSHIP EDUCATION AND DEVELOPMENT (LEAD) PROGRAM

The LEAD program is an extracurricular initiative that provides participating medical students ("LEAD Scholars") with the solid foundation of values, skills, and experiences needed to allow them to realize their full potential as leaders. The LEAD program aims to create a new generation of physician leaders committed to improving health care and the health of all our communities.

The LEAD program is delivered by the Faculty of Medicine in collaboration with the Institute of Health Policy, Management & Evaluation, the Rotman School of Management, and the School of Public Policy & Governance. Applicants are drawn from the first-year UME class each year, with a deadline in January and interviews in February.

The program comprises two summer-long practicum experiences after first and second year, respectively, and a longitudinal sequence of six graduate courses: one taken in the summer after first year, three taken during second year, one taken during the third-year Clerkship, and one taken during fourth year. Bursary support is available, with $5,500 for the first summer practicum, and $6,500 for the second practicum.

For details, please see: http://md.utoronto.ca/leadership-opportunities

MEDICAL SOCIETY COMMUNITY AFFAIRS PROGRAMS

The Community Affairs portfolio of the Medical Society organizes medical student involvement in 26 programs in the community, most of which are focused on providing assistance to marginalized and disadvantaged populations, children, and the elderly.

Check the MedSoc website (www.uoftmeds.com) for contact information for the coordinators of these programs or speak with the Vice-Presidents Community Affairs for more information about how to get involved. Descriptions of each program are available on the www.uoftmeds.com website under 'groups,' or through the Office of Health Professions Student Affairs portal site, under Service-Learning & Student Life: http://portal.utoronto.ca → "My Organizations Plus"

- Adventures in Science (St. George)
- Adventures in Science (MAM)
- Blood Drive
- Bloorview Child Arts
- Community Outreach (St. George)
- Community Outreach (MAM)
- Global Heart Hour
- Growing Up Healthy (St. George and MAM)
- Healing Tonics
- Healthy Sexuality (St. George and MAM)
- Interdisciplinary Medical and Allied Groups for Improving Neighbourhood Environments (IMAGINE)
- Immigrant and Refugee Equitable Access to Community Healthcare (iREACH)
- Kids2Hear
- Kids2See
- Making Waves (St. George)
- Making Waves (MAM)
- Parkdale Mentorship Program
- Saturday Program (SP)
- Saturday Program Mississauga (SPM)
- Scadding Court Mentorship Program
- Seniors' Outreach
- Smiling Over Sickness
- Sun and Skin Awareness (S&S)
- University Discovery and Career Exploration
- Varsity Docs
- Woodgreen Mentoring Program

Awards

AWARDS FOR STUDENTS

The Faculty offers a limited number of merit-based scholarships in each year of study, which are awarded based on a number of different criteria, including academic standing, community or Faculty involvement, and extracurricular activities. Some of these awards also take demonstrated financial need into consideration. Most of these scholarships require no application, and for those that do, applications are distributed to all potentially eligible students (based on year of study) by e-mail. The monetary value of all scholarships is variable and should, in most cases, be considered of a supplementary nature.

These scholarships have been established through the generosity of our donors, both private individuals and corporate bodies. They are described at: http://md.utoronto.ca/awards-scholarships, under the following categories (as well as Admissions Scholarships):

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

Other types of financial assistance, including bursary and loan programs, are administered by the Office of Student Financial Services.

AWARDS FOR TEACHERS

Students play an important role in nominating and supporting education and teaching awards to recognize outstanding educators in the Faculty of Medicine, including the UME program. Nominations by students are encouraged for Faculty of Medicine teaching awards, and in many cases, student support is a prerequisite for nomination.

Education and teaching awards are granted each year in recognition of individual teachers' excellent contributions. Internal awards are granted at the Department, Academy, program, and Faculty levels, and prestigious external awards are offered by the University of Toronto and various provincial, national, and international agencies.

Aikins Awards

For the UME program, the Faculty-level awards are known as the W. T. Aikins Awards. All Faculty of Medicine academic staff who teach in the UME program are eligible to be nominated for an Aikins Award. This award specifically rewards teaching in the undergraduate medical program. Academic staff who teach in the UME program should not be nominated for their work in other programs, for example, teaching in Arts and Science. The minimum number of nominators required for each nomination, and who can nominate, depends on the category as follows:

- Individual Teaching Performance – Small Group: Requires at least two student nominators.
- Individual Teaching Performance – Large Group: Requires at least five nominators (minimum two student nominators)
- Course/Program Development and Coordination: Requires at least three nominators (one student, one faculty member, and the Department Chair).
- Development and Use of Innovative Instructional Methods: Requires at least three nominators (one student, one faculty member and the Department Chair).

(Awards for Teachers, continued)

The nomination procedure is a two-stage process. The first stage requires nominators to fill out a preliminary nomination form indicating the nomination category along with a letter indicating why they are nominating the individual(s). The Aikins committee (composed of faculty and undergraduate students) reviews and evaluates all nominations. Nominees who are selected for further review are then required to provide additional supporting documentation for the second stage of the nomination process. The Aikins committee evaluates the documentation provided and selects the winner(s) in each category.

For details, see:
http://www.medicine.utoronto.ca/about-faculty-medicine/awards-w-t-aikins

Medical Alumni Association Awards
The Medical Alumni Association (MAA) presents awards and prizes to both students and faculty members at the Convocation Banquet and throughout the year in recognition of clinical and academic excellence. Most MAA award decisions are made by the Undergraduate Awards Committee. For more information, please visit http://www.maautoronto.ca/StudentSupport/FinancialAssistance/MAAAwards.aspx, or contact Ruth Gillings at medical.alumni@utoronto.ca.

Other Awards
Community teachers in UME and other medical education programs are also eligible for community teaching awards, offered at the Faculty level. There are three categories of awards, recognizing outstanding teaching in community hospitals and in clinic or practice settings, and for sustained excellence in community-based teaching. For more information about eligibility and nominations please visit:
http://oime.utoronto.ca/Page10.aspx.

Individual Academies circulate information regarding their specific teaching awards directly to their students. Departments collect student nominations in various ways, as explained to students during clerkship rotations or via departmental websites.

Twice each year, our Faculty has the privilege of recognizing outstanding contributions to teaching and education by nominating faculty members for a suite of external provincial, national and international teaching awards. Internal nomination processes are conducted in May and November, and successful nominees are put forward on behalf of the University. To learn more about external education and teaching awards, please visit http://www.medicine.utoronto.ca/faculty-staff/awards-external-teaching-awards, or contact the Education and Teaching Awards Coordinator for the Faculty of Medicine at EduDeans@utoronto.ca. Nominees for external awards are often drawn from previous Faculty-level winners.

Getting involved in UME

STUDENT REPRESENTATION

For students interested in participating directly in committees and other decision-making bodies of the UME program, the Faculty of Medicine, or the Medical Society (MedSoc), there are many elected representative positions that become available every year. See UME Organization & Leadership → Student Representation & Student Government for more information.

SHARING YOUR PERSPECTIVE

Outside of official student representative positions, there are many opportunities for all students to make their opinions known. The Faculty and UME leadership welcome the diversity of student viewpoints, and encourage students to be active in decision-making of the medical school through any of the following means:

Fireside Chats

Four to six times during the school year, the Dean of the Faculty of Medicine, Dr. Trevor Young, hosts the "Fireside Dinner with the Dean" program – better known as "Fireside Chats" – which provide a group of approximately 20 students with the opportunity to meet with the Dean, Vice Dean MD Program, Jay Rosenfield, and one or two other senior members of the Faculty of Medicine in an informal setting. The Fireside Dinner with the Dean program is organized by two student representatives and the Vice Dean, MD Program. The students are randomly selected for each "Chat," and every student receives an invitation over the course of their undergraduate medical studies; hence, there is no application or sign-up process for the program. In addition to getting to know the Dean and the other faculty members, the students at each such event take the opportunity to discuss any issues of concern to them.

Town Hall Meetings

Town hall meetings for students may be organized by students and/or the UME leadership whenever issues of particular complexity or importance require broad discussion, consultation, and opportunities for questions to be asked.

Teacher and Course Evaluations

Students have the opportunity to evaluate virtually every learning activity in the UME program, as well as every course as a whole. These evaluations are generally completed electronically on MedSIS and occasionally on paper. Evaluation data and comments from students are considered very carefully by course directors, and therefore students are strongly encouraged to provide feedback in this manner.

Feedback to Student Representatives

Every course and committee in UME has one or more student representatives, with the exception of the three small, senior operational committees. While students are encouraged to approach program leaders directly with any concerns or ideas they may have, they can also relay their opinions via the appropriate student representatives. This communication may happen directly or through questionnaires or other approaches adopted by the student representatives.

Likewise, the student representatives are responsible for sharing updates from the committees on which they serve with their classmates.

(Sharing Your Perspective, continued)

Open-Door Approach

All of the members of the UME leadership are keen to hear feedback or discuss any issues of interest or concern with students. This includes the Vice Dean, MD Program, the Associate Dean Health Professions Student Affairs, the Associate Dean Undergraduate Admissions & Student Finances, the Academy Directors, the Director of Curriculum, the Preclerkship and Clerkship Directors, and the course directors and thematic faculty leads. Their contact information is available in this handbook beginning here and also on the UME website under Contacts: http://md.utoronto.ca/contact

You may wish to convey your thoughts in an e-mail or request an appointment with any of these individuals, depending on the nature of your feedback.

If you have a concern with a particular individual (e.g. a teacher), it is generally preferable to attempt to resolve the issue as close as possible to the source. However, if for whatever reason this is not possible or desirable, you are welcome to speak with the UME leader of your choosing.

If your concern is specifically related to an incident of student mistreatment or major unprofessionalism (regardless of who appears to be responsible for the incident), the program urges you to report the incident as soon as possible. The student assistance section of the UME website (md.utoronto.ca/student-assistance) or and the *Protocol for UME students to report mistreatment and other kinds of unprofessional behaviour* can help you determine whom to contact and what will happen next.

Undergraduate Medical Education

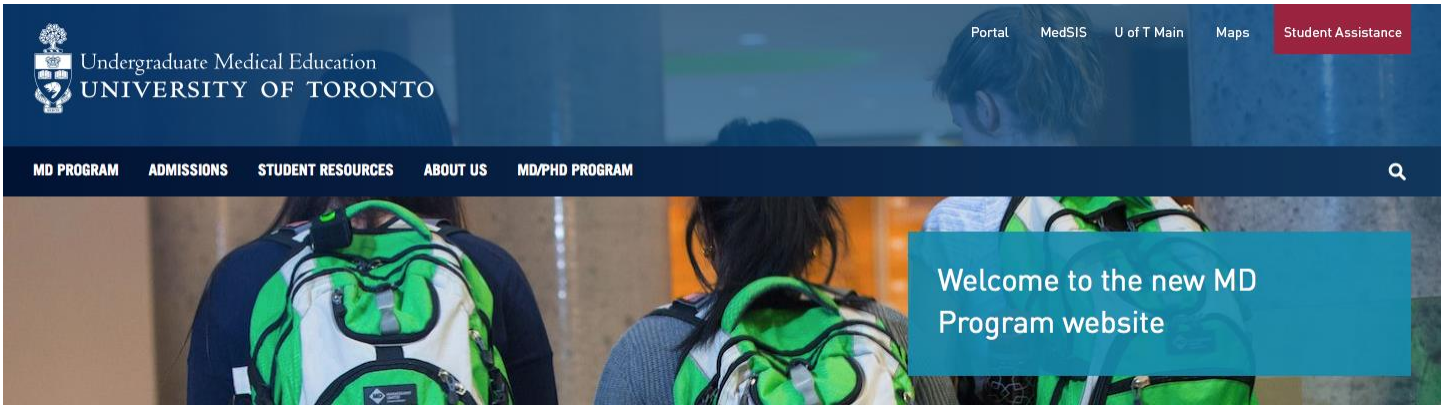
SERVICES & ASSISTANCE FOR STUDENTS

Student Assistance (formerly the 'Red Button') and the Incident Report Form

STUDENT ASSISTANCE INFORMATION ON MD PROGRAM WEBSITE

The student assistance section of the UME website (formerly known as the 'Red Button') provides quick reference information and resources for medical students at the University of Toronto who are experiencing an urgent or crisis situation.

The student assistance 'button' is displayed on the UME website in the upper right hand corner of each webpage.



Links to the student assistance section are available elsewhere, including on the Portal. It can be accessed directly via the following URL: md.utoronto.ca/student-assistance

The information provided in the student assistance section is divided into four main areas where issues may arise:

- Personal crisis
- School absences
- Student mistreatment
- Workplace injury and healthcare access

Each page provides advice, links to resources and/or contact information, relevant policies, etc.

THE INTENTION OF THE STUDENT ASSISTANCE SECTION:

This section is a quick reference guide and a way for students to link to various sources of information and also to an incident reporting form. ***It is not a "hotline" and in no way provides direct emergency assistance***. It does not connect a user directly to another person, nor does it track who has clicked on the button or what components they have accessed. It does, however, direct users to useful contact information and support services (both internal and external to the University), as well as to a special reporting tool for incidents of mistreatment or unprofessionalism (see following page).

REPORTING INCIDENTS OF CONCERN

The UME program is committed to continual monitoring and improvement of the learning environment. This includes promoting awareness of what constitutes appropriate behaviour – by teachers, other health professionals, residents and other learners, and UME students themselves – and providing means to identify when inappropriate behaviour occurs.

The program encourages students who experience or witness behaviour of serious concern in the course of their training to address the situation in one of various ways.

If the incident is relatively minor and the student feels comfortable doing so, it is recommended that the student discuss the situation directly with the person whose behaviour seemed unprofessional. Minor incidents are typically single, apparently isolated events that are troubling, yet do not strike the student as having a significant impact on the learning environment. This direct approach recognizes the role of collegial conversation, and emphasizes the principle of addressing problems locally wherever possible. The student may also wish to approach another trusted UME teacher, leader, or administrative staff member for advice.

For more serious or uncomfortable incidents, students are encouraged to report what they experienced or witnessed to a "Designated UME Leader":

- the Associate Dean, Office of Health Professions Student Affairs (OHPSA)
- an Academy Director
- the Preclerkship or Clerkship Director
- the faculty lead for ethics and professionalism
- a course director
- a personal counsellor in the Office of Health Professions Student Affairs

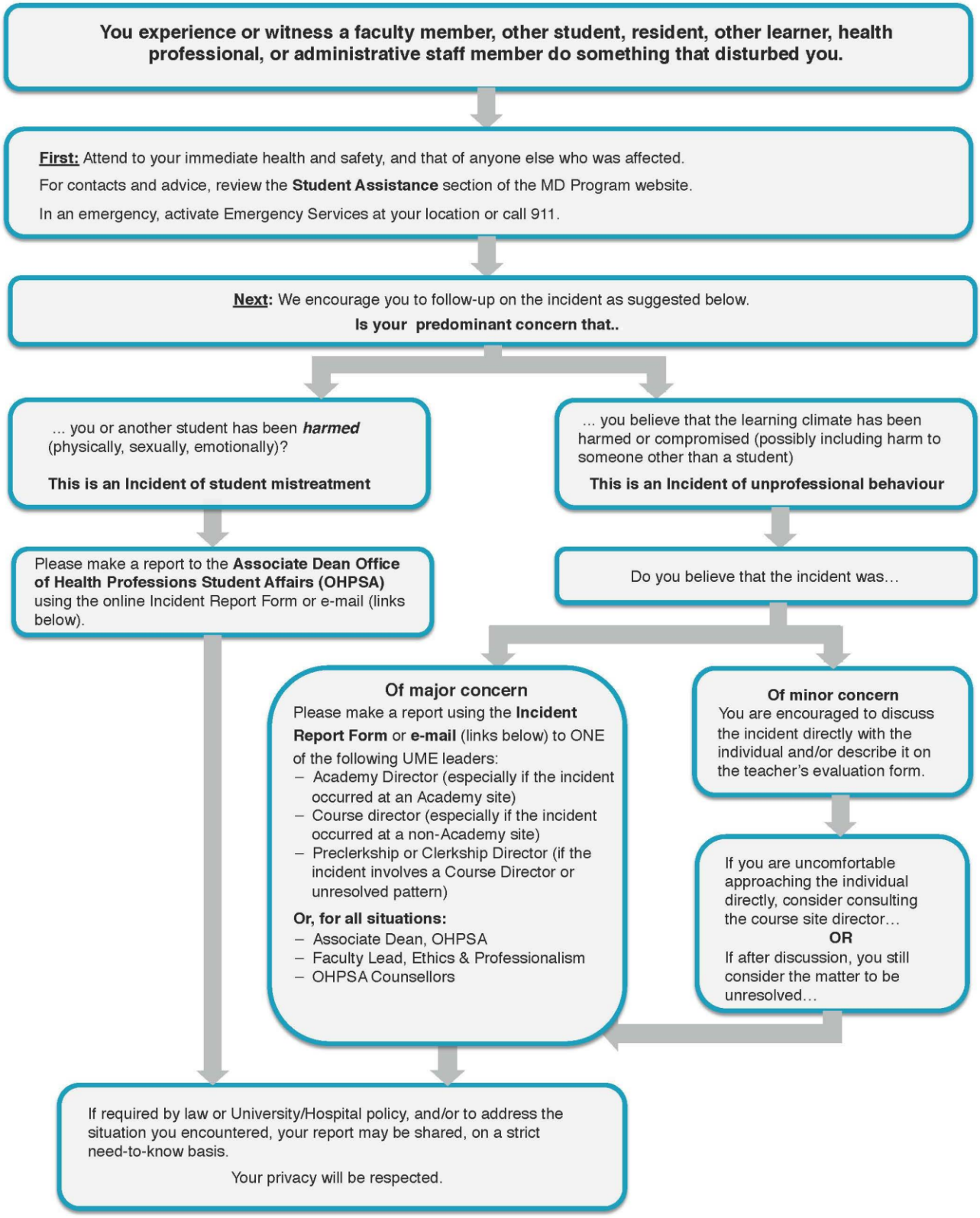
Students can of course choose to speak instead with another individual, but Designated UME Leaders have the connections and knowledge of University resources and protocols to provide appropriate assistance.

Besides a face-to-face meeting, phone call, or e-mail, UME now provides an additional option for students to report an incident to a Designated Leader: the Student Incident Report Form. To submit a UME Incident Report, students are asked to email Dr. Nickell, Associate Dean Health Professions Student Affairs at leslie.nickell@utoronto.ca. In the e-mail, students can describe in general terms the nature of the problem they would like to report, and whom they would like to report it to, and Dr. Nickell will assist in addressing the situation.

UME defines two types of incident: student mistreatment (i.e. harm of some kind to a medical student) and other unprofessional behaviour besides student mistreatment (e.g., mistreatment of someone other than a student, misrepresentation of one's qualifications, harassment, etc.). The response to an incident report will depend on the nature of the situation, but in all cases, the reporting student's privacy will be respected and the matter will be treated sensitively and strictly confidentially except where required by law or University policy.

NOTE: The Incident Report Form is a tool to seek follow-up. It is not an emergency notification service.
See the *Protocol for students to report mistreatment or other kind of unprofessional behaviour* and also the flowchart on the next page.

UNIVERSITY OF TORONTO MEDICAL STUDENT PROCEDURE FOR REPORTING INCIDENTS OF CONCERN



21 September 2011

UNIVERSITY OF TORONTO MEDICAL STUDENT PROCEDURE FOR REPORTING INCIDENTS OF CONCERN (continued)

Can I speak to someone else instead of the people listed in the chart above?

Yes, you can choose to make a report to an individual involved in UME who is not listed above. However, in such a case, the recipient of the report is strongly advised to help redirect you to a UME leader as listed in the flowchart. For details, see the Protocol for UME students to report mistreatment and other kinds of unprofessional behaviour **‹LINK›**. This protocol is for your protection and theirs. Many situations involving harmful behaviour are complicated and require detailed knowledge of policies, procedures, and resources.

What will UME do to help me, or to resolve the issue?

If you make a report to a UME leader identified in the chart above, he/she will provide guidance to you, offer you access to resources and services as appropriate, consult university and/or hospital policies (as relevant) to determine the appropriate steps to be taken, and, if warranted, set in motion a formal investigation process. You should be aware that in most instances, issues cannot be fully addressed by one person alone. Therefore, it is likely the person you make the report to will enlist the involvement of others, with your permission.

Will anything change in the long-run?

We will create a summary report of incidents submitted through this process annually which omits information that identifies you, the reporter. Incidents are recorded for statistical analysis to allow the Faculty of Medicine to monitor the health of the learning environment and make targeted changes over time for the benefit of students and other members of the Faculty community.

Office of Health Professions Student Affairs

The Associate Dean and staff of the Office of Health Professions Student Affairs (OHPSA) are dedicated to supporting students in achieving their full academic and personal potential within Faculty of Medicine's 'programs. They have expertise in a variety of areas, and access to extensive resources and networks within the University and surrounding communities.

COUNSELLING

The OHPSA is staffed by three types of professional counsellors:

- Three Personal Counsellors, who are available specifically to assist students with any personal concerns/issues through private, confidential, short-term counselling. They also conduct group sessions on wellness and mindfulness.
- Two Career Counsellors, who help guide students to develop into the kind of physician they aspire to be. All sessions are confidential. Individual career counselling services include: self-assessment, medical specialty exploration, CaRMS application assistance, CV and personal statement critique, and Residency interview practice and support. The Career Counsellors also conduct workshops, presentations, and career panels.
- An Academic Counsellor, who provides individual student consultation for any student experiencing academic difficulties. Through this office, the "Peer-Facilitated Review Enrichment Program" (PREP) is offered, providing peer-to-peer study groups during the Structure & Function course. The Academic Counsellor also offer tutoring groups, in partnership with the Student Affairs Liaison Team. Note:

Students requesting special accommodation related to a physical or other impairment (e.g. extra time or a separate room for examinations) must have authorization through University of Toronto Accessibility Services and are responsible for bringing their needs to the attention of their course directors or the Associate Dean of OHPSA. The Academic Counsellor also provides consultation and resources to faculty regarding course design, delivery, and remediation.

All counselling services are confidential; counsellor offices are privately located on both campuses, separate from the general UME and OHPSA offices. Appointments may be arranged in the following ways:

1. **Telephone:** 416-978-2764
2. **E-mail:** ohpsa.reception@utoronto.ca
3. **Website:** www.ohpsa.utoronto.ca
4. **Directly with the counsellors:** For their contact info, see the directory at the end of this Handbook or go to the OHPSA website, www.md.utoronto.ca/OHPSA
5. **Drop-in to arrange an appointment:**
   On the St. George campus, the OHPSA office is in Room 121 in the FitzGerald Building, 150 College Street – the Counselling Administrator can book an appointment for students.
   At MAM, the Student Support Administrator is located in the Terrence Donnelly Health Sciences Complex, and he can arrange appointments for students at the UTM campus.

(Office of Health Professions Student Affairs, continued)

FACULTY LEAD IN CAREER EXPLORATION

Career Exploration is an evolving process that brings together meaningful personal and clinical experiences, and consolidates during the fourth-year CaRMS application period. Working within the Office of Health Professions Student Affairs (OHPSA,) the Faculty Lead in Career Exploration is a resource for both students and faculty regarding those experiences, particularly non-curricular Preclerkship clinical activities such as shadowing and observing. The Faculty Lead can assist with issues pertaining to the Enriching Educational Experience Program, the maintenance and development of extracurricular Preclerkship clinical initiatives among the Departments and Divisions of the Faculty of Medicine, Global Health activities, and the Rural Ontario Medical Program (ROMP). The Faculty Lead also works closely with the career counsellors of the OHPSA. For questions, ideas, and additional information, contact Dr. Jon Novick at jon.novick@utoronto.ca or through the OHPSA.

EXTRACURRICULAR AND SERVICE-LEARNING ACTIVITIES

In addition to counselling services, the OHPSA supports student life and community outreach activities. The Office recognizes the value of a well-rounded program for student development, and the role of social responsibility in medicine, and encourages students to participate in Faculty, University, and community activities. A number of social, charitable, and personal development and well-being events are also facilitated by the OHPSA. Awareness of social issues and our professional responsibility to support those in need both locally and globally is encouraged. Collaboration and participation by students from all health professional student groups in the Faculty of Medicine is encouraged wherever possible. In addition, the OHPSA provides assistance with the service-learning activities in the Community Affairs Portfolio of the students' Medical Society (MedSoc) .

Enrolment Services

UME Enrolment Services (ES) is dedicated to providing quality support and resources that are responsive to the needs of our students and graduates. It is responsible for safeguarding the accuracy, integrity, confidentiality, and security of students' and graduates' academic records and providing services relating to registration, graduation, and beyond.

ES handles all grading results and transcripts, and generates the Medical Student Performance Record each year for Year 4 students applying for residency programs. It also collects police record checks and immunization records, among other aspects of registration requirements. ES coordinates all aspects of the Doctor of Medicine Convocation in the spring of each year.

The Faculty Registrar and her staff are available to provide students with information and advice on all faculty and university policies and regulations.

Among other services offered by ES, students can obtain proof of registration or letters of good standing to use in securing a line of credit with a financial institution, for career sampling or observerships, or when applying for electives at other institutions.

ES also provides credentialing services to graduates of the MD program by completing and/or endorsing documentation relating to confirmation of education, confirmation of degree, or Dean's letters of support.

The Faculty Registrar is a Commissioner of Oaths and provides this service when documents for students or graduates require this level of verification.

Forms are available on the ES website at:
http://www.md.utoronto.ca/enrolment-services

See the directory for contact information.

Office of Student Financial Services

The Office of Student Financial Services, under the portfolio of the Associate Dean Undergraduate Medicine Admissions & Student Finances, provides a variety of services to UME students to assist them with the management of all aspects of their finances. Information is shared with students through various means including the following:

- Personal counselling. Confidential one-on-one meetings regarding individual student financial circumstances. Students are invited to contact the office for further information or to make an appointment.
- Webinars
- Other web-based resources (e.g. the "ABCs of Money Management")
- Sessions during Orientation Week
- A session during the Transition to Residency course in fourth year

The Office of Student Financial Services provides information on many topics, such as:

(a) Sources of funding and financial assistance

1. Information on accessing a Line of Credit from a bank

2. Information and advice on accessing Federal and Provincial government load assistance

For Canadian students, this will be the first source of funding. All students are encouraged to apply. Access to the various provincial government application forms can be found at the University of Toronto Enrolment Services Admissions and Awards website at:
http://www.adm.utoronto.ca/financial-aid/canadian-government/

3. Faculty of Medicine Student Grants

Students who qualify for government assistance may be eligible for non-repayable grant assistance. During the 2014-2015 academic year, 74% of students enrolled in the MD program qualified for this type of assistance. Ontario residents who receive OSAP funding are automatically assessed for grant eligibility. Students receiving assistance from a Province other than Ontario must complete a UTAPS application form in order to be considered for grant funding. UTAPS applications information will be sent by email to out of province students receiving government funding from a Province other than Ontario. In general, payment of grants to students who are receiving OSAP support will be made in early fall. For students receiving assistance from a Province other than Ontario, payments are generally made later in the year.

4. Faculty of Medicine Enhanced Bursary Program

The Faculty of Medicine Enhanced Bursary Program is designed to assist students in the Doctor of Medicine program with particularly high financial need and provide these students with additional funding support. Any support provided to students will be in addition to the Faculty of Medicine Grant funding outlined above. Applicants will be required to complete a detailed application form. These bursaries will be renewable subject to completion and submission of a new application each year. The value of bursaries awarded range from approximately $2,000 to $15,000. Please note that you must discuss your application with a Financial Aid Counsellor before completing and submitting an application. Applications are available in early August each year, and the deadline for submission of completed applications is in early September.

5. Faculty of Medicine MD Admissions Bursary Program
The bursary program has been developed to ensure that students identified as having the highest level of financial need have access to resources necessary to complete their studies in the Doctor of Medicine program. It is our hope that students who might not otherwise apply for entry to the MD program are able to do so as a result of the availability of this bursary program.

Bursaries will be available to students entering the MD program each September. Successful candidates will be provided with bursary funding in the amount of $20,000 during each year of study in the MD program. Additionally, one bursary in the amount of $40,000 per year of study in the MD program will be offered to an incoming student. Successful applicants are notified of their bursary funding at the time the offer of admission is made.

6. Faculty of Medicine Scholarships and Awards
The Faculty of Medicine offers a number of academic scholarships and awards. Application is not required for the majority of awards and scholarships. A complete listing of awards and scholarships can be found online at: http://md.utoronto.ca/awards-scholarships

(b) Deferral of fee payment
Students who have been granted provincial loan assistance are eligible to defer payment of fees until later in the fall term. Information on how to do this is available at the ROSI website (http://www.acorn.utoronto.ca).

(c) Advice on budgeting and other aspects of personal financial planning
Both individual appointments and group information sessions are available to help students manage their finances.

See the directory for contact information.

Office of Indigenous Medical Education

The Office of Indigenous Medical Education is home to the Faculty of Medicine curricular co-leads in Indigenous Health Education, an Elder, and the Indigenous Peoples' Undergraduate Medical Education (UME) Program Coordinator. This office provides a culturally safe space within UME and is working to advance Indigenous community engagement and supports.

The office is also working to incorporate Indigenous teachings regarding medicine for all students to improve the discourse in Indigenous Medical Education. Students can come to the office to discuss, ask questions, or participate in cultural teachings. The Indigenous Peoples' Program Coordinator Rochelle Allan is working to develop a comprehensive Aboriginal community outreach program, and provides support to current Indigenous medical students and to other students within the faculty who are hoping to learn more about Indigenous people and Indigenous concepts of health and healing.

Health Services

The University of Toronto Health Service offers confidential, student-centered primary health care, including comprehensive medical care, travel medicine and education, immunization, and referrals for specialized treatment. This service is available to all students at the University of Toronto.

The multidisciplinary health team includes family physicians, registered nurses, a dietician, and support staff.

The clinic offers the following services:

- Allergy care
- Birth control, STI education & care, emergency contraception
- Diagnostic Facilities
- Disability documentation
- Disordered eating care, counselling and education
- Immunization and TB testing
- Men's health
- Nutrition counselling and education
- Pregnancy support
- Periodic health exam
- Smoking cessation
- Travel health education and immunizations
- Treatment of injuries and illness
- Wart removal
- Women's health
- Wound care

CONTACT

St. George Campus	UTM Campus
214 College Street, 2nd Floor University of Toronto Toronto, Ontario M5T 2Z9 Phone: 416-978-8030 Fax: 416-971-2089	Room 1123, South Building 3359 Mississauga Rd. N. Mississauga, ON L5L 1C6 Phone: 905-828-5255 Fax: 905-828-3852 Email: health.utm@utoronto.ca

REGISTRATION WITH A FAMILY HEALTH TEAM

Through a special arrangement, medical students may register as patients with any one of four family health teams (MSH, SMH, TWH, and WCH) in Toronto or two in Mississauga (THP – CVH and THP – MH). This arrangement allows students to obtain a family physician in an expedited manner.

Instructions for contacting and registering with these practices are provided on the Office of Health Professions Student Affairs website (http://portal.utoronto.ca → "My Organizations Plus"), under "Family Physician Access for MD Students."

Undergraduate Medical Education

KEY POLICIES, STATEMENTS, & GUIDELINES

A Note about Policy

There are many policies and other official statements required to provide an organizational framework for the management of an institution as complex as a medical school.

The key policies relevant to the student experience are gathered in the following pages.

While in-depth knowledge of all relevant policies is not reasonable to expect, students do need to be aware:
(a) *that some policies pertaining to student safety, rights, and responsibilities are important to read*
(b) *that policies on other topics listed below do exist*, and
(c) *of where to locate them* if and when a situation arises that requires familiarity with their content.

These policies and many others are also all readily available on the UME website at:

http://www.md.utoronto.ca/policies

Note that some of the longer policies – e.g., the protocol related to student workplace injury and the protocol for students to report mistreatment and unprofessionalism – are summarized in a flowchart that is reproduced here and available for viewing and downloading from the UME website. Every statement, standard, procedure, and other guiding document formally adopted by a committee of the Undergraduate Medical Education program will be made available on the website of the program. Furthermore, every such document will be actively disseminated at least once a year to relevant individuals, who may include course directors, Academy Directors, students, administrative staff, teachers at large (including those who are not faculty members), and others, depending on the contents of the document. Dissemination may be conducted centrally or at the course-, department-, or site-level, as appropriate.

Should an individual or a group have reservations regarding a statement, standard, procedure, or other guiding document, they must submit their concern in writing to the Vice Dean, MD Program who will review the submission and make a decision as to whether it should go before the committee that was responsible for the adoption and implementation of the document. The Vice Dean, MD Program may, at his discretion, temporarily waive the provisions of the document for the complainants for a period not to exceed three months pending review by the appropriate committee, but the document will continue to hold force in general. Should the committee uphold the document, the waiver will cease.

In addition, all statements, standards, procedures, and other guiding documents adopted by UME will be reviewed and re-approved every four years or less by the responsible committee. Review by other relevant committees may also be warranted. The posted version of every document must display the date of initial adoption and the date of the most recent review and re-approval.

This process is intended to help ensure that UME is guided by principles that are:

- current,
- relevant,
- reflective of the goals and mission of both the program and the Faculty of Medicine, and
- well-understood by the students, teachers, staff, and program administrators who together constitute the Undergraduate Medical Education community.

On Student Well-Being & Rights

- **Medical Student Workplace Injury and Exposure to Infectious Disease in Clinical Settings**, Protocol for Incidents of
  - *Flowchart: What to do in the event of a workplace injury*
- **Infectious Diseases and Occupational Health for Applicants to and Learners of the Faculty of Medicine Academic Programs**, Guidelines Regarding
- **Mistreatment and Other Kinds of Unprofessional Behaviour**, Protocol for UME Students to Report
  - *Flowchart for student reporting of incidents of mistreatment or unprofessionalism*
  - *Incident Report Forms*
- **Conflicts of Clinical and Educational Roles**, Procedure for
- **Personal Information in UME**, Principles Governing the Use of
- **Professional Behaviour for Medical Clinical Faculty**, Standards of
- **Professional Responsibilities in Undergraduate Medical Education**, College of Physicians & Surgeons of Ontario Policy on
- **Prohibited Discrimination and Discriminatory Harassment**, Statement on
- **Sexual Harassment**, Policy and Procedures
- **Religious Observances**, Policy on Scheduling of Classes and Examinations and Other Accommodations for
- **Access to Preventive, Diagnostic, and Therapeutic Health Services for Medical Students**, UME Statement on
  - *NB: Includes flowchart on accessing health services*
- **Student Representation on UME Committees**, Statement on
- **Trainee Health and Safety Supplemental Guidelines - Personal Safety and Occupational Hazards**, UME

On Student Responsibilities, Behaviour, & Professionalism

- **Student Attendance and Guidelines for Approved Absences from Mandatory Activities in UME**, Regulations for
  - *Petition for Consideration for Absence*
  - *Record of Absences*
    - *NB: Record of Absences is located in the Appendix*
- **Taking Examinations as Scheduled**, General Regulation on
- **Immunization Policy**, Council of Ontario Faculties of Medicine (COFM)
- **Professional Practice Behaviour for All Health Professional Students**, Standards of
- **Ethics & Professionalism in Healthcare Professional Clinical Training and Teaching**, Guidelines for
- **Appropriate Use of the Internet, Electronic Networking and Other Media**, Guidelines for
- **Value and Use of Student Feedback in UME**, Statement on the
- **Student Completion of Teacher and Course Evaluations in UME**, Principles and Expectations for
- **Code of Behaviour on Academic Matters**
- **Student Conduct**, Code of
- **Student Learning in a Clinical Setting of Employment**, UE COFM Guidelines

On Learning

- Course Hours and Student Self-Study Time in the Preclerkship, Standards for
- Call Duty and Student Workload in the Clerkship, Standards for
- Required Clinical Experiences in the Core Clerkship Rotations: Responsibilities of Students, Faculty, and UME Curriculum Leaders
- Mid-Rotation Feedback in Core Clinical Clerkship Courses, Standards for
- Essential Skills and Abilities Required for the Study of Medicine, Council of Ontario Faculties of Medicine (COFM) Policy Document

- Length of International Electives and Selectives in UME, Policy on

On Student Assessment & Advancement through the Program

- **Grading and Promotion of Undergraduate Medical Students**, Standards for
- **Written Examinations**, Rules for the Conduct of
- **OSCE Examinations**, Rules for the Conduct of
- **Disclosure of Component Marks and Final Grades to Students**, Standards for the
- **Provision of Narrative Feedback to Students in UME**, Expectations for the
- **Timely Completion of Student Assessment and Release of Marks**, Standards for
- **Student Review and Challenge of Examination and Assessment Outcomes**, Standards for
- **Assessment of Undergraduate Medical Trainees in Academic Difficulty – Preclerkship and Clerkship**, Guidelines for the
- **Standards for the Requirement of Extra Work in the Preclerkship**

Undergraduate Medical Education

DIRECTORY & LIST OF OFFICES

Directory & List of Offices

For the most up to-date contacts, refer to the MD website: http://md.utoronto.ca/contact

OFFICE/POSITION	FIRST NAME	LAST NAME	PHONE	EMAIL
OFFICE OF THE VICE-DEAN UNDERGRADUATE MEDICAL EDUCATION (UME)				
VICE-DEAN	Jay	Rosenfield	416-978-4934	jay.rosenfield@utoronto.ca
Executive Assistant to the Vice-Dean	Jennifer	Holland	416-978-4934	md.vicedean@utoronto.ca
Director of Operations	Gina	John	416-978-8544	gina.john@utoronto.ca
Manager, UME Strategic Operations & Policy	Paul	Tonin	416-978-3841	paul.tonin@utoronto.ca
Business Officer	TBD		416-978-7807	
MAM Operations Manager	Tamara	Breukelman	905-569-4428	t.breukelman@utoronto.ca
Financial Officer	Govind	Khurana	905-569-4552	Govindsingh.khurana@utoronto.ca
Communications Strategist	Andrea	Concil	416-978-5509	md.communications@utoronto.ca
Project Manager, Accreditation	Christopher	Jones	416-946-7077	md.accreditation@utoronto.ca
Director, Faculty Development	Jana	Lazor	416-978-7178	Jana.lazor@utoronto.ca
Faculty Development Coordinator	Lori	Innes	416-978-1699	Lori.innes@utoronto.ca
Admin. Coordinator for Manager. Business and Admin.	Barbra	MacDonald	416-946-5371	Barbra.macdonald@utoronto.ca
ACADEMIES				
• *FitzGerald Academy*				
Director FitzGerald staff: See Academy Contact Information	Molly	Zirkle	416-864-5187	zirklem@smh.ca
• *Mississauga Academy of Medicine*				
Director MAM staff: See Academy Contact Information	Pamela	Coates	905-569-4617	pamela.coates@utoronto.ca
• *Peters-Boyd Academy*				
Director Peters-Boyd staff: See Academy Contact Information	Eugenia	Piliotis		eugenia.piliotis@sunnybrook.ca
• *Wightman-Berris Academy*				
Director Wightman-Berris staff: See Academy Contact Information	Jacqueline	James	416-340-4832	jjames@mtsinai.on.ca
ENROLMENT SERVICES, UME				
Director, MD Admissions and Student Finances	Mark	Hanson	416-978-5288	mark.hanson@utoronto.ca
Director of Enrolment Services &Faculty Registrar	Janet	Hunter	416-978-7570	janet.hunter@utoronto.ca
Associate Registrar, Admissions & Registration	Hana	Lee	416-978-2715	hana.lee@utoronto.ca
Coordinator Registrarial Affairs	Dana	Rose	416-946-8236	dana.rose@utoronto.ca

UME DIRECTORY & LIST OF OFFICES

OFFICE/POSITION	FIRST NAME	LAST NAME	PHONE	EMAIL
ENROLMENT SERVICES, UME continued				
Office Administrator	Diane	Ford	416-946-8720	reception.registrar@utoronto.ca
Associate Registrar, Enrolment Management	Becky	Smith	416-978-2807	b.smith@utoronto.ca
Student Enrolment Services Assistant	Elizabeth	Christy	416-978-7928	Medicine.admiss@utoronto.ca
Enrolment Coordinator	Lindsay	Jackowetz	416-978-0224	lindsay.jackowetz@utoronto.ca
Student Support Administrator – UTM/MAM	Mark	Wlodarski	905-569-4506	mark.wlodarski@utoronto.ca
Administrative Coordinator, UME Enrolment Services	Christina	Keith	416-978-5288	mdadmissionea@utoronto.ca
Associate Registrar, Student Finances	Bill	Gregg	416-946-0739	bill.gregg@utoronto.ca
Admissions Officer	Leslie	Taylor	416-978-2729	ld.taylor@utoronto.ca
Student Support Administrator – UTM/MAM	Mark	Wlodarski	905-569-4506	mark.wlodarski@utoronto.ca
CURRICULUM OFFICE				
Director of Curriculum & Sr. Academic Coordinator Accrediation	Martin	Schreiber	416-867-7454	m.schreiber@utoronto.ca
Preclerkship Director	Pier	Bryden	416-978-0655	pier.bryden@utoronto.ca
Clerkship Director	Stacey	Bernstein	416-946-5251	stacey.bernstein@sickkids.ca
Director of UME Evaluations	Richard	Pittini	416-946-8543	richard.pittini@sunnybrook.ca
Preclerkship Deputy Director & Director of Academic Innovation	Marcus	Law	416-978-4543	marcus.law@utoronto.ca
Curriculum Manager	Nadia	Taylor	416-978-0364	nadia.taylor@utoronto.ca
Curriculum Administrative Coordinator	Mariana	Ostache	416-946-7045	mariana.ostache@utoronto.ca
• *Preclerkship Curriculum Staff*				
Senior Preclerkship Coordinator	Margaret	Bucknam	416-948-3430	margaret.bucknam@utoronto.ca
Interim Preclerkship Project Manager	Bochra	Kurabi	416-978-5885	Bochra.kurabi@utoronto.ca
Preclerkship Coordinator	Bektu	Abidta	416-978-1186	bektu.abidta@utoronto.ca
Preclerkship Coorindator	Lina	Marino	416-946-7009	lina.marino@utoronto.ca
Preclerkship Admin Coordinator – MAM	Elizabeth	Day	905-569-4618	elizabeth.day@utoronto.ca
Health Science Research (HSR) Coordinator	Jennifer	Ng	416-978-1027	Jy.ng@utoronto.ca
CPPH-CBS Course Administrative Coordinator	Yasmin	Shariff	416-978-8213	yasmin.shariff@utoronto.ca
CPPH-CBS Course Assistant	Sylvia	Jao	416-978-6860	sylvia.jao@utoronto.ca
CPPH-1 Community Health Placement Officer	Roxanne	Wright	416-978-0952	roxanneb.wright@utoronto.ca
CPPH&HSR Course Administrative Coordinator -MAM	Frances	Rankin	905-569-4602	frances.rankin@utoronto.ca
Curriculum Support	Rockiel	Austin	416-978-6827	rockiel.austin@utoronto.ca
Sponsorship Coordinator	Annamarie	Butler	416-978-1305	annamarie.butler@utoronto.ca
• *Clerkship Curriculum Staff*				
Senior Clerkship Administrative Coordinator	Tim	Flannery	416-978-6941	tim.flannery@utoronto.ca
Clerkship Coordinator	Samantha	Fortunato	416-946-5208	Samantha.fortunato@utoronto.ca
Portfolio Administrative Coordinator	Melissa	Casco	416-978-7327	portfolio.ume@utoronto.ca
Transition to Clerkship Coordinator	Susan	Rice	416-978-2188	s.rice@utoronto.ca
Transition to Residency Admin Coordinator	Ezhil	Mohanraj	416-978-2763	ttr.ume@utoronto.ca

Electives Officer, U of T Students	Eva	Lagan	416-978-0416	eva.lagan@utoronto.ca
Electives Officer, Visiting Students	Sheila	Binns	416-978-2691	sheila.binns@utoronto.ca
OFFICE/POSITION	**FIRST NAME**	**LAST NAME**	**PHONE**	**EMAIL**
Int'l Visiting Student Administrator	Sue	Romulo	416-978-1831	sue.romulo@utoronto.ca
Curriculum Implementation Specialist	Sara	Reynolds	905-569-4334	Sara.reynolds@utoronto.ca
Clinical Course Administrative Coordinators: See course listings in this handbook				
• *Competency & Theme Curriculum Staff*				
Ethics & Professionalism Admin. Coordinator	Joan	McKnight	416-946-8719	joan.mcknight@utoronto.ca
Coordinator, Leader & Collaborator Roles	Susan	Rice	416-978-2188	S.rice@utoronto.ca
Indigenous Peoples' Program Coordinator	Rochelle	Allan	416-946-0051	rochelle.allan@utoronto.ca
Global Health	Susan	Romulo	416-978-1831	sue.romulo@utoronto.ca
• *Evaluations Portfolio Staff & Scientists*				
Curriculum Evaluation Coordinator	Joyce	Nyhof-Young	416-978-0670	joyce.nyhof-young@uhn.ca
Project Coord. MedSIS & Evaluations and Data Analyst	Frazer	Howard	416-946-7040	fraz.howard@utoronto.ca
Professional Educator	Katherine	MacRury	416-978-8543	k.macrury@utoronto.ca
Scientist	Mahan	Kulasegaram	416-978-0577	mahan.kulasegaram@utoronto.ca
• *Course Directors and Thematic Faculty Leads*				
○ *Theme & Competency Faculty Leads*				
Ethics and & Professionalism Faculty Lead	Erika	Abner	416-978-2451	erika.abner@utoronto.ca
CPT Block Theme Coordinator (Preclerkship)	Cindy	Woodland	416-978-6395	cindy.woodland@utoronto.ca
CPT Theme Coordinator (Clerkship)	Rachel	Forman		rachel.forman@utoronto.ca
Medical Imaging Theme Coordinator	Elsie	Nguyen	416-946-8347	Elsie.nguyen@mtsinai.on.ca
Interprofessional Education / Collaborator Role Faculty Lead	Mark	Bonta		mark.bonta@uhn.ca
Leader Role Co-Lead	Isser	Dubinsky	416-815-6418	isser.dubinsky@haygroup.ca
Leader Role Co-Lead	Dante	Morra		dante.morra@trilliumhealthpartners.ca
Global Health Faculty Lead	Rachel	Spitzer		rspitzer@mtsinai.on.ca
Indigenous Health Faculty Co-Lead	Jason	Pennington	416-978-0282	jpennington@tsh.to
Indigenous Health Faculty Co-Lead	Lisa	Richardson	416-978-0090	lisa.richardson@uhn.ca
LGBTQ Health Education Faculty Lead	Ed	Kucharski		ekucharski@sherbourne.on.ca
Health Advocacy Faculty Lead	Philip	Berger	416-946-7667	philip.berger@utoronto.ca
Health Humanities Faculty Lead	Allan	Peterkin		allan.peterkin@utoronto.ca
○ *Preclerkship Course Directors and Leads*				
Preclerkship Director	Pier	Bryden	416-978-0655	pier.bryden@utoronto.ca
Deputy Preclerkship Director	Marcus	Law	416-978-4543	marcus.law@utoronto.ca
STF Course Director	Mike	Wiley	416-978-2642	mike.wiley@utoronto.ca
MNU Co-Course Director	Louis	Liu		louis.liu@uhn.ca
MNU Co-Course Director	Sian	Patterson	416-978-6921	sian.patterson@utoronto.ca
BRB Course Co-Director	David	Chan		chandav@smh.toronto.on.ca
BRB Course Co-Director	Dee	Ballyk	416-978-3694	d.ballyk@utoronto.ca

UME DIRECTORY & LIST OF OFFICES

OFFICE/POSITION	FIRST NAME	LAST NAME	PHONE	EMAIL
HSR Course Director	Debra	Katzman		Debra.katzman@sickkids.ca
CPPH-1 Course Director	Allison	Chris		allison.chris@utoronto.ca
CPPH-1 Associate Course Director	Fok-Han	Leung	416-978-3216	leungf@smh.ca
ASCM-1 Course Director	Jean	Hudson		jean.hudson@trilliumhealthpartners.ca
ASCM-2 Course Director	David	Wong		wongdav@smh.ca
MMMD Course Co-Director	Lori	Albert		lori.albert@uhn.ca
MMMD Course Co-Director	Darlene	Fenech		darlene.fenech@sunnybrook.ca
MMMD Course Co-Director	Eleanor	Latta		lattae@smh.ca
FMLE Course Director	Susan	Goldstein	416-946-0795	susan.goldstein@utoronto.ca
o *Clerkship Course Directors and Leads*				
Clerkship Director	Stacey	Bernstein	416-946-5251	stacey.bernstein@sickkids.ca
Deputy Clerkship Director	Raed	Hawa	416-603-5847	raed.hawa@uhn.ca
Transition to Clerkship Co-Director	Tatiana	Freire-Lizama		freirelizamat@smh.ca
Transition to Clerkship Co-Director	Martin	Schreiber	416-946-7125	martin.schreiber@utoronto.ca
Anesthesia Course Director	Ahtsham	Niazi	**416-978-8156**	ahtsham.niazi@uhn.ca
Dermatology Course Director	Perla	Lansang		perlalansang@gmail.com
Emergency Medicine Course Director	Laura	Hans		hansl@smh.ca
Family & Community Medicine Course Director	Azi	Moaveni		a.moaveni@utoronto.ca
Medicine Course Director	Danny	Panisko	416-603-5824	danny.panisko@uhn.ca
Obstetrics & Gynaecology Course Director	Rajiv	Shah		rajivrobert.shah@utoronto.ca
Ophthalmology Course Director	Daniel	Weisbrod		dan.weisbrod@utoronto.ca
Otolaryngology Course Director	Allan	Vescan		avescan@mtsinai.on.ca
Paediatrics Course Director	Angela	Punnett		angela.punnett@sickkids.ca
Portfolio Course Director	Nirit	Bernhard		portfolio.director@utoronto.ca
Portfolio Associate Course Director	Susanna	Talarico		susanna.talarico@sickkids.ca
Psychiatry Course Director	Raed	Hawa		raed.hawa@uhn.ca
Surgery Course Director	George	Christakis		george.christakis@sunnybrook.ca
Integrated OSCE Chief Examiner	Brian	Simmons	416-978-4102	brian.simmons@utoronto.ca
Director of Electives	Seetha	Radhakrishnan		seetha.radhakrishnan@sickkids.ca
Transition to Residency Co-Director	Tatiana	Freire-Lizama		freirelizamat@smh.ca
Transition to Residency Co-Director	Seetha	Radhakrishnan		seetha.radhakrishnan@sickkids.ca
MD/PHD PROGRAM				
Associate Dean, Physician Scientist Training, and Director, MD/PhD Program	Norman	Rosenblum	416-978-8582	norman.rosenblum@sickkids.ca
Project Manager, Physician Scientist Training Program	Jennifer	Liauw	416-946-7061	j.liauw@utoronto.ca
Administrative Manager	Kendra	Hawke	416-978-3277	Mdphd.program@utoronto.ca
Coordinator, Clinician Investigator Program	Astrid	Augspol	416-978-7189	uoft.cip@utoronto.ca

UME DIRECTORY & LIST OF OFFICES

OFFICE/POSITION	FIRST NAME	LAST NAME	PHONE	EMAIL
CREMS (COMPREHENSIVE RESEARCH EXPERIENCE FOR MEDICAL STUDENTS) PROGRAM				
Director	Neil	Sweezey	416-946-7866	neil.sweezey@utoronto.ca
Administrative Coordinator	Lisa	Charrette	416-946-7866	crems.program@utoronto.ca
LEAD (LEADERSHIP EDUCATION AND DEVELOPMENT) PROGRAM				
Director	Isser	Dubinsky	416-815-6418	isser.dubinsky@haygroup.ca
LEAD Program Coordinator	Christina	Lopez	416-978-1108	ihpme.lead@utoronto.ca
HEALTH PROFESSIONS STUDENT AFFAIRS, OFFICE OF				
ASSOCIATE DEAN	Leslie	Nickell	416-978-2713	leslie.nickell@utoronto.ca
Executive Assistant to the Associate Dean	jason	Philips	416-978-2713	ohpsa.admin@utoronto.ca
Sr. Officer, Service Learning/ Community Partnership / Student Life	Ike	Okafor	416-978-2684	ike.okafor@utoronto.ca
Operations Manager	TBD		416-978-4651	
Outreach Assistant	La Toya	Dennie	416-978-8528	ohpsa.outreach@utoronto.ca
Student Support Administrator – MAM	Mark	Wlodarski	905-569-4506	mark.wlodarski@utoronto.ca
Counselling Assistant	Katie	Raymond	416-978-2764	ohpsa.reception@utoronto.ca
Counsellor Manager	Shayna	Kulman-Lipsey	416-946-0809	shaynak.lipsey@utoronto.ca
Personal Counsellor	Christopher	Trevelyan	416-978-3957	christopher.trevelyan@utoronto.ca
Personal Counsellor	Alysa	Golden	416-978-6092	alysa.golden@utoronto.ca
Career Counsellor / Coach	Carol	Bisnath	416-978-3937	carol.bisnath@utoronto.ca
Career Counsellor	Nancy	Dunlop	416-978-3956	nancy.dunlop@utoronto.ca
Faculty Lead for Career-Led Exploration	Jon	Novick	416-946-7765	jon.novick@utoronto.ca
Academic Coach & Educational Consultant	Nellie	Perret	416-946-0810	n.perret@utoronto.ca

How can I...

[deal with personal issues]

... report an incident that I experienced or witnessed?	• For emergencies, always first contact Emergency Services if you are in a hospital, Campus Police if you are on campus, or 911 if you are elsewhere. • For follow-up with UME, please go to the student sssistance section of the UME website (md.utoronto.ca/student-assistance). You'll find a link to the confidential reporting form, a flow chart to help you decide how to report the incident, the program's full policy on reporting, and other information to assist you. ** More details in this handbook: See "Services & Assistance for Students" and "Protocol for students to report mistreatment and other kinds of unprofessional behaviour" ***
... get help after a clinical workplace injury (e.g., a needle-stick)?	• First inform your clinical supervisor, and then seek help immediately through Occupational Health or your nearest Emergency Department (if Occupational Health does not exist at your site or is closed at the time of the incident). Ask for a copy of every form that is completed. • After you have received initial treatment, contact your Academy Director to ensure that there is appropriate follow-up for you and/or the WSIB ** More details in this handbook: See "Services & Assistance for Students" and "Protocol for incidents of medical student workplace injury and exposure to infectious disease..." **
... speak to someone about the problems I'm facing?	• Depending on the situation you're facing, there are many people you may wish to contact: program leaders, personal counsellors, health professionals, etc. The entire UME leadership maintains an "open-door" policy. • Check out the student assistance section of the UME website (md.utoronto.ca/student-assistance) and use the links to identify the problem that most closely matches your own. Then go to the directory online or in this handbook to contact the person best able to help you.
... request permission to miss school?	• Visit the student assistance section of the UME website (md.utoronto.ca/student-assistance) and review the relevant policy to determine who to speak to for your particular situation and whether you need to complete a Petition for Consideration • If you do need to complete a Petition, you can download it from the same page and follow the instructions to submit it.
... find a family doctor?	• Arrangements are in place for UME students to register with several family health teams in Toronto and Mississauga • Check out the list on the Office of Health Professions Student Affairs site on the portal (http://portal.utoronto.ca)

[get information about my academic record]

... see my grades and evaluations?	• You are entitled to see all of you grades and evaluations. Most are posted in MedSIS and should be available within 4 weeks • If the results aren't posted and you think they should already be available, contact the course director or course administrator (see the Directory, p. 246)
... request a re-mark of an exam or assignment?	• You can request an Informal Review from the course director within a week of learning of your mark • After a week, you must request a Formal Review through the Faculty Registrar • ** For details, see the "Standards for student review and challenge of examination and assessment outcomes" in this handbook **
... obtain official documentation?	• The Office of the Faculty Registrar provides this documentation. • Complete the *Request for Confirmation* form if applicable: (www.md.utoronto.ca → Our Offices → Office of the Faculty Registrar → Forms) • Submit the completed form in person or by e-mail or fax to the Registrar or the Student Support Administrator at MAM

[find opportunities]

... participate in research?	• The CREMS program offers excellent funded research opportunities: http://md.utoronto.ca/research • On the same site, also check out "Non-CREMS opportunities" for a variety of programs offered directly by Departments and Research Institutes • Your teachers are also good contacts if you are interested in participating in research in their field
... learn about my career options?	• SAMPLE different careers through the EEE program in the Preclerkship (find it on the portal: http://portal.utoronto.ca) and Clerkship electives • MEET with a career counsellor in Student Affairs or contact your Academy Director to talk about your interests and priorities • ATTEND Career Info Nights, MMMD lunch-hour career sessions, and other sessions organized by the OHPSA, departments, and PGME programs • LEARN about your options from the AAMC Careers in Medicine website – contact the OHPSA career counsellors if you're not sure how to log on
... share my ideas about the program?	• CONTACT the course director, Preclerkship/Clerkship Director, Academy Director, and/or student representatives for the relevant aspect of UME • EVALUATE the course, service, etc. when you are sent a form on MedSIS or other means – all results are considered carefully for the next year • ATTEND open feedback sessions arranged by Academies or courses and "Fireside Chats" with the Dean and Vice-Dean
... get more involved?	• There are many activities in which to participate: service-learning/community outreach, social groups and events, SALT (Student Affairs Liaison Team), MedLINKS, student government, and representative positions on UME program committees. • The Medical Society website (www.torontomeds.com), student representatives in your class, and Student Affairs staff can give you more details.