

# **McGill University**



## **ROYAL COLLEGE / CMQ EMERGENCY MEDICINE RESIDENCY TRAINING PROGRAM**

### **PROGRAM MANUAL**

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## **WELCOME FROM THE PROGRAM DIRECTOR**

Congratulations and welcome to McGill Emergency medicine – the oldest Royal College Emergency Medicine program in Canada! You are among a very few select and privileged individuals to be training in one of North America's top Emergency Medicine programs.

During your trek through the 5-year Program, you will find it to be both a very exciting yet demanding experience as you strive for excellence and aspire to become a leader in this unique specialty.

During your residency you will be “traveling” across many different specialty areas of medicine and surgery. This will enable you to learn about the urgent and non-urgent problems of each specialty.

In addition to your experiences across these subspecialties, you will also be traveling across emergency departments at various McGill hospital sites. Each Emergency Department has its own special character and strengths. Immerse yourself in the EDs and learn what makes them special, what makes them tick.

Your trek will also include crossing the border to the USA for a toxicology rotation (which has always been a favorite of the residents) as well as abroad for a different Trauma experience. In essence, as you travel through your 5 years of residency, you will be acting as “ambassadors” for McGill Emergency Medicine!

During your trek, you will come across what are called “non-negotiables.” Wednesday mornings are for you! This is protected time for your teaching rounds. You must attend (unless you are on vacation or on an out of town rotation), so arrange your call schedule accordingly.

The goal of the McGill Program is not only to make you excellent emergency physicians, but also to help mold you into the future leaders of Emergency Medicine, whether in Montreal, Quebec, the rest of Canada, or abroad. Our graduates can be found across the country and abroad in various leadership positions. As a result, our Program has a great reputation locally, nationally, and internationally.

Have fun and work hard.

Vincent Poirier, Program Director

## **McGill University, Royal College Emergency Medicine Training Program Resident Health and Safety Policy**

### **Preamble:**

The environment in the Emergency Department poses many potential threats to the personal safety of Emergency Medicine residents and staff Emergency Physicians. These risks are due to inherent risks of communicable disease, potential threat of physical violence, intimidation and harassment, risk of harm related to shift work, and risk of legal action by patients and families.

The safety and security of all Emergency Medicine residents is of the utmost importance to the McGill Emergency Medicine Program. The Royal College of Physicians and Surgeons of Canada and the College of Family Physicians of Canada have collaborated in developing national standards for evaluating sites used for residency education. Standard "A2.6" states that:

All participating sites must ensure resident safety at all times, particularly considering hazards such as environmental toxins, exposure to infectious agents transmitted through blood and fluid, radiation, and potential exposure to violence from patients and others."

Furthermore, The Collective Bargaining Agreement (CBA) between the Federation of Medical Residents of Quebec (FMRQ) and the Quebec Provincial government outlines requirements that all hospitals must have in place necessary measures to ensure the safe working environment for all medical residents

The Emergency Departments of all teaching sites are responsible for ensuring the safety and security of residents training in their facilities in compliance with existing employee safety and security policies/ procedures as well as the requirements outlined by the FMRQ and the McGill Post Graduate office.

The purpose of these guidelines is to enhance the health and well-being of our residents by offering guidelines for personal safety during clinical shifts in the Emergency Department. This document also aims to provide residents with references to obtain furthermore information regarding all aspects of safety within their EM training

### **Resident Personal Safety:**

Residents should adhere to the standards of universal precautions and wear appropriate protective gear during high risk patient interactions (trauma patients, airway management procedures, bleeding patients, and patients presenting with possible infectious illnesses) when necessary. Residents should adhere to hospital Infectious Disease prevention and reporting policies. Residents should keep their immunizations up to date and should seek advice of the hospital's Occupational Health and Safety department to obtain appropriate immunization prior to and during rotations abroad.

Residents must possess adequate knowledge of technical skills and practice appropriate technique to protect themselves and others from needle-stick injuries. Residents must recognize the importance of reporting adverse events and be aware of the indications for post exposure prophylaxis.

Residents should recognize patients who pose a threat of physical violence and understand measures that can be taken to prevent and protect themselves from physical harm (nonviolent crisis intervention, panic buttons, safe interview rooms, police or security presence, physical and chemical restraints). Residents should be aware of emergency procedures if they feel threatened by a patient in the examining room. Examination of potentially psychotic or violent patients should be done in an area where help can be summoned quickly.

If a resident feels that his or her personal safety is threatened, he or she should remove him or herself from the situation in a professional manner and seek immediate assistance. The McGill Emergency Medicine Training program will provide, on a regular basis, special training to residents on how to manage these potentially difficult situations.

Residents must understand the threats related to shift work including signs of physician burnout or substance misuse, impact of shift schedules (ie. Short shifting) and the impact of shift work on interpersonal as well as doctor-patient relationships. Residents are advised to seek assistance from available resources (Program Director, Occupational Health, the PAMQ, or the FMRQ representative) if they are experiencing negative effects of shift work.

Residents should be aware of the importance of safe transportation to and from work. Residents are expected to take precautions when walking alone at night. The request for a security escort to transportation home (e.g.. parking lot, bus stop) especially after evening shifts is encouraged.

Residents are advised to have a chaperone for pelvic, breast and rectal exams on women and selected male patients. Residents are advised to ask for a witness during anticipated or developing difficult patient encounters and the importance of careful documentation of these encounters.

Residents are advised of the importance of careful documentation in patient encounters that are likely to proceed through the judicial system (ie. sexual assault, motor vehicle accidents, physical assault/domestic violence).

Threatening behaviour, harassment, and intimidation are never acceptable; whether the source be a patient (or family member), a colleague, an allied health professional, or a supervisor. The McGill EM program holds strong a zero-tolerance policy with respect to this behaviour. We encourage all residents to be fully aware of the Faculty policy on intimidation and should be made aware that they may report such behaviour without fear of reprisal. The McGill Post Graduate policy on intimidation and harassment can be found at: <http://www.mcgill.ca/harass/>

Pregnant residents should be aware of specific risks to themselves and their fetus in the training environment, and request accommodations when indicated. Residents are encouraged to consult the FMRQ CBA for specific guidelines with respect to their safety.

Residents are encouraged to review the following guidelines established by the Postgraduate Medical Education office and the FMRQ:

FMRQ Collective Bargaining agreement:

<http://www.fmrq.qc.ca/en/working-conditions/collective-agreement>

The McGill Post Graduate policy on intimidation and harassment:

<https://www.mcgill.ca/pgme/current-trainees/policies-procedures>

The McGill Post Graduate policy on Resident health and safety:

[https://www.mcgill.ca/pgme/files/pgme/safety\\_policy\\_approved\\_september\\_26\\_2018.pdf](https://www.mcgill.ca/pgme/files/pgme/safety_policy_approved_september_26_2018.pdf)

Harassment, Sexual Harassment, and Discrimination Office:

<http://www.mcgill.ca/harass/>

Standards of behavior in the learning environment:

[http://www.medicine.mcgill.ca/postgrad/welcometopostgrad\\_standards.htm](http://www.medicine.mcgill.ca/postgrad/welcometopostgrad_standards.htm)

McGill Handbook on Student Rights and Responsibilities:

<https://mcgill.ca/students/srr/policies-student-rights-and-responsibilities>

McGill Student and Resident Affairs:

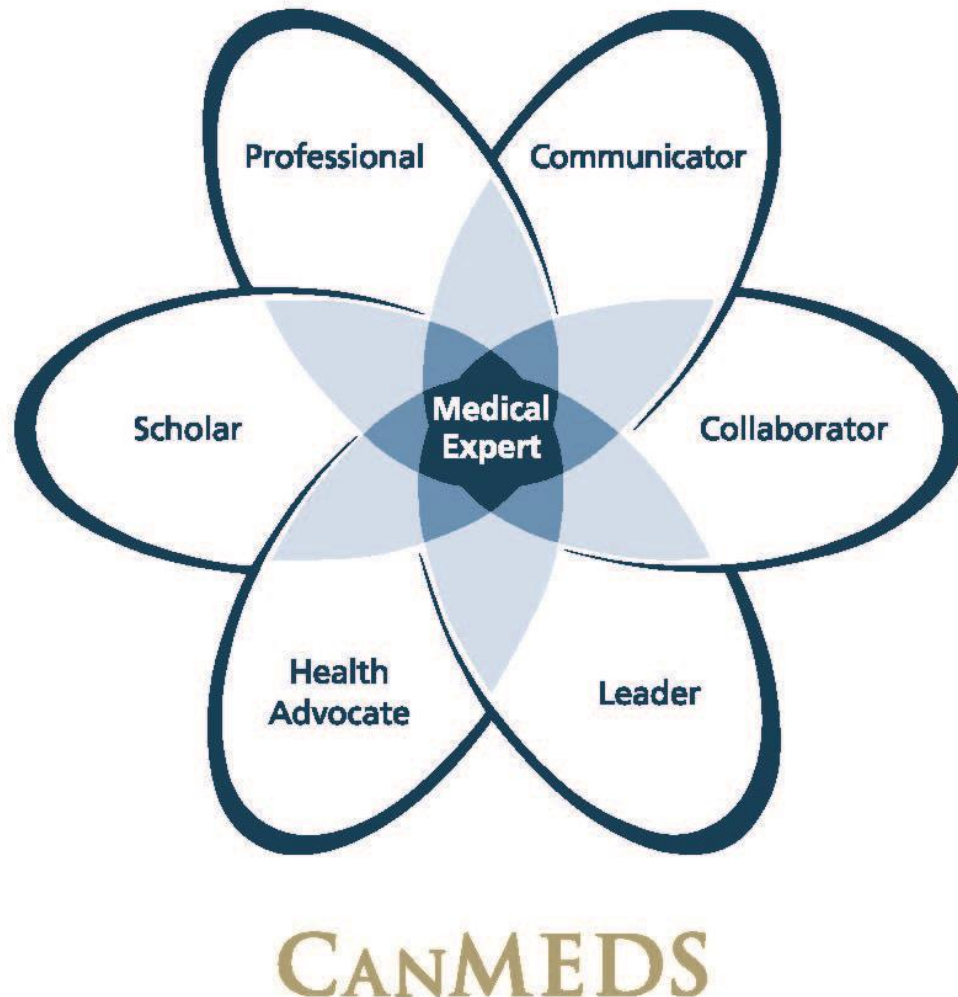
<http://www.mcgill.ca/harass/>

The Quebec Physicians' Health Program – QPHP:

<http://www.pamq.org/>

## THE CanMEDS ROLES

The Royal College of Physician and Surgeons of Canada has adopted and developed the concept of CanMEDS. It stands for “Canadian Medical Education Directions for Specialists. It is a description of the well-rounded physician, It describes the ideal roles and competencies a specialist is expected to fulfill. Consequently, these have been incorporated into the



McGill Emergency Medicine Royal College training program and are used as the framework for the overall goals of the residency program. There are 7 CanMEDS roles: Medical Expert, Communicator, Collaborator, Manager, Advocate, Scholar, and Leader. All McGill residents in a Royal College program will be evaluated (and potentially examined) based on these roles.

The following table is a brief description of these roles:

A more detailed description of the CanMEDS roles can be found on the Royal College Web site:

<http://www.royalcollege.ca/rcsite/canmeds-e>

CanMED Role	Activity
<b>1. Medical Expert</b>	<ul style="list-style-type: none"><li>• The central role</li><li>• Demonstrate diagnostic and therapeutic skills for ethical and efficient practice</li></ul>
<b>2. Collaborator</b>	<ul style="list-style-type: none"><li>• Effectively consults with other physicians and health care professionals</li><li>• Effectively works within an inter-disciplinary health care team, including patients, colleagues and other health care professionals</li><li>• Collaborative care and shared decision making</li><li>• Conflict resolution</li></ul>
<b>3. Manager</b>	<ul style="list-style-type: none"><li>• Utilizes time and resources effectively to balance patient care, learning needs, outside activities</li><li>• Allocates finite health care wisely</li><li>• Utilizes information technology to optimize patient care, continued self-learning and other activities</li></ul>
<b>4. Scholar</b>	<ul style="list-style-type: none"><li>• Critically appraises sources of medical information</li><li>• Facilitates learning of patients, students, residents and other health care professionals</li><li>• Contributes to the development of new knowledge</li><li>• Develops, implements and documents personal education strategy</li></ul>
<b>5. Professional</b>	<ul style="list-style-type: none"><li>• Delivers the highest quality of care with integrity, honesty and compassion</li><li>• Exhibits appropriate personal and interpersonal professional behaviours</li><li>• Practices medicine ethically consistent with obligations of a physician</li></ul>



## MCGILL EMERGENCY MEDICINE PROGRAM GOALS AND OBJECTIVES

The Royal College Emergency Medicine program at McGill follows closely the objectives of training (OTRs) and Specialty Training Requirements as outlined on the Royal College website. The following table demonstrates how the CanMEDS Objectives are addressed and used as a framework for the overall Goals and Objectives of the McGill Emergency Medicine Program:

CanMED Role	Activity
<b>1. Medical Expert</b>	<ul style="list-style-type: none"> <li>• Clinical Rotations</li> <li>• Specialty rotations outside the country (toxicology in NY)</li> <li>• Academic Half Day (strictly protected time)</li> <li>• Interactive sessions – monthly core textbook sessions</li> <li>• Annual in-training exams (CITE, ABEM, interactive) as a means to identify knowledge gaps</li> <li>• Journal club</li> <li>• Medical simulation</li> <li>• Medical conference attendance</li> <li>• Area of interest (AOI)</li> </ul>
<b>2. Communicator</b>	<ul style="list-style-type: none"> <li>• CPC compensation for junior residents</li> <li>• Journal club presentations</li> <li>• Medical simulation sessions</li> <li>• Grand Rounds presentations (R2-R4)</li> <li>• Clinical rotations</li> <li>• Residency Research Day</li> <li>• Mock oral exams (R5)</li> <li>• Clinical Teaching Unit rotation (R4)</li> <li>• Formal presentations at medical conferences</li> </ul>
<b>3. Collaborator</b>	<ul style="list-style-type: none"> <li>• Clinical rotations</li> <li>• Simulation Centre session</li> <li>• Mock codes</li> <li>• Special academic days</li> </ul>
<b>4. Manager</b>	<ul style="list-style-type: none"> <li>• Medico-Administration rotation (R4)</li> <li>• Clinical rotations (with graded responsibility)</li> <li>• McGill seminar on Practice Management</li> <li>• Special academic days</li> </ul>
<b>5. Health Advocate</b>	<ul style="list-style-type: none"> <li>• Clinical rotations (role modeling)</li> <li>• Special Academic Days/Grand Rounds</li> <li>• Medical Simulation</li> </ul>
<b>6. Scholar</b>	<ul style="list-style-type: none"> <li>• Clinical Rotations</li> <li>• Journal Watch</li> <li>• Journal Club</li> <li>• Grand Rounds</li> <li>• Epidemiology course</li> <li>• ED/Journal Club rotation</li> <li>• Clinical Research Project</li> <li>• Subscriptions to online EM resources</li> <li>• Medical conference attendance</li> <li>• Area of interest (AOI)_</li> </ul>
<b>7. Professional</b>	<ul style="list-style-type: none"> <li>• Clinical Rotations (role modeling)</li> <li>• Special Academic Sessions/Grand Rounds on medical ethics and professionalism</li> <li>• McGill Faculty initiatives/seminars on professionalism</li> <li>• Role modeling</li> </ul>

## PROGRAM & ACADEMIA



A Royal College & CMQ Emergency Medicine Residency Program

### EMERGENCY MEDICINE 5-YEAR CURRICULUM (Pre-Competency by Design)

Rotations per year:	Year 1	Year 2	Year 3	Year 4	Year 5	5 year Total
Adult ED	3	3	7	2	6	21
Pediatric ED	1	1.5	1	1	2	6.5
Trauma Service	1					1
Sports Medicine	1					1
Obs/Gyn	1					1
Short stay unit	1					1
Critical Care/ICU	1	1		1		3
Anaesthesia	1					1
Psychiatry	1					1
Epidemiology	1					1
ED/Journal Club	1					1
Toxicology		1	1			2
Cardiology Consults		1				1
CCU		1				1
Pediatric ICU		1				1
Pediatric Anesthesia		0.5				0.5
MSK/Ortho		1				1
ED/Ultrasound		1				1
Community/Rural ED		1				1
Electives			1		3	4
Neurology			1			1
Neuro ICU			1			1
Trauma				2		2
EMS			1			1
Area of Interest				6		6
CTU (Clinical Teaching Unit)				1		1
Internal Medicine Consult Service					1	1
Medico-Administration					1	1
Research*		(1)	(2)	(1)	(1)	(5)*
Yearly Total:	13	13	13	13	13	65

\* Over the 5 years, there are 20 weeks dedicated to research time. When requested, these weeks are deducted from the adult emergency medicine rotations

EMERGENCY MEDICINE NEW CBD CURRICULUM  
(Initiated in 2018)

	<b>TTD</b>	<b>Foundation</b>	<b>Core</b>	<b>TTP</b>		
	PGY 1	PGY 1	PGY 2	PGY 3	PGY 4	PGY 5
ADULT EM (22)	3	3	3	4	4	5
PEDS EM (6.5)		1	1.5	3	1	
ED / JOURNAL CLUB		1				
POCUS		1				
TOXICOLOGY / ED			1			
RURAL EM				1		
75% ED/ 25%SSU			1			
CTU					1	
ADMIN						1
ICU (3)		1		1	1	
MSK/SPORTS (2)		1	1			
EPIDEMIOLOGY		1				
ANESTHESIA (2)		1			1	
TRAUMA (2)			1	1		
CARDIO CONSULTS			1			
CCU			1			
PEDS ANESTHESIA			0.5			
TOXICOLOGY (NYC)				1		
NEUROLOGY			1			
NICU				1		
EMS				1		
PSYCHIATRY			1			
OB-GYNE			1			
ENT/OPHTHALMO			1			
ELECTIVES (3)			3			
AREA OF INTEREST (6)						6
IM CONSULTS				1		
<b>TOTAL ASSIGNED</b>	<b>3</b>	<b>10</b>	<b>39</b>	<b>13</b>		

## ACADEMIC HALF DAY

Every Wednesday from 8h30 to 12h00, we hold our Academic Rounds. This is your protected time! Thus, attendance at Rounds is mandatory. Rounds are held at the Glen site, the Montreal General hospital as well as the Jewish General hospital. There are also about 8-10 sessions per year at the McGill Simulation Centre. The third Wednesday of every period, academic rounds are substituted for Interactive Rounds. Interactives have been instituted to help the resident study and prepare for the final exam. For the Junior Residents (R1 – R2), you will cover the text Emergency Medicine: A Comprehensive Study Guide by Judith Tintinalli. The entire textbook will be covered over a two-year period. The resident is expected to have read the chapters in advance. Residents will be quizzed in an open and interactive format. Note that there is an exam at the end of each year. The Senior Residents will cover the text Rosen's Emergency Medicine: Concepts and clinical Practice.

Week 1: JGH (with the CCFP-EM residents)

Week 2: MGH

Week 3: Interactive session TBA

Week 4: RVH (with CCFP-EM residents)

Content of rounds may include Grand Rounds presentations by faculty or residents, POCUS presentations, CQI, Simulation Days and special event days. Three times per year, each Adult Emergency Department organizes a "site day" where a special guest(s) is invited to present on cutting edge Emergency Medicine.

***\*\*Please note: attendance at Rounds is mandatory. It is viewed as being the same as showing up to an Emergency shift or clinical responsibilities on the wards. Absence from Rounds will result in sick days being deducted.***

## JOURNAL CLUB AND CRITICAL APPRAISAL TOPIC (CAT)

### ***Essential Details***

**When:** Academic half-days

**Where:** As above

**Who:** FRCPC and CCFPEM residents. These sessions are core protected time, so attendance is mandatory. Staff and invited guests are strongly encouraged to attend.

### **Article Distribution:**

- Critical Appraisal Topics (CAT) is under the responsibility of the CCFP-em program. A resident is assigned to provide a review and critical appraisal of recent topic in emergency medicine.
- Journal Club. The article(s) are chosen by the 2 FRCPC residents responsible for presenting, usually a paired junior and senior resident. The article should be distributed to the Listserv at least 1 week prior to presenting.

**Summary:** Provide a written summary, less than 1 page, on what was learned. Also, provide access to reference articles/resources. This summary should be also be submitted to the listserv (within 1 week of the Journal Club).

### **Goals**

### **SCHOLAR**

- To keep residents and staff abreast of current cutting-edge literature and best literature
- To learn the techniques of critical appraisal as they apply to different study designs
- To learn the three general critical appraisal skills of evaluating the validity of study methods, appreciating the strength and precision of results and applying the results with an eye to changing practice or informing decision-making
- To learn and apply the EBM concepts and skills

- To learn skills and habits that will allow lifelong reading behaviour and learning habits
- To become aware of important publications outside the EM literature

#### **MEDICAL EXPERT**

- To develop knowledge on key topics and the supporting literature
- To improve clinical practice consistent with the latest research findings and critically appraised best evidence
- To integrate critically appraised best evidence into decision making through considerations that include values and perspectives that relate to the ethical, managerial, professional and health advocate dimensions of an emergency physician

#### **COMMUNICATOR**

- To develop and hone interactive teaching and presentation skills
- Based on the knowledge and insights gained, to effectively and impressively communicate with your patients and colleagues in other specialties on critical and up to date issues
- Consideration should be given to reaching a wider audience of EM colleagues through peer-reviewed publication of your Journal Club summaries (posting on website, writing letters to editors, publishing summaries)

#### **COLLABORATOR**

- To work as a team with other residents (both FRCPC and CCFPEM)
- To invite and interact in a dynamic learning environment with special guests who are experts on the topic or issues being presented

#### **Format**

Over the year, one half of the Journal Clubs will be dedicated to teaching some of the principals of EBM (evidenced based medicine) while the remainder will be “theme” based (where a selection of current cutting edge articles are presented on a topic).

If you are doing an EBM format, choose 1 article that highlights the EBM concept that you want the residents to learn. The article should not be more than 2 years old. A good EBM reference is JAMA’s “Users’ Guide to the Medical Literature: A Manual for Evidenced-based Clinical Practice”. At the end of your session, please provide a brief summary, either written or distributed on-line. This should highlight the concept taught and indicate on-line references for review.

If you are assigned to do a topic or “theme” you will present and critically appraise 2 or 3 cutting edge and up to date articles. In addition to presenting the articles, you should briefly present your search strategy. The resident is strongly encouraged to invite a guest to JC who can act as an expert on this topic. A brief summary should be provided at the end of the session, either written or on-line. This summary should be sent the IT resident to be put on our web site.

For the FRCPC residents, consult your mentor well in advance. They can provide you with ideas and help review topic itself, the objectives, content and educational strategy of your presentation. Let him/her know the date and that you are counting on their support!



A Royal College & CMQ Emergency Medicine Residency Program

### **Industry Companies Funding Policy**

The McGill Emergency Medicine Residency has a need to collect funds to help sponsor emergency academia and education of the residents. Consequently, the McGill Emergency Residency Education fund has been created. It is to be used for academic purposes that benefit the program as a whole (e.g. sponsoring speakers, educational equipment). It is not to be used for personal benefit (books, trips etc.) nor is it to be used for food.

(Pharmaceutical) companies may make unlimited donations (frequency and amount, with a suggested minimum of \$750) to the Emergency Medicine Residency educational fund.

No obligations or conditions can be set by the pharmaceutical companies in exchange for the donations (however, the names of donors will be listed amongst the companies making donations).

In return, the companies will be allowed to attend up to 4 Journal Clubs per year. However, there will be only one company present per journal club. The company representative will set up their display outside the Journal Club room. They will not be allowed to give a formal presentation to those attending the JC. Residents and staff are free to politely interact with the company representative outside of the JC room.

Contributions will all go into a single fund, and the amount contributed will remain undisclosed to both the residents and the other pharmaceutical companies.

The Chief residents will continue to manage the fund, but expenditures greater than \$100.00 will require consensus and approval by both Chiefs and the Program Director.

## ROTATIONS GOALS & OBJECTIVES

### ADMINISTRATION

#### *Goals and Objectives*

This four-week rotation is designed to teach effective management and administration skills as they relate to the practice of Emergency Medicine. The resident will be exposed to all levels of administration. The resident will be expected to learn basic principles of leadership and administration, develop an understanding of the function of the Emergency Department within the institution and its relationship with other departments. Other key objectives will include: understanding important medico-legal aspects of emergency medicine, understand aspects of quality assurance, professionalism, risk management, and crisis resource management.

The rotation supervisor is Dr. Jonathan Cooperman at the Jewish General Hospital. There is active ED staff participation at the JGH, MGH, and Glen site, as well as with DPS, flow coordinators and departmental chiefs.

#### *Structure*

During this rotation, the resident will receive lectures in ED administration and hospital topics covering inter-departmental protocols and policies. Some of the topics presented include:

- ED design
- Information Technology and the Medical Health Record
- Canadian Triage System
- Trauma systems
- Morbidity and Mortality (M&M) review process
- Patient complaints
- Quality assurance (QA)
- Legal aspects of Emergency Medicine
- Career planning
- Time management
- Protocol and procedure development
- Overcrowding and bed utilization
- Lean philosophy on patient flow
- Role of the DPS and Department Chief
- Negotiation and conflict resolution
- Practice management

The resident will be required to complete a project that will involve either responding to a patient complaint letter or working through a Morbidity and Mortality case. Issues related to medical and system errors will be their main focus. Projects are completed under the supervision of a faculty mentor and the resident will be required to present his/her findings to the rotation supervisor with review by the JGH faculty members tasked with handling patient complaints and M&M cases.

The resident will participate directly in the ED as a “flow coordinator” at all three sites learning how to handle different flow situations and complicated cases. Clinical responsibilities will include 2 shifts at each of the 3 adult EM sites.

#### *Evaluation*

Evaluation of the resident will be based on their attendance and participation in lecture, the feedback during their reassessment shifts in the ED, as well as their administrative project (patient complaint letter or M&M).

## **MEDICAL EXPERT**

The resident will be expected to:

- Participate in the management of difficult cases
- Learn efficient decision making in cases of unclear disposition
- Decide on admission/discharge vs. consultation
- Focus on the re-assessment of cases already present in the ED, learn the evolution of the patient's stay and decide on an appropriate work-up taking into consideration all the data available since their arrival in the ED
- Learn the key protocols and policy guidelines as they apply to each of the 3 ED sites

## **COMMUNICATOR**

The resident will learn to deal effectively with patients and their families during difficult and challenging patient encounters. He/She will need to be able to communicate effectively at meetings. The resident will also need to provide an effective written response to a patient complaint letter or M&M case.

## **COLLABORATOR**

The resident will be expected to become comfortable communicating and collaborating with residents, other allied health care providers, as well as with consultant staff physicians.

## **MANAGER**

The resident will be expected to demonstrate organizational skills in ED administration, as well as learn to organize, manage and lead committees both at the ED and hospital levels. This may include budgeting and staffing according to objective measures.

## **HEALTH ADVOCATE**

The resident will be expected to recognize the determinants of illness and injury seen in the Emergency Department and be able to act on these findings. They will be expected to advocate for the patients in the ED, sometimes through a long stay in the emergency.

## **SCHOLAR**

The resident will be expected to familiarize themselves with the concepts of medical and system errors, and work to understand the roles they play in undesirable patient outcomes. As noted above, a mandatory project will be required. Residents are encouraged to read academic EM material relevant to the topics addressed.

## **PROFESSIONAL**

The resident will be expected to treat patients and fellow staff with respect. They will adequately prepare for meetings and their structured learning sessions, and will demonstrate professionalism (appearance, punctuality, work ethic, etc.). The resident will be required to exhibit the following qualities: reliability, honesty, maturity, respect for others, acceptance of constructive criticism and demonstrate a sincere concern for the well-being of others. The resident will need to convey an understanding of the key ethics principles commonly seen in Emergency Medicine practice and also of physician wellness issues regularly found in Emergency Medicine.

**SUPERVISOR:**

**ADMINISTRATIVE COORDINATOR:**

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## ADULT EMERGENCY MEDICINE

The specialist in Emergency Medicine is foremost a clinician who uses the requisite knowledge and skills to diagnose and manage patients presenting with a wide spectrum of acute illness and/or injury, including:

- Acute life-threatening events
- Exacerbations of pre-existing or chronic conditions
- Common minor presentations
- Psycho-social issues

Highly developed clinical reasoning skills are needed to care for patients with acute and undifferentiated problems, often before clinical or diagnostic information is available or in the face of significant diagnostic and prognostic uncertainty.

The specialist in Emergency Medicine is also a leader and collaborator, interacting effectively with other medical professionals and systems to facilitate the provision of prompt, efficient, high-quality and cost-effective medical care to individuals and communities.

To develop these specialized skills, residents will complete a total of 21 rotations in adult EM (22 under CBD starting with the cohort of PGY1 residents in July 2018). About one third of these rotations are done as a junior resident (PGY1-2, or transition to discipline/foundations under CBD). The rotations are spread equally among the three primary adult sites (MGH, RVH and JGH) with one additional rotation in a community-based ED anywhere in Quebec. Additionally, residents are scheduled for ED shifts as part of other rotations, including Journal Club, Toxicology, MSK/Sports med, POCUS, Clinical Teaching Unit, Medical Administration, and their area-of-interest rotations.

Over the five years of residency training, there is a graded level of responsibility that evolves as the resident becomes more senior, with the degree of direct supervision by the on-duty attending fading gradually over time. The junior resident focusses on gaining knowledge and technical skills in the management of individual patients. By the end of the second year, the resident will have finished more off-service rotations and many EM rotations, and should have a solid approach to almost any undifferentiated patient complaint. In the third year, the resident should focus on assuming a heavier patient load and begin to manage department flow. The fourth year resident should also assume some responsibility for the supervision and teaching of more junior trainees in the department. By the final year, the resident should be able to assume all the responsibilities of an attending physician.

In the first four years of training, the EM resident will have read all of Tintinalli and Rosen in preparation for monthly interactive sessions. Consequently, all the core topics of EM will have been covered at least twice. Additionally, residents should be studying around the cases they see on shift, building on textbook knowledge by searching the literature to address areas of uncertainty encountered in the day-to-day management of patients.

Rotations in adult Emergency Medicine will be scheduled at the two adult general hospitals of the McGill University Health Centre (Royal Victoria and Montreal General Hospitals) and the Sir Mortimer B Davis Jewish General Hospital. At all three sites, self-directed and case-based learning will be augmented by a series of daily didactic lectures, covering the core topics of emergency medicine. Each resident will be responsible for teaching one of these sessions every time they rotate in adult EM.

Each hospital has a unique patient population and area of particular clinical expertise. Almost all of the attending emergency physicians at each site are either CCFP-EM or FRCP-EM certified, and many have subspecialty areas of expertise, either clinical (e.g. toxicology, critical care, sports medicine) or in research or administration. More details on each ED can be found in the respective orientation manuals for each site.

### ***Goals and Objectives***

At the completion of training, the resident is expected to have acquired the following competencies through exposure during their 21+ rotations in adult emergency medicine:

## MEDICAL EXPERT

Apply knowledge of the clinical, socio-behavioural, and fundamental biomedical sciences relevant to Emergency Medicine to rapidly assess and manage patients with acute and/or undifferentiated illness or injury, ranging from life-threatening events to common minor presentations, including but not limited to:

- Principles of resuscitation and critical care management
- Trauma
- Acute medical and surgical disorders
- Psychiatric and behavioural disorders
- Toxicology
- Environmental emergencies
- End of life care
- Perform a complete and appropriate assessment of a patient, meaning a selective, accurate, and well organized history and physical examination
- Demonstrate effective clinical problem solving and judgment to address patient problems, including interpreting available data and integrating information to generate well organized differential diagnoses and management plans
- Select appropriate investigations, including but not limited to laboratory and diagnostic imaging, with careful attention to patient safety and diagnostic utility and cost, and interpret the results accurately and within their clinical context
- Ensure informed consent is obtained for investigations and treatments, when indicated and feasible
- Use preventive and therapeutic interventions effectively in a safe, appropriate, and timely manner
- Perform procedures in an appropriate, safe, and skillful manner, with appropriate attention to minimizing patient risk and discomfort. Demonstrate knowledge of the indications, contraindications, methods, and potential complications of the therapeutic and investigative procedures employed in Emergency Medicine, including but not limited to:
  1. Airway management
  2. Wound repair
  3. Abscess drainage
  4. Immobilization of extremity injuries
  5. Reduction of displaced fractures and dislocated joints
  6. Joint arthrocentesis
  7. Epistaxis control
  8. Ocular examination (slit lamp, IOP measurement) and foreign body removal
  9. Peripheral and central venous access
  10. Intraosseous access
  11. Lumbar puncture
  12. Regional anesthesia
  13. Thoracostomy tube insertion
  14. Point of care ultrasound

## COMMUNICATOR

- Develop rapport, trust, and positive, ethical therapeutic relationships with patients and their families
- Accurately elicit and synthesize relevant information and perspectives of patients, their families, colleagues, and other professionals
- Accurately convey relevant information and explanations to patients and their families, colleagues, and other professionals. Empathetically provide effective, clear, and thorough explanations of diagnosis, investigation, management, and expected outcome, even during times of crisis
- Develop a common understanding on issues, problems, and plans with patients, their defined family units, and other professionals to develop a shared plan of care
- Convey oral and written information effectively about a medical encounter

## COLLABORATOR

- Recognize and respect the diverse roles, responsibilities, and competencies of other professionals in relation to those of the specialist Emergency Medicine physician
- Work with others to assess, plan, provide, and integrate care for individuals and groups of patients
- Work with other health professionals effectively to prevent, negotiate, and resolve interprofessional conflict

## LEADER

- Demonstrate knowledge of and utilize specific strategies to manage emergency department crowding
- Triage and set appropriate priorities when dealing with single or multiple critically ill patient(s)
- Perform timely and selective clinical reassessments to optimize and facilitate patient care
- Demonstrate an understanding of and practice the principles of crisis resource management and act as an effective team leader in crisis situations
- Demonstrate the ability to address complaints from patients, family members, and colleagues
- Describe the process for addressing adverse events
- Recognize the importance of just allocation of health care resources, balancing effectiveness, efficiency, and access with optimal patient care
- Improve efficiency and performance through appropriate understanding and use of information technology

## HEALTH ADVOCATE

- Identify opportunities for advocacy, health promotion, and disease prevention with individuals to whom they provide care, including but not limited to addictions, injury prevention, interpersonal violence, child/elder abuse and neglect
- Identify vulnerable or marginalized populations within those served and respond appropriately

## SCHOLAR

- Integrate the available best evidence and best practices to enhance the quality of care and patient safety in emergency medicine practice
- Facilitate the learning of patients and their families, students, residents, and other health professionals as appropriate (this includes formal presentations to small groups as well as clinical supervision of junior trainees while on duty)
- Apply lifelong learning skills to implement a personal program to maintain and enhance areas of professional competence in Emergency Medicine

## PROFESSIONAL

- Exhibit appropriate professional behaviours in practice, including honesty, integrity, commitment, compassion, respect, and altruism
- Recognize and appropriately respond to ethical issues encountered in practice
- Demonstrate insight into their own limits of expertise

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*ORIENTATION MANUAL*

<https://docs.google.com/document/d/1hNYGiuarmLLNkIFLm20cGX9s1xKmqK7Uolh8OudkRTA/edit?usp=sharing>

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*ORIENTATION MANUAL*

<https://onedrive.live.com/view.aspx?resid=BFD501E8EB391AB!398&ithint=file%2cdocx&app=Word&authkey=!ApmqspYrPGG3acI>

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## **PEDIATRIC EMERGENCY MEDICINE**

Training in pediatric emergency medicine will take place at the Montreal Children Hospital (MCH). In this hospital, the emergency department is divided in three sections according to acuity (red, yellow, and green). PGY-1 residents do shifts only in the lowest acuity section. There are also “technical skills shifts”, during which residents are taught to place IV’s and catheters by an experienced nurse.

Residents are directly supervised almost exclusively by Pediatric Emergency Medicine specialist physicians.

Formal teaching occurs biweekly, both in-situ simulation and “lunch and learn” sessions for the more senior residents.

Emergency medicine residents spend a total of 6.5 months in the MCH emergency department.

### ***Goals and Objectives***

#### **PGY 1-2 YEARS**

##### **MEDICAL EXPERT**

- Explain the natural history, pathophysiology, anatomy, treatment and complications of common acute disorders that fall within the scope of pediatric emergency medicine
- Recognize the unstable / critically ill child, mobilize the health care team and supervisor, and initiate appropriate basic life support maneuvers. Eventually, begin to take a more active role in leading and managing the resuscitation
- Obtain a proper history and physical exam of the pediatric patient presenting to the Emergency Department
- Formulate an appropriate differential diagnosis for pediatric patients with uncomplicated urgent and non-urgent emergency department presentations
- Be knowledgeable of the indications, use and interpretation of common lab tests, EKG’s, and common radiographic tests
- Demonstrate technical competence in uncomplicated IV insertion, urinary catheter insertion, lumbar puncture, suturing of simple lacerations and extremity immobilization, including participating in safe procedural sedation
- Recognize classic warning signs of abuse/neglect

##### **COMMUNICATOR**

- Communicate effectively with:
  1. Patients and their families
  2. Nurses, Respiratory Therapists, Unit Clerks
  3. Attending Physicians, Residents and Medical Students within the Department
  4. Consultants by telephone/in person
- Deliver sensitive or difficult information to patients/families in a manner a professional manner
- Document encounters accurately and concisely, including follow-up notes and interpretation of lab, ECG and radiological investigations

##### **COLLABORATOR**

- Participate in the inter-disciplinary team that makes up Emergency Health Care.
- Respect the other members of the Emergency Department and seek out their opinions and skills when appropriate.
- Demonstrate flexibility in one’s role within the Emergency Department if the need arises.
- Involve the patient and family in shared decision-making.
- Respect and support the role of the patient’s primary physician e.g. their family physician or pediatrician in their ongoing health care.

## MANAGER

- Manage 3-4 patients concurrently
- Consult appropriately and prioritize the timing of consults
- Triage tasks in order of priority
- Use resources such as lab testing and radiology cost-effectively
- Participate in the direction of effective patient flow within the Emergency Department
- Use the hospital computer database/information technology effectively to help direct the individual patient's care
- Ensure comprehensive care of patients seen including following up of tests done on that visit, transfer of care and discharge planning

## HEALTH ADVOCATE

- Acknowledge that the patient's well-being is central to all medical care
- Implement preventive medicine or harm reduction strategies that will influence patient health and well-being
- Advocate for the patient always, particularly when they are unable to do so themselves

## SCHOLAR

- Continuously seeking out new knowledge and incorporate this into daily practice
- Apply landmark studies and evidence-based practice to patient care
- Use information technology to direct self-learning as well as patient care

## PROFESSIONAL

- Demonstrate a commitment to patients by applying best practices and adhering to high ethical standards
- Show awareness of the racial, cultural and societal facets that influence the delivery of emergency medical care
- Exhibit appropriate professional behaviours and relationships in all aspects of practice, demonstrating honesty, integrity, humility, commitment, compassion, respect, altruism, respect for diversity, and maintenance of confidentiality
- Exhibit self-awareness and manage influences on personal well-being and professional performance.
- Receive and accept constructive criticism
- Demonstrate a commitment to patient safety and quality improvement

## PGY 3-5 YEARS

*The resident will have been expected to have completed all the goals and objectives of the PGY1-2 years in addition to the following:*

## MEDICAL EXPERT

- Lead the team in the assessment, resuscitation, stabilization and ongoing ED care of a patient suffering from a life-threatening condition or injury, including but not limited to shock, cardiorespiratory arrest, respiratory failure, severe sepsis, or severe trauma
- Assess and manage patients with complicated emergency, urgent and non-urgent presentations
- Demonstrate technical competence in airway management, difficult peripheral IV insertion, central line insertion, tube thoracostomy, complicated laceration repair, reduction of fractures and dislocations, and procedural sedation

## COMMUNICATOR

- Effectively respond to consultation requests from other physicians
- Sensitively engage in complex patient care discussions around end of life care
- Disclose harmful patient safety incidents to patients and their families accurately and appropriately

## **COLLABORATOR**

- Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports a collaborative culture
- Be able to assume team leadership within the department and be an effective participant in this multi-disciplinary milieu
- Expertly work with EMS personnel by reviewing patient care with EMS upon their arrival to the department
- Coordinate transfer of patients from community hospitals and outlying regions for specialized emergent care
- Assist referring community emergency physicians in stabilization and treatment of paediatric patients at their centers

## **MANAGER**

- Manage multiple (>4) patients concurrently
- Assume leadership of the department while on shift
- Ensure proper flow of patient care through department
- Apply the principal and skill set of evidence based medicine in identifying integrating the best research evidence to patient care

## **PROFESSIONAL**

- Serve as a role model for junior residents and medical students
- Display knowledge of the professional, legal and moral codes binding physicians, in particular as they apply to issues of consent and refusal of care in the pediatric patient
- Recognize and intervene when unprofessional conduct occurs in the resident's midst as in accordance with government and professional regulations

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## ANAESTHESIA (ADULT & PAEDIATRIC)

Knowledge and skills concerning emergent airway management is core Emergency Medicine. The McGill Emergency resident will learn this core knowledge and technical skills on 2 core rotations: General Anesthesia (4 weeks) and Pediatric Anaesthesia (2 weeks) - This rotation will allow the resident to focus on the details of Pediatric Anaesthesia (airway anatomy, medication dosing, equipment sizes etc). The resident will then be able to apply and master their knowledge and hone their skills on several other rotations: Adult and Pediatric Emergency Medicine, ICU (Medical, Surgical, Neurological, Pediatric, Cardiac), and Trauma. By the end of the Program, the resident must feel comfortable (both in knowledge and skill) with any emergency airway problem:

### MEDICAL EXPERT

- Anatomy of the upper and lower airways (both adult and pediatric)
- Learn relevant pre-operative historical and physical exam considerations including evaluation of the airway difficulty
- Demonstrate the appropriate clinical judgment regarding the need for acute airway intervention
- Knowledge of the principles of both non-invasive ventilation and invasive mechanical ventilation
- Knowledge of hemodynamics, monitoring, fluid resuscitation and blood products
- Knowledge of the pharmacology (mechanism of action, indications, contra-indications, side-effects, complications and doses) of the various induction agents, paralyzing agents, pressors, and vasodilators, local anaesthetic agents, and those used for procedural sedation
- Knowledge of at least 6 different airway “rescue” techniques for the difficult airway
- Understand the principles of general, regional and local anaesthesia, as well as procedural sedation. The resident must be able to describe the appropriate anatomy of regional blocks
- Expertly demonstrate the following skills:
  1. Insertion of oral and nasal airways
  2. Manual ventilation (Bag-valve-mask technique)
  3. Techniques to open the airway (jaw thrust, chin lift)
  4. Techniques for managing the obstructed airway
  5. Rapid sequence intubation (including manual in-line immobilization of the c- spine)
  6. The skills required for at least 6 airway rescue techniques (Bougie, lighted stylet, LMA, combi-tube, retrograde intubation, fibre optic, digital manipulation)
  7. Be able to assess successful intubation (including end tidal CO<sub>2</sub>)
  8. Be able to adjust settings for both the mechanical vent and CPAP/BiPAP machines.
  9. Surgical airway technique (cricothyroidotomy)
  10. Peripheral and central venous catheterization and arterial line insertion
  11. Skills required for both regional and local anaesthesia

### COMMUNICATION

The resident must be able to display effective communication with:

- Patients and families (in various situations including pre-op, post resuscitation)
- Anaesthesiologists, surgeons, respiratory technicians, and nurses
- Colleagues and peers during (especially during acute resuscitation situations)

### COLLABORATOR

The resident must be able to demonstrate:

- The ability to work as team with anaesthesiologists, surgeons, respiratory technicians, nurses and orderlies
- The ability to work as a team both in the Emergency Department or ICU, when dealing with “semi-elective” airway issues or with the acute resuscitation



## MANAGER

The resident must be able to demonstrate:

- An understanding of the role of and the appropriate consultation of the Anaesthesia service, and its role within the hospital
- Appropriate use of blood and blood products.

## HEALTH ADVOCATE

- Be able to discuss with patients and their families the risks and benefits of the various procedures and/or interventions, or be able to assist and direct them to the appropriate individuals who can inform and answer their questions or concerns
- Understand and act appropriately upon a patient's advanced directives
- Understand and discuss with patients and families McGill's levels of care
- Be the patient's advocate at all times, especially when they are unable to do so themselves

## SCHOLAR

The resident must:

- Keep abreast of the relevant and landmark studies
- Be able to critically appraise these landmark articles
- Be aware of web based Anaesthesia sites (see McGill emergency website for links)

## PROFESSIONAL

The resident must be able to:

- Be mindful of one's own limitations and know when to call for back-up (by knowing and acknowledging your strengths and weaknesses).
- Show respect at all times for the patient's:
  1. Race/ethnicity
  2. Language
  3. Religion/Belief system
  4. Gender/sexual orientation
  5. Confidentiality
- Be a leader in the acute resuscitation
- Display ethical behaviour commensurate with a physician at all times with respect to:
  1. Patients and their families
  2. Allied health staff
  3. Attending Staff, residents and medical students
  4. Be a role model to fellow physicians, nurses, residents, and medical students.

## ADULT ANESTHESIA

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## AREA OF INTEREST (AOI)

Emergency Medicine has evolved significantly over the last 20 years. Consequently, there are many areas of subspecialty that now fall under the domain of EM. The McGill Emergency resident has the opportunity to pursue his/her interest in one of these areas. During 6 rotations (either consecutively or randomly) the resident will be able to develop an area of interest. These areas may be clinical (e.g. critical care, toxicology etc.) or they may be non-clinical (e.g. administration, education, informatics, etc.). The resident may also combine the area of interest with their research project.

In terms of goals and objectives, the ultimate goal of this block of time will be dependent on what the resident selects as his/her area of interest, and the objectives will be created to enable the resident to obtain his/her goal.

### *Rotation Logistics*

**Rotation Proposal:** The resident will write a proposal of what he/she wants to do for this period. The proposal must be approved by the program director. The proposal should be written in CanMEDS format (medical expert, communicator, collaborator, manager, health advocate, scholar, professional). Depending on the project, certain CanMEDS roles will be emphasized over others.

**Staff Mentor/Supervisor:** The resident must select a staff to his/her supervisor for the rotation. The staff will review the proposal and advise on how to progress. The mentor/supervisor must inform the Area of Interest Committee that he/she is willing to take on that responsibility.

**Incomplete Area of Interest:** Should the resident not complete his/her proposal, the Program Director, in consultation with the mentor and resident, will evaluate the situation and whether or not satisfactory progress has been made. Should the committee decide the rotation is incomplete, the implications will be similar to any other incomplete rotation (as per McGill's promotion and Evaluation).

## CARDIOLOGY AND CORONARY CARE UNIT (CCU)

The cardiac care curriculum consists of three four week rotations, one in the Cardiac Care Unit (CCU) and two with the Cardiology Consult Service. The goals and objectives for these two rotations are as follows:

### MEDICAL EXPERT

The resident will develop expertise in the pathophysiology and management of acute and chronic cardiac disease. He or she will demonstrate knowledge of:

- Principles of resuscitation of the patient in cardiac arrest and a mastery of ACLS protocols
- Immediate and long-term management of arrhythmias, including the pharmacology of anti-arrhythmic medications and indications for pacing
- Principles of hemodynamic monitoring and mechanical ventilation (both invasive and non-invasive) in the critically ill patient
- Diagnosis of acute coronary syndromes, including the roles of cardiac enzymes, resting and stress electrocardiography, echocardiography, nuclear studies, and angiography
- Management of acute coronary syndromes and their complications, including initial stabilization and ongoing monitoring; the roles of all medical treatment options including thrombolysis; the roles of primary and rescue PCI
- Diagnosis and management of acute and chronic congestive heart failure, hypertensive emergencies, endocarditis, pericarditis/myocarditis, cardiac tamponade, aortic dissection, and valvular emergencies
- A thorough differential diagnosis and a rational approach to investigation and management of the patient with undifferentiated chest pain, palpitations, dyspnea, or syncope
- Recognition and management of pacemaker problems

- Management of the acutely ill cardiac transplant patient. The resident will also demonstrate the following skills:
  1. ECG and plain chest radiograph interpretation
  2. Cardioversion and defibrillation
  3. External chest compressions
  4. Hemodynamic monitoring by Swan-Ganz catheterization and arterial line placement
  5. Temporary percutaneous and transvenous pacemaking
  6. Pericardiocentesis

#### COMMUNICATOR

- Demonstrate ability to discuss the patient's care and counsel regarding risk modification with the patient and family
- Demonstrate ability to deliver bad news in a sensitive, concise and understandable manner
- Show skill in explaining risks, benefits and obtaining consent for relevant procedures, in particular thrombolysis and PCI for acute coronary syndromes
- Demonstrate ability to discuss living wills, advanced directives and do not resuscitate/levels of care orders
- Communicate effectively with the multi-disciplinary team
- Communicate effectively with the cardiac arrest team during resuscitation
- Provide clear written documentation in the patient's chart, including consults, progress notes, and orders

#### COLLABORATOR

- Recognition of the role of each health care team member with respect to the patient's care
- Demonstrate ability to resolve common team conflict problems
- Demonstrate ability to work in a multi-disciplinary team
- Be capable of involving the patient and family in decision-making

#### MANAGER

- Demonstrate ability to allocate cardiac care resources to the patient and population served in an evidenced-based manner
- Recognize resources of tertiary care cardiac care centres and the use and rationalization of these for the individual patient and the population served
- Be able to manage competing interests of consults from other services, including the Emergency Department, with ongoing care of cardiac patients
- Be capable of managing multiple critically ill patients concurrently
- Comprehend the role of the Cardiology Consult service and Cardiac Care Unit with respect to the hospital and community as a whole
- Recognize medico-legal risk and identify potential preventive and corrective steps

#### HEALTH ADVOCATE

- Identify the determinants of health of the individual cardiac patient
- Be capable of discussing with patients risk and harm reduction strategies
- Be the patient's advocate at all times, particularly when they are unable to do so themselves
- To be able to seek additional medical expertise when there is a conflict of opinion concerning patient care

#### SCHOLAR

- Demonstrate knowledge of landmark cardiac studies, to be able to critically appraise them and understand the subsequent applicability
- Be consistent in reading around clinical cases and improving cardiac knowledge base
- Demonstrate ability to formulate a clinical question and efficiently access information required to answer clinical questions in an evidence-based manner

## PROFESSIONAL

- Demonstrate awareness of the racial, cultural and societal factors that may influence delivery of care to the cardiac patient
- Show respect all times for the patient's:
  1. Race/ethnicity
  2. Language
  3. Religion/Belief system
  4. Gender/sexual orientation
  5. Confidentiality
- Be aware of one's own strengths and weaknesses, and seek help when needed
- Be able to receive and accept constructive feedback
- Display ethical behaviour compatible with a physician at all times with respect to:
  1. Patients and their families
  2. Allied health staff
  3. Attending Staff, residents and medical students
  4. Serve as a role model for colleagues and other health care personnel

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#### *CCU*

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## CLINICAL TEACHING UNIT (CTU)

### EMERGENCY MEDICINE CLINICAL TEACHING UNIT

CTU is a four-week mandatory clinical rotation for senior Emergency Medicine residents, with the objective of developing the resident's skill and confidence as a clinical teacher. The resident-teacher will apply principles of learner-centered instruction and techniques for teaching in a busy clinical environment while supervising junior trainees (clerkship through PGY-2) in the ED. Through group learning activities, practical experience, and self-reflection, the resident-teacher will acquire skills in interactive small-group lecturing, focused instruction during case review, effective bedside teaching and direct observation of trainee-patient interaction, the safe teaching of procedures, and giving constructive feedback.

#### *Learning Objectives*

The specific learning objectives of the CTU rotation are focused on the CanMEDs Scholar role. At the same time, it is understood that to be an effective teacher and role-model in the busy clinical team environment of an Emergency Department, the resident-teacher must demonstrate excellence in all CanMEDs domains.

- Integrate teaching into the ED environment:
  1. Identify advantages of the ED as a teaching environment
  2. Identify barriers to teaching in the ED
  3. Identify characteristics of effective ED clinical teachers
  4. Identify common teaching mistakes
  5. Demonstrate strategies to overcome barriers to teaching in the ED
- Use a learner-centered approach to teaching:
  1. Explain the main principles of adult learning theory and learner-centered teaching
  2. Orient the learner to the shift, set expectations
  3. Diagnose the learner
  4. Prime the learner for each patient encounter
  5. Assign appropriate responsibility to the learner
  6. Ask questions that promote critical thinking
  7. Show the learner general approaches to problem-solving
- Use a variety of efficient, effective clinical teaching techniques:
  1. Use the "One-Minute Preceptor" framework for case discussion
  2. Choose high-yield cases for teaching
  3. Consolidate the teaching of several learners
  4. Directly observe patient-learner interactions, providing focused feedback on clinical skills
  5. Teach at the bedside when appropriate
  6. Use quick teaching techniques such as triggers, mnemonics, and pearls
  7. Use prepared materials when appropriate (e.g. teaching files, online tutorials, teaching scripts, educational prescriptions)
  8. Demonstrate an effective approach to teaching technical skills
- Give constructive feedback:
  1. Provide private, timely, specific and objective feedback
  2. Limit feedback to few objectives at a time
  3. Use the "sandwich technique" for feedback
  4. Encourage self-reflection in the learner
  5. Counsel the learner on how to improve

- Lecture effectively to small groups:
  1. Develop learner-centered objectives
  2. Use interactive techniques
  3. Create appropriate audio-visuals and handouts
  4. Evaluate effectiveness of lecture
- Teaches the learner effective communication skills:
  1. Teach the student how to present a case using the "3-minute emergency medicine presentation" technique
  2. Help the student acquire the key communication skills of a physician
  3. Show the student how to document cases appropriately for the ED setting
- Role model active, life-long learning:
  1. Show the learner how experts deal with knowledge gaps using the principles of EBM
  2. Recognize cognitive errors in self and others
  3. Solicit feedback on teaching from the learner
  4. Reflect on own teaching style and strategies

### ***Instructional Strategies***

#### **Workshops:**

The senior residents will all be assigned to the CTU rotation at the same time to take advantage of the social aspects of learning by participating as a group in three half-day workshops. One of these workshops will take place in the simulation center (giving feedback and teaching procedures). The other two workshops will focus on the elements of a general framework for effective, efficient teaching in the ED clinical environment.

#### **Readings:**

Chapters will be assigned from the book "Practical Teaching in Emergency Medicine", second edition. Reading should be done prior to the workshops.

#### **Reflective exercises:**

The CTU residents will submit written exercises in which they draw upon the material from their readings and from their clinical teaching shifts to reflect upon their performance as a clinical teacher.

#### **Clinical teaching shifts:**

Each resident will spend ten shifts in the ED supervising and teaching one or two junior learners (clinical clerk to PGY-2). During these shifts, the resident will initially focus entirely on their role as teacher and will not be responsible for carrying their own patient load. However, an important goal during these shifts will be to adjust their teaching strategies to match the actual work-flow time-pressures of the ED. Therefore, in the last few shifts it is expected that CTU residents will begin to see a few of their own patients as well as continuing to supervise the more junior trainees. Residents will be matched to one of the three adult ED's (JGH, MGH, and RVH) for the duration of the rotation.

#### **Observed teaching encounters:**

Each resident is matched to one or more attending ED physicians who will act as mentors during the CTU rotation. During the teaching shifts, at least twice in the rotation for a minimum of two hours each time, one of these mentors will directly observe the resident-teacher and provide coaching and feedback on their teaching skills.

#### **Small group teaching:**

The resident-teachers will each conduct two one-hour small-group teaching sessions for a group of junior learners on duty in the department. The topics are to be chosen by the CTU resident. Feedback for the CTU resident's own personal use will be collected from those in the audience.

**Debriefing sessions:**

Two debriefing sessions will be held later in the rotation, as an opportunity for the CTU residents to share their clinical teaching experiences and give each other support and advice. A teaching mentor will facilitate the debriefing.

**Feedback and Evaluation**

The CTU-resident will receive feedback from multiple sources. Some of these will be collected and summarized in a final evaluation by the CTU instructor; other forms of feedback will be purely formative.

- Daily written evaluations from learners and supervising attending physicians on teaching shifts.
- Feedback from the observed teaching encounters will be given only to the CTU resident and not used for summative evaluation.
- Written feedback from the audience members at each small-group teaching activity they lead will be given only to the CTU resident and not used for summative evaluation.
- Self-assessment through the reflective homework.
- Participation in the workshops and debriefing sessions.

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## EMERGENCY DEPARTMENT ULTRASOUND

### *Structure*

This will be a 4 week rotation based at the Jewish General Hospital which will be broken down into eight 8-hr emergency shifts, as well as 9 3-hr ultrasound scanning shifts. During this rotation, the resident will participate in didactic learning, bedside ultrasound training, and direct clinical patient care. Residents must be paired up during their rotation.

Prior to the rotation, all residents must have completed the ePoCUS Essentials core course that is provided at the beginning of the academic year. This is a mandatory pre-requisite for the rotation. The overall goals of the rotation are two-fold. To successfully complete all requirements to become a CPoCUS-certified independent practitioner (IP) for the core indications, and to become introduced to the use of POCUS in patient care and decision-making in the Emergency Department

During each of their scanning shifts residents will be paired and under the direct supervision of a CPoCUS-certified Independent Practitioner (I.P.) where they will be proctored while performing abdominal, cardiac, lung and pelvic ultrasound examinations on patients in the emergency department. Each exam will be logged and counter-signed by the proctoring I.P. to ensure the completion of each scan. During their 8-hr emergency shifts, they will be scheduled to work alongside a CPoCUS IP. They will be responsible for the evaluation of all ED patients, and together with the attending staff, will make decisions regarding their management and ongoing emergency care. During this time, any point of care ultrasound examination performed by the resident may count towards their requirements only if it is reviewed by a CPoCUS I.P. During this training period, residents are encouraged to act if they see a positive scan, but must not draw any conclusions from a negative scan, unless they have been proctored by an I.P.

As per the CPoCUS requirements to become an I.P, a resident must complete 225 scans of the following relevant areas. Definitions of a determinate scan are:

- Heart: 50 scans of the entire inferior pericardium to detect pericardial effusion
- Aorta: 50 scans of the aorta visualized from subdiaphragmatic region to bifurcation in transverse view to measure diameter
- Lung: 25 scans each of anterior and lateral assessment for the detection of pneumothorax and pleural effusion/hemothorax
- Abdomen: 50 scans of the hepatorenal and splenorenal interfaces fanned to detect free fluid; diaphragm visualized in LUQ
- Uterus: 50 scans of the uterus to detect intrauterine pregnancy (IUP)

During the course of obtaining the 225 required definitive scans, the residents be also be required to show that they can complete 10% of the above scans completely unassisted to ensure their independent abilities in generating determinate images.

The resident will also be required to successfully complete the CPoCUS written exam (85% passing grade), as well as the practical and visual exams. The resident will be required to register with CPoCUS to have access to the exams. Should the resident be unable to complete any part of the requirements, extra shifts may be assigned by the supervisor in order to complete unfinished training. Once all components are completed, the residents will be certified as a CPoCUS I.P. As part of the current Royal College requirements, the use of ultrasound guidance for vascular access will also be taught and demonstrated.

Since the scheduling of the scanning shifts is done well in advance and is difficult to change, vacations are strongly discouraged as it leads to a high risk of an incomplete rotation.



## Objectives

### MEDICAL EXPERT/CLINICAL DECISION-MAKER

#### *Basic Scientific Knowledge:*

Understand the role of physics in modern ultrasound. To understand the nature of ultrasound waves and wave properties, modes of transmission. Define necessary terms such as:

- Frequency
- Resolution
- Penetration
- Attenuation
- Echogenicity
- Gain
- Artefact (shadowing, refraction, enhancement)

Understand the role of specific probes; their characteristics, and their uses, such as:

- Abdominal probe
- Linear array
- Endocavitary probe

Understand the critical steps of correct image generation and interpretation. This may include the comprehension of

- Planes of view
- Probe placement
- Probe orientation
- Image modulation

#### *Basic Clinical Knowledge:*

Demonstrate knowledge of the following:

- Define the primary emergency applications of emergency ultrasound. To recognize the conditions which require the use of bedside ultrasound for diagnosis. These conditions include, but are not limited to:
  1. Abdominal Aortic aneurysm (AAA)
  2. Pericardial Effusion
  3. Cardiac standstill during cardiac arrest
  4. Ectopic Pregnancy
  5. Trauma/non-traumatic intrabdominal fluid
  6. Pneumothorax
  7. Pleural Effusion/hemothorax
- Understand the specific indications, and limitations of bedside ultrasound for the above conditions; Specifically:
  1. Cardiac ultrasound:
    - a) Define your area of interest to generate a subcostal view of the heart when evaluating for cardiac activity and pericardial effusions
    - b) Define the relevant cardiac anatomy including pericardium, cardiac chambers, septum, valves, and aorta
    - c) Recognize the causes of cardiac arrest when assessing cardiac activity, and the causes of pericardial effusion
    - d) To be able to differentiate between true positive and false positive results
  2. Abdominal Aorta
    - a) Define your area of interest in obtaining a transverse view of the abdominal aorta

- b) Recognize relevant anatomy, such as the vertebral bodies, the inferior vena cava, the aorta with its major branches
- c) Understanding the various locations and different types of AAA
- d) To use the appropriate protocols when evaluating for a AAA

### 3. FAST

- a) Describe the indications and limitations of bedside ultrasound in blunt and penetrating thoracoabdominal trauma
- b) To be able to evaluate the abdomen in at least three sites for the presence of free fluid in traumatic and non-traumatic scenarios
- c) To define the relevant local anatomy including the liver, spleen, kidneys, bladder, uterus, and diaphragm
- d) To understand the sources of false positives and false negatives
- e) To understand the possible clinical pathways depending on your ultrasonographic findings and clinical setting

### 4. First Trimester Pregnancy

- a) Define your area of interest in obtaining transabdominal and endovaginal images of the female uterus
- b) Describe the indications and limitations of focused sonography when evaluating a patient with first trimester pain and bleeding
- c) Be able to identify intrauterine pregnancy, either through the identification of a decidual reaction, gestational sac, AND yolk sac, or through the identification of a fetal pole and/or fetal cardiac activity
- d) To identify free intraperitoneal fluid in the context of an ectopic pregnancy
- e) Understand the role of quantitative B-HCG in the evaluation of a possible ectopic pregnancy
- f) To recognize the possible alternatives of an empty uterus

### 5. Lung

- a) Describe the indications and limitations of bedside ultrasound in assessing the Lung in patients with shortness of breath from a traumatic or non-traumatic cause.
- b) To be able to define your areas of interest in obtaining an anterior and a lateral view of the lung.
- c) To be able to identify specific findings that allow you to rule out or rule in pneumothorax including recognizing lung sliding, comet tail artefacts, lung pulse, lung point, cardiac and liver lung point.
- d) To be able to identify specific findings that allow you to rule out or rule in a pleural effusion/hemothorax including recognizing curtain sign, spine sign, direct visualization of fluid and the components of blood in the thorax
- e) To understand the sources of false positives and false negatives.
- f) To understand the possible clinical pathways depending on your ultrasonographic findings and clinical setting

## COMMUNICATOR

*By the end of the rotation, the resident will:*

- Demonstrate the ability to effectively communicate with referring and consultant colleagues regarding the relevant negative and positive sonographic findings
- Be able to recognize the limitations of emergency bedside ultrasonography and to request more definitive testing by consultants when required
- Demonstrate the ability to communicate effectively with patients and their family regarding the nature of the injury/illness suffered and anticipated management plan, showing them respect and gaining their cooperation and confidence

- Be able to explain to the patient the advantages, focused nature, and limitations of an emergency bedside ultrasound examination and to communicate the possible need for further radiographic testing depending on the findings at the bedside

## COLLABORATOR

*By the end of the rotation, the resident will:*

- Recognize the role of each health care team member with respect to the patient's care
- Show consideration for the knowledge, skills and roles of the various members of the healthcare team
- Demonstrate the ability to work well with other health team members. Deal effectively with difficult issues and show the ability to resolve common team conflict problems
- Be capable of involving the patient and family in decision-making

## MANAGER

*By the end of the rotation, the resident will:*

- Demonstrate the capacity to manage multiple patients concurrently, and to handle most common problems independently, while asking consultants for help in more complex situations
- Recognize the resources of the tertiary care emergency departments and the use and rationalization of these for the individual patient and the population served
- Be able to manage competing interests of consultants from other services with respect to ongoing care of patients

## HEALTH ADVOCATE

*By the end of the rotation, the resident will:*

- Be the patient's advocate at all times, particularly when they are unable to do so themselves
- Display advocacy for the community at large and for society

## SCHOLAR

*By the end of the rotation, the resident will:*

- Demonstrate knowledge of current scientific literature with respect to emergency ultrasound applications and use of this knowledge daily patient management
- Demonstrate interest in expanding current knowledge base by reading around clinical cases
- Demonstrate the ability to critically-appraise research methodology and medical literature with respect to emergency ultrasound
- Demonstrate an interest in expanding their knowledge base of future applications of emergency ultrasound

*Once reaching the status of Independent Practitioner, the resident will be able to understand the important responsibility of teaching other health care professionals bedside US in concordance with the requirements of the Canadian Emergency Ultrasound Society.*

## PROFESSIONAL

*By the end of the rotation, the resident will:*

- Demonstrate awareness of the racial, cultural and social factors that influence the delivery of emergency care to patients
- Show respect at all times for the patient's:
  1. Race/ethnic/religious background
  2. Language
  3. Socio-economic level
  4. Gender/sexuality
  5. Confidentiality
- Be aware of one's own strengths and weaknesses, and recognize when to call for back up
- Be able to receive and accept constructive feedback

- Display ethical behaviour compatible with a physician at all times with respect to:
  1. Patients and their families
  2. Allied health staff and practitioners
  3. Attending Staff, residents and medical students
  4. Be a role model for medical students, residents, staff physicians, nurses, and other allied health care personnel

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## EMERGENCY MEDICAL SERVICES (EMS)/PRE-HOSPITAL CARE (update 2018)

McGill Emergency residents will have the opportunity to learn about emergency medical services (EMS) through their exposure to EMS in their work in the emergency department (ED) as well as during a four-week rotation in EMS at Urgences-Santé, the pre-hospital care provider for Montreal. During the four-week rotation, interactive presentations as well as practical sessions will be used to educate the resident. By the conclusion of the rotation, the resident will be expected to prepare a short presentation on an EMS topic. (The resident will also have the opportunity to undertake an elective in aviation medicine.)

### MEDICAL EXPERT/CLINICAL DECISION-MAKER

- Direct pre-hospital patient care management
  1. Take a concise history and perform a directed physical exam
  2. Develop a differential diagnosis and assess severity of the case
  3. Initiate management in the field
  4. Initiate transport at the appropriate priority level and to the appropriate facility
- Direct medical control
  1. Provide on-line medical control
  2. On-scene supervision of EMTs
- Indirect medical control
  1. Participate in the creation of EMT protocols
  2. Review cases for quality assurance
- Emergency Medicine Systems:
  1. Explore the history of emergency medical systems
  2. contrast different organizational systems (e.g. urban vs. rural, North American vs. European)
- Triage
  1. Contrast the different types of telephone triage
  2. Understand the advantages and disadvantages of the advanced medical priority dispatch (Klawson) system
- Disasters and mass casualty situations
  1. Learn how to perform field triage
  2. Understand the role of the on-scene physician and in the hospital
  3. Understand the principles of mass casualty incident command and transport from the scene
- Aeromedicine
  1. Understand the basic principles of aeromedicine (flight physiology)
  2. Understand the roles of fixed wing versus rotary transport c. Participate in aeromedical transport
- ALS and BLS
  1. Learn the differences between basic and advanced life support care
  2. Understand the controversy that exists between the need for either
- Management of Medical Problems
  1. Differentiate between equipment, techniques and medications used in the pre-hospital setting and in the ED, and understand the evidence behind what is being/should be done
- Pediatrics
  1. Acquire knowledge of the special circumstances surrounding the prehospital care of the pediatric patient, such as unique clinical protocols, legal concerns and areas of research

### COMMUNICATOR

- Establish a therapeutic relationship with patients and their families in the field
- Develop the ability to concisely communicate essential information when transferring care of patients in the ED
- Understand and demonstrate the importance of cooperation and communication among health professionals involved in the care of individual patients, including EMTs, nurses and physicians.
- Understand the lines of communication in disaster medicine

## COLLABORATOR

- Demonstrate the ability to work effectively with other prehospital and in-hospital health care professionals during direct patient care
- Identify and describe the role, expertise and limitations of all members of the pre-hospital care team (i.e. first-responder, primary care paramedic, advanced care paramedic, critical care paramedic, physician) required to optimally achieve a goal related to patient care
- Participate in an interdisciplinary team meeting, demonstrating the ability to accept, consider and respect the opinions of other team members
- Acquire the ability to resolve conflicts between the various members of the prehospital care team

## MANAGER

- Direct the EMS team during on-scene patient care
- Understand the structure, financing, and operation of the local EMS system and its facilities, function effectively within it and be capable of playing an active role in its change
- Understand the role of the EMS medical authority in the direction and management of prehospital care delivery
- Become sensitive to medico-legal issues in prehospital care and learn to minimize legal risk
- Learn the role of, and demonstrate familiarity in the use of pre-hospital technology including communication equipment, GPS systems and prehospital information systems

## HEALTH ADVOCATE

- Understand the different levels of population: patient, specific population and the general population, and appreciate the distinct issues at each level
- Become sensitive to the changing role of the prehospital care provider in the local, provincial and federal levels, and advocate for advancements in their status

## SCHOLAR

- Demonstrate familiarity with the unique characteristics of pre-hospital research and be aware available tools for the advancement of EMS research (e.g. EMSOP, EMS Research Agenda)
- Prepare a short review of an EMS topic for presentation at the end of the rotation
- Apply the principles of evidenced-based medicine to the practice of pre-hospital care and evaluate the interventions currently in use
- Demonstrate the fundamentals of teaching pre-hospital care providers, and adapt the level of instruction to the appropriate level of the trainee
- Be cognizant of current landmark EMS research
- Be able to critically appraise and apply EBM techniques to evaluate this literature
- Improve your knowledge base in EMS through the use of selected readings, journals in the field and textbooks (e.g. Prehospital Systems and Medical Oversight, Kuehl, 3rd Ed.)

## PROFESSIONAL

- Show respect at all times for the patient's:
  1. Race/ethnicity
  2. Socio-economic status
  3. Religion/belief system
  4. Gender/sexuality
  5. Confidentiality
- Demonstrate knowledge and insight into ethical and legal issues that arise in the pre- hospital setting including (but not limited to) advanced directives, refusal of transport etc...
- Serve as a mentor for EMTs and other prehospital care providers by delivering the highest quality care with integrity, honesty, and compassion

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### **ICU (MEDICAL, SURGICAL, NEURO)**

Over the course of their training in Critical Care Medicine at McGill, the resident will have ample exposure to the critically ill patient: Medical and Surgical ICU, Neuro ICU, Pediatric ICU, Trauma Service, CCU, and of course, in the Emergency Department. A graded level of responsibility will be given to the resident as (s)he gains more Critical Care experience.

A progressively greater depth of knowledge will be expected. The resident will do 2 months as a junior resident and 1 month as a senior resident. The junior rotations are done at the MUHC or JGH. These 2 months should provide a varied experience with medical, surgical and trauma ICU patients. The senior rotation will be done at St. Mary's Hospital, where the resident will be the only resident (or the most senior resident with a junior family medicine resident). Hence, he/she will be running the ICU, doing all the consults in the hospital and ED, gaining a greater appreciation of the indications for intensive care unit admissions and therapy.

By the end of the R2-3 year, the resident will have completed 2 ICU rotations, 1 trauma, and 1 CCU rotation. Thus, the resident should be competent in the management of the most critically ill patients. On completion of residency training, the resident should have achieved proficiency in the recognition and initial management of problems commonly encountered in the intensive care unit. For less common problems, the trainee should gain a knowledge base that allows them to formulate a differential diagnosis, initiate a management plan, and request appropriate consultations.

#### **MEDICAL EXPERT**

- Demonstrate and apply a sound fund of basic science knowledge to patient care in the majority of cases.
- Demonstrate and apply a fund of clinical knowledge in a manner that enables resolution of common clinical situations on a consistent basis. This includes (but is not limited to) the recognition and management of:
  1. Acute respiratory failure (and ventilator orders)
  2. Common rhythm disturbances, including knowledge of the indications, contraindications and side effects of anti-dysrhythmic therapies
  3. Sepsis and other causes of hemodynamic instability. Must be able to classify shock, outline hemodynamic patterns, and understand the indications and contraindications of inotropes and vasopressors
  4. Acute renal failure
  5. Acute intoxications
  6. Acute neurological insults

7. Electrolyte and acid base disorders (ABG interpretation)
8. Endocrine emergencies
9. Coagulation disorders
10. Obtain an appropriate history from the patient, family, or other medical personnel, that is complete, accurate and systematic
11. Perform a problem-oriented physical examination with the recognition of most findings to allow for proper diagnosis and management
12. Develop diagnostic plans that are appropriate and reflect current standards
13. Accurately interpret the results of common lab and diagnostic tests
14. Be able to synthesize historical, physical exam and diagnostic testing information into a problem list and appropriately prioritize problems
15. Make judgments that are complete and sound. Arrive at appropriate decisions using the available information
16. Outline a therapeutic plan in conjunction with the ICU fellow or attending physician and Institute appropriate therapy
17. Develop an ability to recognize acute life-threatening illness and institute life sustaining supportive therapy
18. Demonstrate adequate knowledge of monitoring techniques for the critically ill patient to allow for appropriate management
19. Demonstrate competency in performing essential procedures with appropriate skill and manual dexterity for level of training. Carry out techniques correctly and efficiently with appropriate knowledge of indications and risks
  - a) RSI and alternative airway techniques (bougie, LMA, cric)
  - b) Ventilator settings
  - c) ABG settings
  - d) Arterial Lines
  - e) Central Lines
  - f) CVP monitoring principals (leveling, zeroing and measuring)
  - g) Swan Ganz monitoring (including determination of central venous and mixed venous blood gas
  - h) Cardioversion and defibrillation
  - i) Transcutaneous and transvenous pacing
  - j) Pericardiocentesis
  - k) Thoracentesis
  - l) Balloon Tamponade (Blakemore tubes)
  - m) Lumbar puncture and opening pressure measurement
  - n) Dialysis catheter placement and be aware of the various dialysis techniques and their indications

## COMMUNICATOR

- Communicates effectively and professionally with allied health professionals
- Must communicate calmly and effectively in acute resuscitation situations
- Demonstrate an ability to consistently achieve a positive rapport with patients and families, gaining their respect and confidence
- Must be able to clearly explain diagnosis and treatment options in an understandable fashion to both patients and their family members
- Develop communication skills with patients on a ventilator
- Must be able to deliver information and/or bad news to families in a humane manner that is understandable and encourages discussion
- Demonstrate an ability to write records/reports that are usually complete, orderly, systematic, generally support management, and allow a physician unfamiliar with the patient to identify the relevant daily issues
- In response to a consultation request from another health care provider, the resident must be able to present a well-reasoned, well-documented assessment and recommendations in written and oral form



## COLLABORATOR

- Demonstrate the ability to become an active and vital member of the Intensive Care Unit team
- Demonstrate an ability to give and follow appropriate instructions with nurses and allied staff, and to develop rapport, resulting in a constructive working environment
- Demonstrate an ability to work well with other services
- Deal effectively with issues and achieve good results even in difficult situations without antagonizing others

## MANAGER

- Demonstrate the ability to handle most common problems independently, while asking consultants for help with specific questions in more complex situations
- Demonstrate the ability to order investigations and consultations in a logical and cost effective manner
- Participate in bed management issues. Understand and manage the flow of patients into the ICU, and timely (yet appropriate) transfer of the patient to the ward
- Effectively organize work in such a way that priorities are established and that coordination occurs with the other members of the team ensuring total, acute, and continuing care of patients
- Respond in timely fashion to consult requests from the ED and wards, balancing the needs of the critically ill patients in the ICU and elsewhere in the hospital

## HEALTH ADVOCATE

- Educate the families of critically ill patients on the life-style and health issues that have led to the illnesses of their family members

## SCHOLAR

Residents should be able to demonstrate their scholarly approach to medical practice in the following areas during participation on patient rounds, teaching sessions, and journal clubs:

- Self-education skills; demonstrate up-to-date knowledge in major clinically applicable developments. Display effective skills in continuing education. Demonstrate an ability to identify gaps in knowledge and develop a strategy to fill the gaps
- Critical Appraisal of the Medical Literature; Demonstrate ability to seek out, locate and judge the strength of the evidence in the literature. Able to pose an appropriate patient- related question, execute a systematic search for evidence, and critically evaluate medical literature in order to optimize clinical decision-making
- Scientific Interest; Participates in the scientific activities offered in the program
- Contributes actively to discussion and teaching. Able to add to and elevate the level of discussion. Incorporates a spirit of scientific enquiry and use of evidence into clinical decision-making
- Teaching Skills; Available, approachable. Effectively shares knowledge. Helps others to develop their potential.
- Oral Presentation Skills; Able to give a clear, concise, effective oral presentation concerning a clinical or scientific topic with appropriate use of audiovisual aids

## PROFESSIONAL

- Integrity and honesty; demonstrate an honest, straightforward approach that is respectful of others, and deserves the respect of others
- Show respect at all times for the patient's:
  1. Race/ethnicity
  2. Language
  3. Religion/belief system
  4. Gender/sexual orientation
  5. Confidentiality
- Responsibility and self-discipline; Dependable, reliable, honest and forthright in all information and facts; prompt, appropriate follow-up of patients. Non-clinical responsibilities, (e.g. rounds, teaching, etc.) are similarly dealt with
- Bioethics; Sensitive to bioethical issues and demonstrates a reasonable approach to them
- Performs in an ethical manner with other health care professionals, patients and families

- Self-Assessment; demonstrates appropriate awareness of own limitations; seeks assistance and/or feedback to overcome/ compensate for limitations, and accepts advice graciously
- Receptiveness to Feedback: Responds constructively to new suggestions and ideas

ICU-MUHC

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ICU-JGH

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## INTERNAL MEDICINE CONSULT SERVICE

Senior residents in their PGY3 or PGY4 year will complete a 4-week rotation with the Internal Medicine (IM) consult service at the Royal Victoria Hospital. This rotation involves completing consults in the Emergency Department (ED), and cases are reviewed directly with an IM attending physician or senior resident in the ED. You may occasionally be asked to supervise the work of more junior members of the team. Rarely, residents will complete consults on the ward or for pre-op patients, but these will usually be assigned to non-EM residents on the team. Typically about two new consults are seen per day, plus reassessments.

On this rotation, residents should focus on developing a systematic approach to the evaluation of patients with acute medical problems. This will involve deepening their understanding of the pathophysiology, clinical presentation, diagnosis and treatment of diseases of the heart, lungs, kidneys, GI tract; the immune, hematologic, endocrine and nervous systems; infectious and neoplastic diseases; and special populations, including the elderly, dialysis and transplant patients, patients with coexisting cognitive deficits or psychiatric illness, and patients at the end of life. Residents will also learn to assess risks and decide on disposition of patients, including developing an approach to safe patient discharge or handover to another service.

Residents gather together on Friday afternoons for more formal teaching.

Weekend shifts, and shifts that end later (8pm) are required (respecting the residents' collective agreement), but there are no overnight shifts or "on call" periods. Residents on this rotation are not expected to respond to "code blue".

Upon completion of the rotation, the resident should have a foundation in the following items, which can be built upon with continued exposure during subsequent ED rotations:

### MEDICAL EXPERT

- Perform a patient-centered clinical assessment, eliciting a history and physical exam that is accurate and appropriately focussed and organized
- Generate a relevant and prioritized problem list with differential diagnoses, demonstrating knowledge and understanding of the pathophysiology, clinical presentation and diagnostic work-up of patients presenting with undifferentiated problems from the various systems listed above
- Implement a patient-centered management plan, consistent with the patient's goals of care, including arranging for appropriate disposition and understanding the indications for admission to an internal medicine ward, short stay unit, critical care unit, or other
- Understand the issues surrounding the safe transport of critically ill patients within the hospital
- After obtaining and documenting informed consent, perform procedures in an appropriate, safe, and skillful manner, with appropriate attention to minimizing patient risk and discomfort. Demonstrate knowledge of the indications, contraindications, methods, and potential complications of the therapeutic and investigative procedures employed in Internal Medicine, including but not limited to:
  1. Paracentesis
  2. Joint arthrocentesis
  3. Lumbar puncture
  4. Thoracocentesis
  5. Vascular access
  6. ACLS skills
  7. Airway management
- Recognize and respond to harm from health care delivery, including patient safety incidents

## COMMUNICATOR

- Establish professional therapeutic relationships with patients and their families, characterized by empathy, respect and compassion
- Elicit and synthesize accurate and relevant information, incorporating the perspectives of patients and their families
- Share health care information and plans with patients and their families, checking for their understanding, and disclosing harmful patient safety incidents appropriately
- Engage patients and their families in developing plans that reflect the patient's health care needs and goals, facilitating informed decisions
- Document clinical encounters and progress in an accurate, complete, well organized, timely, and accessible manner, addressing the questions of the referring doctor, including a clear plan for further investigations, treatments, disposition and (when relevant) discharge instructions and follow-up recommendations
- Share information with others involved in the care of the patient in a manner that respects patient privacy and confidentiality and enhances understanding

## COLLABORATOR

- Work collaboratively with physicians and other colleagues in the health care professions, establishing and maintaining positive relationships, negotiating shared responsibilities, managing conflicts, and engaging in respectful shared decision-making
- Demonstrate safe handover of care, using both verbal and written communication, during a patient transition to a different health care professional, setting, or stage of care

## LEADER

- Contribute to a culture that promotes patient safety, and analyze patient safety incidents to enhance systems of care
- Apply evidence to achieve cost-appropriate allocation of care resources, including investigations, consults, and in-patient beds
- Manage time efficiently
- Assume a leadership role in the care of the medical patient
- Understand the role of the Department of Medicine within the hospital and as a tertiary/quaternary care referral center

## HEALTH ADVOCATE

- Work with patients to address determinants of health that affect them and their access to needed health services or resources
- Work with patients and their families to increase opportunities to adopt health behaviours
- Incorporate disease prevention, health promotion, and health surveillance into interactions with individual patients

## SCHOLAR

- Identify opportunities for learning and improvement by regularly reflecting on and assessing their performance using various internal and external data sources
- Engage in collaborative learning to continuously improve personal practice and contribute to collective improvements in practice
- When teaching others, create a safe learning environment and ensure patient safety is maintained, and provide feedback to enhance learning and performance
- Recognize knowledge gaps in clinical encounters and generate focused questions to address them by identifying, selecting and navigating pre-appraised resources, critically evaluating research, and integrating evidence into decision-making

## PROFESSIONAL

- Exhibit appropriate professional behaviours and relationships in all aspects of practice, demonstrating honesty, integrity, humility, commitment, compassion, respect, altruism, respect for diversity, and maintenance of confidentiality
- Demonstrate a commitment to excellence in all aspects of practice, including patient safety and quality improvement
- Recognize and respond to ethical issues encountered in practice
- Fulfill and adhere to the professional and ethical codes, standards of practice, and laws governing practice
- Exhibit self-awareness and manage influences on personal well-being and professional performance

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### ***Introduction***

This four-week rotation is designed to expose the FRCP Emergency Medicine resident to general musculoskeletal and orthopedic pathology commonly encountered in the field of Emergency Medicine. This experience will be uniquely based in outpatient environments - primarily, but not necessarily limited to, the Emergency Department and Orthopedic Clinic settings. Both adult and pediatric experiences will be included within the same rotation. During this rotation, the resident is expected to consolidate their knowledge and skills in the primary ED management and appropriate referral for follow-up and ongoing care of common MSK/orthopedic problems. Through specific clinic experiences, the resident will amass a more specialized knowledge base and advanced skills that can be applied to their ED patient encounters, as well as to improving their ability to communicate with their consultant colleagues and allied healthcare providers. A suggested reading list, along with core teaching sessions, rounds and resident presentations, will supplement the clinical learning experiences. With regards to direct teaching responsibilities, the resident will be expected to prepare one (1) MSK/orthopedic-related teaching sessions to be given to the residents and medical students rotating through the Montreal General Hospital Emergency Department during their month on service. The resident will also be expected to participate in the planning and delivery of an MSK/orthopedic-related Simulation (together with the other residents participating in the rotation during the same academic year), which will be presented as part of the program's weekly educational rounds.

Teaching and attending staff participation has been offered and endorsed by all implicated players, and approval given by the heads of the various departments involved.

### ***Structure***

During this rotation, the resident will participate in direct clinical patient care in the following settings:

- Emergency Department of the Montreal General Hospital
- Orthopedic (trauma) clinics at the Montreal Children's Hospital
- Orthopedic clinics at the Montreal General Hospital
- Orthopedic consultation in the Emergency Departments of the Montreal General and Montreal Children's Hospitals
- Plastic Surgery clinics at the Montreal General Hospital

During their time in the ED, the resident will be under the direct supervision of the attending ED staff on shift. They will be expected to see all patients in the ambulatory care area of the MGH ED presenting with MSK/orthopedic complaints. They will be responsible for the initial evaluation, ongoing care and disposition of these patients during their visit to the ED. For those patients requiring specialist consultation in the (Orthopedics, Rheumatology, Plastics or other MSK-related specialty), the resident will be expected to accompany the consultant during their evaluation of the patient and to be involved in any additional investigations, re-evaluations and ultimate disposition planning in concert with the consultant and attending ED staff. The resident will be encouraged to be aware of patients seen in other areas of the ED with MSK/orthopedic problems and to implicate themselves appropriately in their evaluation and management.

During their time in clinic, the resident will be under the direct supervision of the attending clinic staff (adult or pediatric). They will be responsible for the initial evaluation of clinic patients, and together with the attending staff, will make decisions regarding their immediate management and ongoing care. While in clinic, the resident will also have the opportunity to be involved in the initial assessment of orthopedic consultations requested by the Emergency Department. These consults will be reviewed and managed in concert with the responsible orthopedic resident and attending staff.

### ***Evaluation***

The resident will be responsible for obtaining a completed daily evaluation form from the attending physician for each of the individual clinical experiences attended during the rotation. Daily evaluation forms will be provided to the resident

at the beginning of the rotation. The resident is expected to give a blank form to the attending physician at the beginning of the experience (ED shift or clinic), and to request the completed copy along with feedback at the end of that same experience.

Patients seen by the resident will be recorded on the daily evaluation sheets (by MRN and diagnosis only), in order to give an idea of the number of patients and breadth of pathology seen in each clinical setting, and during the overall rotation. The resident will also be provided with a log book in which he/she is expected to document relevant activities throughout the 4-week rotation, including all procedures performed/witnessed. This log book will also have space to list interesting imaging studies (by MRN and diagnosis), which will ultimately be used to compile a teaching database for the residency program. It is expected that the resident will submit all daily evaluations along with the completed logbook to the rotation coordinator at the end of the rotation.

## **Objectives**

### **MEDICAL EXPERT/CLINICAL DECISION-MAKER**

#### *Basic Scientific Knowledge:*

Demonstrate knowledge of the anatomy and physiology of the musculoskeletal system. Demonstrate knowledge of the principles of healing of bone, muscle, tendon and ligament injuries.

#### *Basic Clinical Knowledge:*

Demonstrate knowledge of the following:

- Mechanism and natural history of traumatic injuries to the musculoskeletal system. These include, but are not limited to:
  1. Fractures
  2. Dislocations
  3. Sprains, strains, muscle tears
  4. Tendonitis, bursitis, apophysitis
  5. Back pain
  6. Radiculopathies
  7. Overuse syndromes
- Accurate description of fractures & dislocations with respect to:
  1. Anatomic location
  2. Type/classification
  3. Comminution
  4. Angulation
  5. Displacement
  6. Open or closed
  7. Articular involvement
- Accurate description of soft tissue and non-fracture injuries with respect to:
  1. Anatomic location
  2. Severity/grade
  3. Degree of limitation of function/range of motion
- Pathogenesis, pathophysiology and natural history of non-traumatic disorders of the musculoskeletal system. These include, but are not limited to:
  1. Infections
  2. Inflammatory and rheumatologic conditions
  3. Malignancies
- Clinical presentation of traumatic and non-traumatic musculoskeletal conditions.

- Manifestation of injuries and non-traumatic syndromes in special patient populations. These include, but are not exclusive to:
  1. Athletes
  2. Children and adolescents
  3. The elderly
- Principles of emergency department management of traumatic and non-traumatic musculoskeletal injuries and disorders
- Pharmacological agents and other modalities used in the treatment of musculoskeletal and rheumatologic disorders
- Complications of musculoskeletal injuries and their management
- Appropriate consultation and follow-up for acute musculoskeletal conditions

#### *History & Physical Examination:*

- Demonstrate ability to perform a complete orthopedic/musculoskeletal history and physical examination. Examination of the following are emphasized:
  1. Hand
  2. Wrist
  3. Shoulder
  4. Foot and ankle
  5. Knee
  6. Hip
  7. Spine
  8. Peripheral nerve and nerve root exams
- The assessment should be organized in a sequential manner, which permits a clear definition of the problem and a rational approach to differential diagnosis and management

#### *Interpretation & Utilization of Information:*

- Display knowledge of indications, limitations and health risks of the following tests, as well as the appropriate interpretation of their results:
  1. Plain radiography
  2. CT scanning
  3. MRI imaging
  4. Fluoroscopy
  5. Nuclear medicine
  6. Blood work
- Display proficiency in the interpretation of plain radiography of the musculoskeletal system.

#### *Clinical Judgment & Decision Making:*

- Demonstrate the ability to do the following:
  1. Evaluate specific symptoms and signs that occur in disease and injury states of the musculoskeletal system
  2. Assess the risk of associated injuries in patients with multiple trauma or trauma to defined anatomical areas
  3. Perform the appropriate clinical and imaging assessments that will identify common and important fractures/dislocations
  4. Appropriately select and apply temporary immobilization devices for a given injury or condition
  5. Attend to pain and suffering caused by acute musculoskeletal injury



## Technical Skills

- Demonstrate proficiency at the following skills:
  1. Casting and splinting of non-displaced fractures
  2. Reduction of common fractures
  3. Reduction of common dislocations
  4. Arthrocentesis
  5. Common joint infiltrations
  6. Local and regional anaesthesia, including hematoma blocks and nerve blocks, used in the treatment of common musculoskeletal disorders
  7. Procedural sedation

## COMMUNICATOR

### *Inter-Professional Relationships with Physicians and Other Allied Health Professionals:*

- Demonstrate the ability to effectively communicate with referring and consultant colleagues regarding the nature (mechanism, description) of injury/illness, performance of necessary interventions and coordination of subsequent care
- Demonstrate the ability to do the following on a regular and ongoing basis:
  1. Work effectively with other physicians and allied professionals of the healthcare team
  2. Show consideration for the knowledge, skills and roles of the various members of the healthcare team
  3. Be respectful of other team members

### *Communications with Patients & Families:*

- Demonstrate the ability to communicate effectively regarding the nature of the injury/illness suffered and anticipated management plan, showing them respect and gaining their cooperation and confidence
- Show skill in explaining risks, benefits and obtaining consent for relevant procedures
- Demonstrate the ability to discuss and explain “bad news” to the patient & family in a sensitive, concise and comprehensible manner

### *Written Communication and Documentation:*

- Consistently demonstrate the ability to document the history, physical, diagnostic formulation, and management plan in an accurate, complete and organized manner. This may include, but is not limited to:
  1. Initial patient evaluations
  2. Progress or reassessment notes (clinic and/or ED)
  3. Discharge summaries
  4. Consultation reports
  5. Other correspondence with referring or primary care physicians
  6. Off work or other physical/occupational restriction attestations or forms

## COLLABORATOR

- Consistently demonstrate the ability to:
  1. Work within the framework of a multi-disciplinary healthcare team
  2. Recognize the expertise of each health care team member and their respective role as it relates to the patient’s care
  3. Appropriately delegate responsibilities to members of the health care team
  4. Resolve common team conflicts
  5. Involve the patient and family in decision-making

## MANAGER

- Demonstrate the understanding and utilization of current information technology in managing musculoskeletal injuries and disorders
- Demonstrate responsible resource allocation behaviours with regards to the patient and population based on the best-available evidence
- Demonstrate the ability to manage competing interests of individual ongoing patient care, new patient assessment and patient flow in the ED setting
- Demonstrate the ability to manage competing interests of individual patient care and consultation requests in the clinic setting
- Demonstrate the capacity to manage multiple patients concurrently
- Understand the role of Orthopedic, Sports Medicine, Physiotherapy, Occupational Therapy and rehabilitation services with respect to the patient, hospital and community as a whole Coordinate/direct patients appropriately for ongoing care by Orthopedics, Sports Medicine, Physiotherapy, Occupational Therapy and other consultant or rehabilitation services

## HEALTH ADVOCATE

- Be the patient's advocate at all times, particularly when they are unable to do so themselves.
- Display advocacy for the community at large and for society
- Demonstrate the ability to discuss risk and harm reduction strategies, as well as safety precautions to prevent future injury from occurring

## SCHOLAR

### *Motivation to Read and Learn:*

- Demonstrate knowledge of current scientific literature and application of this knowledge to case presentation and daily patient management
- Demonstrate interest in expanding current knowledge base by reading around clinical cases

### *Critically Appraises Medical Literature:*

- Demonstrate the ability to critically-appraise research methodology and medical literature with respect to clinical cases, as well as during organized activities such as journal club

### *Teaching Skills:*

- Demonstrate initiative to teach other health care professionals and/or patients about specific relevant health care issues
- Discuss clinical topics and/or journal articles with colleagues in the form of presentations or journal clubs

## PROFESSIONAL

- Demonstrate awareness of the racial, cultural and social factors that influence the delivery of emergency MKS/Orthopedic care
- Show respect all times for the patient's:
  1. Race/ethnic background
  2. Language
  3. Socio-economic level
  4. Religion/Belief system
  5. Gender/sexuality
  6. Confidentiality
- Be insightful of one's own strengths, weaknesses, and recognize when to call for back up. Be able to receive and accept constructive feedback

- Display ethical behaviour compatible with a physician at all times with respect to:
  1. Patients and their families
  2. Allied health staff
  3. Attending Staff, residents and medical students
- Be a role model for medical students, residents, staff physicians, nurses, and other allied health care personnel
- Maintain a healthy and sustainable balance between personal and professional lives

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## NEUROSCIENCES (NEUROLOGY)

The McGill Emergency Medicine Resident will experience their core Neurosciences on 2 rotations: The Neurology Consult Service and NICU (Neurologic Intensive Care Unit). Both of these rotations are 4 weeks in duration. Further knowledge will be garnered on several other rotations including Adult and Pediatric Emergency, ICU, and Trauma.

### MEDICAL EXPERT

- Display knowledge of neuro-anatomy and (patho)physiology
- Develop skill in the performance of both a screening and detailed neurological exam
- To be able to cite the criteria and perform the exam for brain death
- Demonstrate the ability to recognize and manage the following conditions:
  1. Acute cerebrovascular disorders (ischemic or hemorrhagic)
  2. Status epilepticus/seizure
  3. Acute spinal cord emergencies (compression, trauma, cauda equina)
  4. (Acute) headaches, status migrainosis
  5. Cranial nerve disorders
  6. Demyelinating disorders
  7. Neuromuscular disorders (Myasthenia gravis, Guillain-Barre, ALS)
  8. Pseudotumor cerebri
  9. Normal pressure hydrocephalus
  10. Peripheral neuropathies
  11. Shunt malfunction
  12. Neurological infections (meningitis, encephalitis, abscess, shunt)
  13. Closed head injury/concussion syndromes
  14. Penetrating head injury
  15. Burr holes: indications, how to perform, complications
- Understand the pathophysiology of raised ICP, the various management techniques and how to perform RSI when there is an elevated ICP
- Understand the indications for:
  1. CT(A)
  2. MR(A)
  3. EEG
  4. EMG
  5. Doppler
  6. Plain radiography
- Develop skills in performing lumbar puncture and the subsequent interpretation of the results
- Develop an approach to interpreting head CTs

### COMMUNICATOR

- To be able to effectively communicate the diagnosis and treatment plan to the patient and/or his/her family, including prognosis, risk modification
- When working as a consultant, the resident will effectively communicate the plan both written and verbally to the appropriate health professionals
- Demonstrate ability to discuss living wills, advanced directives, and levels of care
- Be able to discuss end of life issues (including brain death, organ donation) in a compassionate, concise and understandable way with family members
- Show skill in explaining risks, benefits and obtaining consent for relevant procedures
- Communicate effectively with the multi-disciplinary team

## COLLABORATOR

- The resident will recognize the role of each health care team member with respect to the patient's care
- The resident will be cognizant of when to contact the organ donation team
- Demonstrate ability to resolve common team conflict problems
- Demonstrate ability to work in a multi-disciplinary team
- Be capable of involving the patient and family in decision-making

## MANAGER

- Demonstrate rational utilization of the various diagnostic imaging tools
- Demonstrate rational utilization and understanding the roles of the neurological and neurosurgical consulting services
- Demonstrate appropriate outpatient referral

## HEALTH ADVOCATE

- The resident will act as the patient's advocate at all times
- The resident will discuss risks and harm reduction strategies (e.g. BP or sugar control, protective helmets, return to play)
- Organ donation

## SCHOLAR

- The resident must be aware of the current literature and controversies (e.g. thrombolysis and acute CVAs)
- The resident must be able to critically appraise the literature

## PROFESSIONAL

- Must display ethical behaviour compatible with a physician at all times when working with:
  1. Patients and their families
  2. Allied health professionals
  3. Attending staff, residents and students
- Show respect at all times for the patient's:
  1. Race/ethnicity/socio-economic background
  2. Language c. Religion
  3. Sex/sexuality
  4. Confidentiality
- The resident must be cognizant of his/her own strengths and weaknesses, and know when to ask for help
- Be a role model for medical students, residents, nurses and other colleagues
- Be able to receive and accept constructive feedback

## NEURO ICU

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## NEURO CONSULTS

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## OBSTETRICS & GYNECOLOGY

Obstetrics and Gynecology is a 4-week rotation takes place at St. Mary's Hospital. In addition, the resident will have ample exposure to obstetrics and gynecology problems at both the RVH and JGH. While rotating at the MGH, the resident will have the opportunity to take call with the sexual assault team.

### MEDICAL EXPERT

- Demonstrate ability to perform an obstetrical and gynecological history, exam and assessment
- Demonstrate the knowledge of the anatomy, physiology of gynecological and other pelvic structures and the physiologic changes of pregnancy
- Demonstrate knowledge of the normal stages of labour and delivery, including their time course
- Able to formulate a differential diagnosis, management plan including investigations of the following conditions:
  1. Vaginal bleeding in the pregnant patient (all trimesters)
  2. Pelvic and abdominal pain in the pregnant patient
  3. Vaginal bleeding in the non-pregnant patient
  4. Pelvic and abdominal pain in the non-pregnant patient
  5. Vaginal discharge/pruritis
- Display ability to diagnosis, investigate and manage the following gynecological and obstetrical emergencies:
  1. Abortions
    - a) Threatened/Incomplete/Complete
    - b) Septic Abortions
    - c) Complications of Therapeutic Abortions
  2. Placental Emergencies
    - a) Placenta Abruptio
    - b) Placenta Previa
    - c) Vasa Previa
  3. Pregnancy
    - a) Ectopic pregnancy
    - b) Hyperemesis gravidarum
    - c) Molar pregnancy
    - d) Pregnancy Induced Hypertension (Preeclampsia/eclampsia/HEELP)
  4. Complications of Labour
    - a) Preterm labour.
    - b) Premature rupture of membranes
    - c) Failure to progress
    - d) Fetal distress
  5. Complications of Delivery
    - a) Prolapse cord
    - b) Abnormal presentations (breech, shoulder dystocia, etc.)
    - c) Uterine inversion
    - d) Multiple and still births
  6. Neonatal Resuscitation
    - a) Calculation and significance of APGAR scores
    - b) Isoimmunization
  7. Post-Partum Complications
    - a) Hemorrhage
    - b) Retained products
    - c) Endometritis
    - d) Mastitis
    - e) Cardiomyopathy
    - f) Depression
  8. Infection
    - a) Pelvic inflammatory disease

- b) Sexually transmitted diseases
  - c) Toxic shock syndrome
- 9. Ovarian Torsion
- 10. Sexual Assault
- 11. Trauma
  - a) Demonstrate an understanding of the significance and management of minor to major trauma in the pregnant patient including fetal monitoring, ultrasound, and indications for emergent delivery
  - b) Know the indications and describe the technique for post mortem C-sections
- The resident should demonstrate the following skills:
  1. Show ability to perform an uncomplicated delivery
  2. Demonstrate knowledge to perform moderately difficult delivery including, but not limited to:
    - a) Shoulder dystocia
    - b) Breech delivery
  3. Pelvic Ultrasonography
    - a) Detection of IUP
  4. Perinatal and neonatal resuscitation

#### COMMUNICATOR

- Explore facets of patient e.g. age, gender, ethno-cultural background, social support and emotional wellness and their effect on the patient's illness or pregnancy
- Demonstrate ability to discuss the patient's care and counsel regarding risk modification with the patient and family
- Demonstrate ability to discuss and explain to patients and families "bad news" in a sensitive, empathic and understandable manner
- Show skill in explaining risks, benefits and obtaining consent for relevant procedures
- Demonstrate ability to discuss living wills, advanced directives and do not resuscitate orders
- Communicate effectively with the multi-disciplinary team
- Demonstrate the ability to enquire about the possibility of abuse in a sensitive manner

#### COLLABORATOR

- The resident will recognize the role of each health care team member with respect to the patient's care
- Demonstrate ability to work in a multi-disciplinary team
- Be capable of involving the patient and family in decision-making
- Ability to resolve common team conflict problems

#### MANAGER

- Demonstrate evidence-based ability to allocate resources to the patient and population served
- Recognize resources of tertiary care gynecological and obstetrical care centers and the use and rationalization of these for the individual patient and the population served
- Be able to manage competing interests of consults from other services, including the Emergency Department, with ongoing care of admitted patients
- Be capable of managing multiple patients concurrently
- Comprehend the role of the obstetrics and gynecology service with respect to the hospital and community as a whole
- Elucidate and recognize instances of medico-legal risk and identify potential preventive and corrective steps

#### HEALTH ADVOCATE

- Demonstrate ability to identify the determinants of health of the individual obstetrics and gynecology patient
- Be capable of discussing with patients' risk and harm reduction strategies
- Be the mother's and baby's advocate at all times, particularly when they are unable to do so themselves

## SCHOLAR

- Demonstrate knowledge and applicability of specialty relevant important studies
- Be consistent in reading around clinical cases and improving obstetrics and gynecology knowledge base

## PROFESSIONAL

- Show respect all times for the patient's:
  1. Language
  2. Race/ethnicity
  3. Religion/Belief system
  4. Sex/sexuality
  5. Confidentiality
- Be insightful of one's own strengths and weaknesses
- Be able to receive and accept constructive criticism
- Display ethical behavior commensurate with a physician at all times with respect to:
  1. Patients and their families
  2. Allied health staff
  3. Attending staff, residents and medical students
- Serve as a role model for colleagues and other health care personnel

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## PSYCHIATRY

The McGill EM Psychiatry rotation is a 4-week rotation based in the Psychiatry Emergency of the Montreal General Hospital under the direct supervision of the emergency based psychiatrist, the resident will be responsible for assessing both the ambulatory psychiatric patients that walk in to psychiatry emergency services, and the patients referred by the Emergency Physician.

### MEDICAL EXPERT

*The Emergency Medicine Resident must be able to:*

- Demonstrate the ability to conduct an interview with patients with acute and chronic psychiatric disorders
- Demonstrate ability to perform a mental status exam in patients with normal and altered mental status
- Demonstrate the ability to assess suicide risk and thereafter initiate appropriate management
- Must be cognizant of the DSM classification of psychiatric disorders:
  1. Assess and make a differential diagnosis and management plan for patients with major affective (axis I) disorders
  2. Assess and make a differential diagnosis and management plan for patients with personality and developmental (axis II) disorders
- Must understand interaction between psychiatric and medical disorders (axis III):
  1. Understand how to medically clear a patient including the role/ utility/indications/limits of various laboratory and o t h e r investigative modalities
  2. Delirium versus dementia
  3. Dementia versus pseudodementia
  4. Alcohol and other intoxications as well as withdrawal syndromes
  5. Altered mental status secondary to a medical condition versus a primary psychiatric disorder
- Must learn the principles and demonstrate effective management of the violent patient including:
  1. Use of restraints, both physical and chemical
  2. Safety of staff
  3. Conflict resolution
  4. Techniques to avoid escalation
- Understand the pharmacodynamics, indications, contraindications and side effects of the therapeutic agents (major tranquilizers, sedative hypnotics and anti-depressants) commonly used to treat the various psychiatric disorders
- Must be cognizant of the various medico-legal issues of competence, consent, “involuntary hospitalization” including:
  1. “Garde Preventive”.
  2. “Rapport d’évaluation psychiatrique pour ordonnance de garde en etablissement” (formulaire AH-108).

### COMMUNICATOR

- Demonstrate appropriate documentation of the psychiatric history and physical
- Communicate effectively with the patient, the patient’s family, and allied health personnel, in an appropriate, sensitive, concise and understandable manner
- Communicate effectively back to the consulting physician both verbally and written

### COLLABORATOR

- Understand the roles and work as part of a multi-disciplinary health care team including psychiatrists, nurses, social work, patient attendants, referring physicians
- Work with and understand community resources
- Working with and involving the patient and family in decision making and treatment plan

## MANAGER

- Must demonstrate the ability to use and allocate psychiatric resources appropriately, including indications for emergency psychiatric consultation
- Must be able to manage competing interests between patients, families, psychiatrists, consulting (Emergency) physicians
- Must understand the role of Psychiatry Services within the Emergency Department, the hospital, and the community

## HEALTH ADVOCATE

- Act as the patient's advocate
- Be capable of discussing with patients risk and harm reduction strategies
- Intervene on behalf of the patient obtaining appropriate social service involvement

## SCHOLAR

- Demonstrate interest in acquiring psychiatric knowledge by continued reading.
- Be cognizant of emergency related landmark psychiatric literature

## PROFESSIONAL

- Be mindful of one's own limitations and know when to call for back-up (by knowing and acknowledging your strengths and weaknesses)
- Show respect at all times for the patient's:
  1. Race/ethnicity
  2. Language
  3. Religion/Belief system
  4. Gender/Sexual orientation
  5. Confidentiality
- Be a leader in dealing with the difficult patient and show skills in conflict management
- Display ethical behaviour compatible with a physician at all times with respect to:
  1. Patients and their families
  2. Allied health staff
  3. Attending Staff, residents and medical students
- Be a role model to fellow physicians, nurses, residents, and medical students

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## RESEARCH

### Goals

#### Primary Goals

- The ultimate goal of the research time is to introduce the resident to the basic concepts of research and to stimulate interest in pursuing a career as an emergency physician- researcher. The expected outcome of the resident's research work is a completed study. The study should be of work performed during their residency. MINIMUM CRITERIA: The resident will be expected to complete the research project to the level where it is i) submitted for publication or ii) presented at a suitable conference research forum

#### Secondary Goals

- To provide the Emergency Medicine residents with an understanding of the principles and practices of clinical research
- To encourage future research in Emergency Medicine
- To familiarize residents with principles of scientific writing, grant applications, and potential funding agencies
- To produce fundable projects to support research at McGill University Emergency Medicine
- To present at scientific meetings
- To add to and enhance the field of Emergency Medicine
- To expose the resident to research as a career option.

### Objectives

#### MEDICAL EXPERT/CLINICAL DECISION-MAKER

- Recognize the interface between clinical practice and the clinical research that informs evidence-based clinical practice
- To formulate research questions from the uncertainty that exists in Emergency Department care

#### COMMUNICATOR

- To communicate effectively, both verbally and in writing research proposals
- To learn how to write grant proposals, abstracts, and research papers
- Demonstrate ability to obtain informed consent
- To present research at rounds and/or major conferences

#### COLLABORATOR

- Work effectively with a research supervisor, biostatistical consultants and other members of a research team to bring a research project to fruition

#### MANAGER

- Demonstrate time management skills that will permit timely completion of the scholarly requirements of the research objectives
- To manage the financial resources of the research project

#### HEALTH ADVOCATE

- Consider research project from a societal perspective of risk benefit and greater public good
- Consider research questions in terms of clinical equipoise and the ethical considerations of clinical research

#### SCHOLAR

- The resident will participate in research and thereby
  1. Contribute to development of new knowledge
  2. Become an expert in the chosen research field
- The resident will either:

1. Develop an independent research project, or
2. Join a research project/concept that has already been initiated, but has no proposed methodology
- The resident will:
  1. Present at the annual Resident Research Day/ Quebec EM Resident Research day
  2. Achieve one of the following objectives:
    - a) Present their research (e.g. poster, oral, lightening presentation) at a suitable national or international conference (e.g. CAEP, AMUQ, SAEM)
    - b) Publish their study

## PROFESSIONAL

- Recognize the ethical and professional obligations inherent to clinical research
- If necessary, interact with an institutional Research and Ethic Review Board to advocate for or defend a research proposal

### ***How to Proceed with the Research Project***

Research starts with idea generation. Sources for ideas appropriate for study include experienced researchers, both in the field of Emergency Medicine as well as in related specialties, attending physicians, and other residents. The residency research committee (RRC) is also a potential source of research questions.

All residents will be supported by a research supervisor. The RRC will maintain a database of research staff interested in working with a resident. The research supervisor need not be from the EM faculty, and will likely not be a clinical mentor. It is also appropriate to have more than one research supervisor for a study, especially when multiple areas of expertise are required (e.g. clinical, methodological, statistical).

Acceptable research: A variety of methodologies will satisfy the residency research requirements, including:

- Experimental or observational studies
- Surveys
- Qualitative or quantitative studies
- Systematic reviews with meta-analytic analyses
- Clinical, operational, educational, simulation studies
- ED or non-ED based studies
- *Note that case reports do not satisfy EM research objective requirements. However, residents are encouraged to publish case reports to further their own experience and add to the medical literature*

*The Emergency Medicine Residency Research Committee (RRC)* is a primary component of the research curriculum. The RRC is accountable to the Program Director to meet the goal and primary objectives as previously stated. The supervisor will monitor Resident's progress. Both the resident and the supervisor will be accountable to the RRC to meet selected objectives after each research rotation (to be elaborated below). The RRC will establish links with other departments, McGill University and the Department of epidemiology to facilitate resident projects.

*Epidemiology Course:* R1's will undertake 1 summer courses offered by the McGill University Annual Summer Program in Epidemiology and Biostatistics. These will occur during period 12 in the first year of the program. The objectives of these courses are to allow the resident to acquire basic knowledge about research concepts. For further information phone 398-3973, fax 398-4503 or E- mail [summer@epid.lan.mcgill.ca](mailto:summer@epid.lan.mcgill.ca).

To complete the residency program, the resident must complete the minimum criteria as established between the resident, research supervisor and the RRC.

## PHASES

The following research phases have been developed to provide the resident with a structure for successful completion of the goals and objectives. It is possible that residents accelerate these suggested guidelines.

### PHASE I:

#### ***Goals***

To successfully complete two courses offered by McGill Annual Summer Program.

By the end of R1, the resident should have selected a research idea. If the resident has not done so, then the RRC has the right to assign the resident a research project.

#### ***Research Hypothesis***

Residents should develop an area of research interest in the R1 year. The Emergency Medicine Residency Research Committee (RRC) maintains a bank of interested supervisors with accompanying fields of interest and particular projects which can be accessed from the McGill FRCP(EM) website. Ideas for research projects can be found by reviewing this databank. In addition, other sources of research ideas include clinical cases, conference abstracts and published studies. Often, finding a good research question is often the most difficult part of the Research curriculum.

Residents should then approach the RRC co-chairs, Drs. Eli Segal and J. Scott Delaney, to validate the concept before too many hours are spent delving into an impractical project; early consultation will allow greater exploration of ideas and feasibility of the study.

Residents should perform OVID or Medline searches to further understand their area of research interest. For those unfamiliar with literature searches, help is available from the medical librarians in each hospital or at the Health Sciences Library at McGill. The review of previous research should be regarded as a dynamic process. After a researchable question has been identified, a literature search helps determine what has already been studied, what research designs have been employed, what controversies exist, and where your question fits in. It will allow the resident to critically appraise preceding works, and puts the intended research project in perspective by linking it to previous works. As well, the methods used by previous authors may assist in the creation of methodology for the proposed study. The goal is that the resident should have a feasible research project and an appropriate supervisor within the first six months of residency PGY1 year.

### PHASE II:

#### ***Hypothesis & Methodology Development***

By the end of the R1 year, the resident will have completed

- A thorough review of the literature on their research topic
- A study hypothesis
- Research protocol, including appropriate methodology
- Research Ethics Committee approval

This resident's progress will be followed by the RRC. In case of problems, delays or any concerns, the residents should communicate with the RRC co-chairs immediately, rather than waiting for the bi-annual RRC update meetings, so as to prevent unnecessary delays to the research timeline.

During the bi-annual RRC update meetings, the resident will present their research idea and will receive feedback.

Besides their supervisor, residents are encouraged to consult the RRC co-chairs as well as other resource persons in the Department, the Hospital or the University. Specific expertise may be needed when addressing areas such as study feasibility, sample size and statistical questions, and ethical issues.

### ***Research Protocol***

A written proposal is a necessary working document that will allow the resident to carefully define his/her plan to test the hypothesis stated and minimizes the risk of wasting time and resources associated with more casual or informal approach. Since the research project involves collaborating with others, the proposal helps formulate, structure, and communicate the resident's idea to the study co-investigators.

The resident will improve upon and/or reformulate the hypothesis (if necessary) and then develop the research methodology. The format should include the goal of the study, a research plan, inclusion and exclusion criteria for the population to be studied, treatments, statistical considerations, potential risk to subjects, informed consent, and estimated time for completion of the study based on calculations of sample size needed and the number of potential subjects visiting the ED.

Suggested research protocol outline includes the following:

- Title
- Abstract
- Introduction
- Review of the pertinent literature
- Study objective or hypothesis
- Significance
- Methods:
  - 1. Overview of study design
  - 2. Patient population
    - a) inclusion criteria
    - b) exclusion criteria
  - 3. Measurements
  - 4. Interventions
  - 5. Outcome variables
  - 6. Potential confounding variables
  - 7. Procedures to be used in the collection of information
  - 8. Method of blinding patients, experimenter, and the evaluator
- Statistical considerations
  - 1. Power calculations
  - 2. Sample size
  - 3. Statistical analyses
  - 4. Examples of tables, charts and graphs
- Safety
  - 1. Criteria for early study termination (if any)
  - 2. Ethical and legal considerations
  - 3. Adverse event reporting
  - 4. Patient consent
  - 5. Responsibilities of the investigator
- References

Not all of the above sections will be required for each study (e.g. issues with randomization or blinding not relevant to retrospective studies). The research supervisor will oversee the preparation of the research proposal.

By the end of the R1 year, a written preliminary research protocol should be submitted to the RRC for review. A written proposal is a necessary working document that will allow the resident (and supervisor) to carefully define their plan to test the hypothesis stated. Revisions to the draft are expected and the resident should not feel defeated or discouraged, but viewed as constructive efforts to improve the research project. Once the research proposal has been finalized, the project will be submitted to the ethics committee.

### ***Research Ethics Committee Approval***

All projects MUST be submitted and approved by the appropriate Research Ethics Committee. Some projects that do not involve direct patient interaction or chart evaluations, such as database analysis, may receive expedited Research Ethics Committee approval. Regardless, all projects need to be submitted to a Research Ethics Committee and receive a written approval. The RRC co-chairs can help identify which Research Ethics Committee may be most appropriate for each project. In general, if a project is to be undertaken at one institution (ex. MUHC, JGH) that Research Ethics Committee will be most appropriate. In cases where research will be undertaken at several institutions, or outside of the hospital environment, the McGill Medicine Research Ethics Office (Institutional Review Board) may be more suitable. Early consultation with the appropriate ethics committee coordinator may help avoid late discovery of ethical issues that could complicate a mature project, thus avoiding needless protocol revisions. After receiving written approval from the ethics committee, project implementation may then proceed.

The resident should have completed Phase II, including a mature, revised research protocol, by the end of the PGY1 year. The resident should be ready to begin data collection by the beginning of PGY2.

### ***Grant Application***

The resident will be guided by their supervisor on how to tailor their research proposal to gain acceptance by granting agencies. Applications to agencies such as national emergency associations, the FRSQ and MRC, pharmaceutical companies and research funding from the university and the hospital will be encouraged.

## **PHASE III:**

Following ethics committee and RRC approval, the resident is ready to begin data collection.

### ***Project Implementation***

Recruitment of the medical staff and support personnel for data collection will be necessary to complete a study without bias, such that there is no selective entrance and processing of patients. The resident may need to develop an educational package for introduction of his/her study to ensure adequate recruitment and proper initiation of the study. It may be advisable to commence with a pilot study to rectify haunting errors in methodology.

### ***Data Collection & Analysis***

#### ***Analysis of Data***

The assistance of a statistician or methodological expert will be helpful to ensure optimal data analysis. Ideally, the statistician who was consulted during protocol development will be able to analyze the results. The research supervisor's input will also be invaluable in evaluating and interpreting the data.

## **PHASE IV:**

### ***Draft the Research Paper for Publication***

Preparing the draft and manuscript for publication is one of the final phases of the project. Commonly, multiple revisions are required prior to submission of the manuscript to a journal, and then revisions may be requested after being accepted as well – don't be discouraged. Frequent communication between the co-authors will accelerate the

manuscript writing process. Identifying which journal you are submitting to will help you write the paper in a format which is suitable for the intended journal. Most journals will give detailed instructions on the format required under the “For Authors” section of the journal homepage.

### ***Submit the Journal for Conference Presentations***

Conference presentations of research results usually occurs before publication of the final manuscript in a journal. There are many conferences which have traditionally accepted projects for poster presentations and these include, CAEP, SAEM, CASEM, AMUQ, etc. It is also expected that residents will also present their completed, or near completed work at the annual Resident Research Day/Quebec EM Resident Research Day.

#### **SUMMARY**

<b><i>Phase</i></b>	<b><i>Year</i></b>	<b><i>Activity</i></b>	<b><i>Description</i></b>	<b><i>Objectives</i></b>
<b>Phase I</b>	R1 (first 6 months)	Select field of interest & meet with supervisor, RRC	Resident translates an idea into a feasible project.	Identify a research question
<b>Phase II</b>	R1 (last 6 months)	Hypothesis Development  Protocol development  Ethics Committee evaluation	Hypothesis development Review of literature  Write up protocol: Iterative process including feedback from supervisors and statistician  Submit near-final protocol to Research Ethics Committee	Present the research question and planned methods at RRC   Obtain Research Ethics Committee approval
<b>Phase III</b>	R2	Data collection	Implement study and collect data	Obtain study data
		Data analysis	Analyze data with the assistance of research supervisor and statistician	Complete data analysis
<b>Phase IV</b>	R3	Manuscript preparation  Submit to conferences  Journal submission	Write-up manuscript in collaboration with co-authors  Present findings at conference(s)  Submit manuscript to journals	Publish study and disseminate knowledge



### **RRC Meetings:**

The RRC will meet with all residents twice a year to review the progress of all the research projects. These meetings are a mandatory program activity. Following the meeting, residents will be asked to complete a brief form describing the status of their project. In addition, research updates may be scheduled during academic half-days to review specific projects or to discuss topics of interest.

### **Research Time:**

The resident will have an equivalent of 5 periods (20 weeks) of research over the entire program. No research time will appear on the resident's annual schedule. **Research time can only be taken from adult Emergency rotations.** The resident will have to **"apply"** for time just as they would for vacation/conference/study leave. The procedure for obtaining research time is:

- Submit time request to the RRC (with a copy to the program director) a minimum of 45 days prior to the rotation. This will give the RRC to review the request, and once approved, will allow the 30-day minimum time required for schedule requests. A specific Research Time Request form, obtained from the program coordinator, should be used for the request and submitted with the request to the RRC coordinators and the program coordinator
- Once approved, the RRC will inform the resident as well as the program coordinator/secretary (who will keep a grid of all the research time used by the residents)
- When research requests are submitted, the RRC will evaluate the request based upon the resident's progress in their project, the stated objectives for the time requested and the feasibility of accomplishing their goals. RRC will then either 'support' or refuse a request. Research requests that receive this endorsement must then be submitted to the program office for approval. Note this means that RRC approval does not guarantee that the resident will obtain the time off- the final decision always lies with the program director. This is because a resident may present a reasonable research request to the RRC, but may be ineligible for research time during a specific month due to issues beyond the knowledge of the RRC (e.g. other requests also made for the same month, resident on probation, etc). Residents should incorporate the time required for receiving endorsement by the RRC and approval by the program office when determining the timeframe for their requests so as not to fall after the deadline
- The resident will then inform (with a copy of the RRC approval) the person responsible for emergency schedules of the time allowed for that period, and whether they want it off as an entire block, specific days, or just a proportional decrease in number of shifts. Please note, residents are still expected to:
  1. Do their share of nights and weekends
  2. Attend rounds and journal club
- Accountability: Once completed the resident must present to the RRC the work that they have accomplished
- Research time request must be justified based upon research objectives and expected workload during time taken
- Research time is only to be used for resident research projects. Other activities (e.g. area of interest, fellowship training, educational experiences in research), while worthwhile, will not be considered
- The standard research time granted is 1- 2 weeks (see below for how time is distributed). More than 2 weeks of research time is only granted if a resident can justify the need for continuous daily work: 8 hours a day, 5 days a week, for all 4 weeks. This only occurs when a resident is using the time for data collection
- Research time granted during a month is based upon a proportional system. For example, if 2 out of 4 weeks are granted, then the resident will be scheduled for 2/4th fewer ER shifts that month. Continuous time off (e.g. a whole week straight) is only approved for specific circumstances- e.g. daily data collection and must be justified in the request
- ER site coordinators are responsible for shift scheduling. RRC coordinators endorse requests, but the research request approval should not be construed as a guarantee of specific shifts or days off

***Due to the number of recurrent issues with research time requests, please take note of the following:***

- A research request for 4 weeks for development of a research protocol will be refused
- A research request for the first 2 weeks of a month to work on their protocol is inappropriate- RRC may support the amount of time requested, but the actual dates will be up to the site director and will likely be scheduled as fewer shifts rather than 2 weeks straight for research. Requests for continuous time off requires specific justification and is reserved for data collection or similar activities
- A research request for 2 weeks for research submitted 4 weeks prior to the rotation may receive endorsement from the RRC but will likely be refused by the program office or the site coordinator due to being past the deadline
- A request research time for 4 weeks to develop a tactical EMS resident training program that has a research angle is just plain wrong and will be refused
- A research request to 'finish-up' your project, 2 months before your Royal College exams when you've either already published your paper or haven't touched your project in 3 years will be refused
- A request for 1-2 proportional weeks of research time during your adult ED rotation to work on your lit review, modify or finalize your protocol, meet with supervisors or statisticians, collect data, analyze your results or write up your manuscript will most likely be approved

**Resident Research Project Tracking Sheet**

	YES	NO
RESIDENT NAME		
PGY LEVEL		
UPDATED		
PROJECT TITLE		
SUPERVISOR		
ETHICS APPLICATION SUBMITTED		
ETHICS APPROVAL		
DATA COLLECTION STARTED		
DATA COLLECTION COMPLETED		
MANUSCRIPT COMPLETED		
MANUSCRIPT ACCEPTED		
POSTER PRESENTATIONS		
COMPLETED RESIDENCY REQUIREMENTS		

**SUPERVISORS:**

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## SPORTS MEDICINE

### *Structure*

During this 4 week rotation the resident will participate in direct clinical patient care in several settings which include primarily the:

- McGill Sports Medicine Clinic
- Primary Care Orthopedics Clinics at the Montreal General Hospital

During their time in clinic, the resident will be under the direct supervision of the attending clinic staff. They will be responsible for the initial evaluation of clinic patients, and together with the attending staff, will make decisions regarding their immediate management and ongoing care. Additional learning opportunities exist in the context of sideline coverage of varsity level, or other, sporting events that are covered by clinic staff.

### *Objectives*

#### MEDICAL EXPERT/CLINICAL DECISION MAKER

##### *Basic Scientific Knowledge:*

Demonstrate knowledge of the anatomy and physiology of the various systems involved as they pertain to sport and exercise, including the cardiovascular, gastrointestinal, musculoskeletal and neurologic systems.

Demonstrate knowledge of the mechanisms of acute and overuse injuries and other physiologic and pathologic conditions unique to sport and exercise.

##### *Basic Clinical Knowledge:*

Demonstrate knowledge of the following:

- Specific conditions which may preclude or limit involvement in sport and exercise. These conditions may not be addressed in other rotations and include, but are not limited to:
  1. Hypertrophic cardiomyopathy
  2. Marfan's syndrome
  3. Exercise induced asthma
  4. Female Athlete Triad
  5. Tendonitis, bursitis, apophysitis
  6. Back pain and radiculopathies (including brachial plexus injuries)
  7. stress injuries and other overuse syndromes
- Accurate description of soft tissue and non-fracture injuries with respect to:
  1. Anatomic location
  2. Severity/grade
  3. Degree of limitation of function/range of motion
- Use and abuse of different pharmaceutical agents including
  1. Ergogenic aids (anabolic steroids, erythropoietin)
  2. Stimulants
  3. Creatine and protein powder/bars
  4. Anti-inflammatory medications
- The pathophysiology, healing and assessment tools involved in sport-related head injury and concussion

- Appropriate use of consultation for different sport related injuries or conditions. This should include some learning about the expertise of other fields, including:
  1. Physiotherapy
  2. Athletic therapy
  3. Osteopathy
  4. Sports psychology
  5. Nutrition
  6. Common bracing and orthotic devices used to aid recovery and/or prevent injury

#### *History & Physical Examination:*

Demonstrate ability to perform a directed history and physical examination related to sport and exercise. As well as assessing for a fracture or dislocation, examination of the following is emphasized:

- Shoulder
  1. Impingement Syndrome and Rotator Cuff Injuries
  2. Shoulder Instability
  3. Brachial Plexus Injuries
  4. Acromioclavicular injuries
- Elbow and forearm
  1. Epicondylitis
  2. Condylar injuries
- Wrist and hand
  1. Tendonitis
  2. DRUJ and TFCC injuries
  3. Carpal tunnel syndrome
  4. Ligament injuries of fingers (including ulnar collateral injury of thumb)
- Spine
  1. Facet joint irritation
  2. Foraminal stenosis
  3. Cervical and lumbar disc herniation with dermatome/myotome assessment
  4. Spondylolysis and spondylolisthesis
- Hip
  1. Bursitis
  2. Labrum injury
  3. Adductor strain
- Knee
  1. Ligament Injuries
  2. Meniscal Injuries
  3. Anterior knee pain and Overuse conditions
- Lower leg
  1. Medial tibial stress syndrome
  2. Muscle strains
  3. Achilles' tendon injuries
- Foot and Ankle
  1. Ligament injuries
  2. Osteochondral injuries
  3. Neuromas
  4. Stress fractures
- Abdomen
  1. Rectus injuries
  2. External oblique muscle tear (sport hernia)
- Head
  1. Concussion evaluation (using SCAT tool & BESS testing)

The assessment of injuries in an acute “on-field” setting should also be addressed. The assessment of an athlete wearing equipment may involve:

- The removal of a helmet and/or “log rolling” an injured athlete while maintaining cervical precautions
- Assessment of the cervical spine and brachial plexus in athletes wearing cervical collars and shoulder pads

#### *Interpretation & Utilization of Information:*

Display knowledge of indications, limitations and health risks of the following tests, as well as display appropriate interpretation of their results:

- Blood work
- Pulmonary function tests
- Plain radiography
- Ultrasound (including echocardiography)
- CT scanning
- MRI imaging
- Nuclear medicine (bone scan, SPECT scan)
- Nerve conduction studies and electromyography

#### *Clinical Judgment & Decision Making:*

Demonstrate the ability to do the following:

- Evaluate the safety and ability to commence or resume sport and exercise when assessing a pre-existing or traumatic condition
- Utilize appropriate clinical and imaging adjuncts that will help identify common and important injuries or conditions
- Appropriately treat pain and inflammation caused by an injury or underlying condition.
- Utilize appropriate ancillary services in rehabilitation and recovery
- Counsel patients on the expected stages of recovery and return to sport and exercise

#### *Technical Skills:*

Demonstrate proficiency at the following skills:

- Arthrocentesis
- Common joint infiltrations

### COMMUNICATOR

#### *Inter-professional relationships with physicians and other allied health professionals:*

Demonstrate the ability to effectively communicate with referring and consultant colleagues regarding the nature of sport-related injuries and conditions, performance of necessary interventions and coordination of subsequent care and rehabilitation.

Demonstrate the ability to do the following on a regular and ongoing basis:

- Work effectively with other physicians and allied professionals of the healthcare team (including those members involved in both the acute care and rehabilitation/recovery of patients with sport-related injuries or conditions)
- Show consideration for the knowledge, skills and roles of the various members of the healthcare team
- Be respectful of other team members

### *Communications with patients & families:*

Demonstrate the ability to communicate effectively regarding the nature of the injury/illness suffered and anticipated management plan, showing them respect and gaining their cooperation and confidence.

Demonstrate the ability to discuss and explain the expected stages of recovery and return to sport and exercise to the patient & family in a sensitive, concise and comprehensible manner.

Show skill in explaining risks, benefits and obtaining consent for relevant procedures.

### *Written communication and documentation:*

Consistently demonstrate the ability to document the history, physical, diagnostic formulation, and management plan in an accurate, complete and organized manner. This includes documentation that may be required in, but is not limited to:

- Initial patient evaluations
- Progress notes
- Consultation reports

## **COLLABORATOR**

### *Demonstrate the ability to:*

- Work within the framework of a multi-disciplinary healthcare team
- Recognize the expertise of each health care team member and their respective role as it relates to the patient's care
- Appropriately delegate responsibilities to members of the health care team
- Resolve common team conflicts
- Involve the patient and family in decision-making

## **MANAGER**

- Demonstrate the understanding and utilization of current information technology in managing injuries and conditions related to sport and exercise
- Demonstrate the responsible allocation and rationalization of resources to the patient and population based on the best-available evidence
- Demonstrate the ability to manage competing interests of individual patient care and consultation requests in the clinic setting
- Understand the role of Orthopedic, Physiotherapy, Occupational Therapy and other rehabilitation practitioners and services with respect to the patient, clinic, hospital and community as a whole
- Coordinate/direct patients appropriately for ongoing care by Orthopedic, Sports Medicine, Physiotherapy, Occupational Therapy and other rehabilitation practitioners and services

## **HEALTH ADVOCATE**

- Be the patient's advocate at all times, particularly when they are unable to do so themselves
- Display advocacy for the community at large and for society
- Demonstrate the ability to discuss risk and harm reduction strategies, as well as safety precautions to prevent future injury from occurring

## SCHOLAR

### *Motivation to read and learn:*

- Demonstrate knowledge of current scientific literature and application of this knowledge to case presentation and daily patient management
- Demonstrate interest in expanding current knowledge base by reading around clinical cases

### *Critically appraises medical literature:*

- Demonstrate the ability to critically-appraise research methodology and medical literature with respect to clinical cases

### *Teaching skills:*

- Demonstrate initiative to teach other health care professionals and/or patients about specific relevant health care issues
- Discuss clinical topics and/or journal articles with colleagues in the form of presentations or rounds

## PROFESSIONAL

- Demonstrate awareness of the racial, cultural and social factors that influence the delivery of care to patients with sport-related injuries or conditions
- Show respect all times for the patient's:
  1. Race/ethnic background
  2. Language
  3. Socio-economic level
  4. Religion/Belief system
  5. Gender/sexuality
  6. Confidentiality
- Be insightful of one's own strengths, weaknesses, and recognize when to call for back up
- Be able to receive and accept constructive feedback
- Display ethical behaviour compatible with a physician at all times with respect to:
  1. Patients and their families
  2. Allied health staff and practitioners
  3. Attending Staff, residents and medical students
- Be a role model for medical students, residents, staff physicians, nurses, and other allied health care personnel
- Maintain a healthy and sustainable balance between personal and professional lives

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## TOXICOLOGY

### *General Objectives*

During the course of their training in Emergency Medicine at McGill, residents have to acquire an understanding of Toxicology as well as be able to apply this knowledge in clinical practice.

Residents will be exposed to the area of Clinical Toxicology during their Emergency Medicine rotations where they will encounter patients presenting with deliberate self-poisoning, accidental intoxications, intoxications resulting from deliberate recreational use of substances, occupational hazards or environment injuries such as bites and stings from venomous creatures. They will also be exposed to Poison Center base toxicology during their one month rotation at a Poison Control Center in their senior years.

It is expected that at the end of their training, residents will have acquired the knowledge to recognize signs and symptoms of intoxication which is the effect of a drug beyond the scope of what is considered its therapeutic effect. They should be able to initiate diagnostic measures and treatment as well as identify situations where further or additional expertise is required and collaborate effectively with other consultants.

Emphasis will be placed on the recognition, appropriate management of common intoxications encountered in the emergency department and their modalities of treatment. As well, the resident should demonstrate knowledge of the differential diagnostic exercise when approaching the unknown overdose with use of laboratory results, electrocardiogram and toxidromes.

### **MEDICAL EXPERT AND CLINICAL DECISION-MAKER**

Residents should be able to:

- Obtain a history that is accurate, pertinent and concise for the nature of the problem
- Perform physical examination that is sufficient to initiate a diagnosis or management plan
- Discriminate types of poisoning with the knowledge of the different toxidromes
- Identify the need for gastrointestinal decontamination and the benefits and risks of:
  1. Gastric lavage
  2. Emesis
  3. Single and multiple dose activated charcoal
  4. Cathartics
  5. Whole Bowel irrigation
- Demonstrate the ability to interpret accurately the results of common diagnostics tests
- Demonstrate knowledge in the mechanism of toxicity, usual toxic dose, stabilization and treatment modalities of the following with the following scale:
  1. Extensive and detailed knowledge of this subject matter is obligatory
  2. Ability to explain the principles involved in this subject matter is expected but detailed knowledge is not required
  3. Recognition of the importance of this subject is expected by broad knowledge of the principles involved.
    - a) Analgesics
      - Acetaminophene (1)
      - NSAID's (1)
      - Aspirin (1)
      - Opioids including methadone (1)
    - b) Autonomic agents
      - Anticholinergic (1)
      - Antihistamines (1)
      - Serotonergic (1)
      - Benzodiazepines (1)
      - Over the counter non benzodiazepines sedatives (2)



- Sympathomimetics (1)
- c) Chemicals and substance of abuse
  - Alcohol (1)
  - Cannabinoids (1)
  - Cocaine, amphetamines, psychostimulants (1)
  - CNS depressants (1)
  - Nicotine and tobacco (1)
  - Opioids (1)
  - Psychedelics (2)
- d) CNS drugs and muscle relaxants
  - Toxic alcohols, methanol, ethylene glycol, isopropyl alcohol (2)
  - Anesthetics (2)
  - Anticonvulsants (2)
  - Cyclic antidepressants (1)
  - GHB (2)
  - Muscles relaxants (2)
  - Neuromuscular blocking agents (1)
  - Parkinson drugs (3)
  - Antipsychotics, ( phenothiazines and butyrophenones) (1)
  - SSRI's and SNRI (1)
  - Lithium (2)
  - MAOI (2)
  - Hallucinogens (1)
  - Sedatives, hypnotics and anxiolytics (1)
- e) Cardiovascular
  - Antiarrhythmics (2)
  - Anticoagulants (2)
  - Antihypertensives (2)
  - Antiplatelets (2)
  - Thrombolytics and antifibrinolytics (2)
  - Inotropes (2)Nitrates and nitrites (2)
- f) Environmental (3)
  - Biological incidents
  - Chemical incidents
  - Plants
  - Ingestions
  - Contact dermatitis
- g) Gastrointestinal agents (3)
  - Antacids
  - Antidiarrheals
  - Laxatives
- h) Toxic gases
  - Carbon monoxide (1)
  - Chlorine (3)
  - Carbon dioxide (3)
  - Cyanide (1)
  - Smoke inhalation (1)
  - Products of combustion (1)

- i) Hydrogen fluoride (3)
- j) Vitamins, minerals and endocrine agents (3)
  - Oral hypoglycemics (2)
  - Insulin (2)
  - Newer diabetic drugs (3)
  - Potassium salts (2)
- k) Demonstrate knowledge of mechanisms of action and indications for the following antidotes:
  - Analeptics (2)
  - Chelation agents (3)
  - Benzodiazepine antagonists (1)
  - Activated charcoal (1)
  - Cyanide treatment (1)
  - Glucagons (1)
  - Calcium (1)
  - Methylene blue (2)
  - Opioid antagonists (1)
  - Oxygen including hyperbaric (2)
  - Atropine (1)
  - Protamine (2)
  - Thiamine (1)
  - Vitamin K (1)
  - Folinic acid (3)

#### COMMUNICATOR

Residents should be able to demonstrate effective communication skills by their ability to:

- Work harmoniously within the team
- Being able to formulate a clear plan of action and convey information to other colleagues
- Deliver information to patient and families in a sensitive manner using the appropriate vocabulary for their understanding of the situation
- Link effectively with the provincial Poison Center and summarize the evidence to allow for better consultation and follow-up on the cases
- Produce legible and pertinent written documentation enabling another professional to access the information pertaining to the case

#### COLLABORATOR

Residents should be able to identify and act as leader of the multidisciplinary team required for the management of poisoned patients in the Emergency Department. More specifically, residents should be able to contact and request assistance of other allied health professionals when dealing with:

- Poison control and toxicology consultant
- ICU physicians
- Psychiatry
- Social services, and community support organizations

#### MANAGER

Residents should understand and be able to apply in their practice:

- Principles of HAZMAT
- Principles of risk assessment
- Providing effective consultation when a referral from an outside hospital is made and be able to utilize resources judiciously in accepting a transfer for an intoxicated patient

## HEALTH ADVOCATE

Residents should be able to recognize and advise patients and their families regarding the general epidemiology and prevention of poisonings and more specifically:

- Inappropriate use of medications
- Dangerous interactions between medications
- Long term or chronic side effect of medications
- Risks of polypharmacy and excessive over the counter medications use
- Health issues pertaining to drug and illicit substance abuse
- Social issues relating to the behavior of deliberate self-harm and poisoning

## SCHOLAR

Residents should be able to demonstrate an intellectual approach to medical practice in the following areas during participation on patient rounds, teaching sessions, journal clubs and interdisciplinary meetings.

- Continuing Medical Education
  1. Show interest in self-education skills by demonstrating knowledge in the evolving concepts in the management of poisoned patients and new pharmacological developments
- Critical Appraisal of the Medical Literature
  1. Demonstrate the ability to research the medical literature, and then identify and critically appraise the best available evidence for any patient related question
  2. Identify limitations in current toxicological research
- Scientific Interest
  1. Show interest in other scientific areas closely related to clinical toxicology such as biochemistry, basic pharmacology, agricultural and occupational toxicology by recognizing potential implication of these fields into clinical practice
  2. Demonstrate ability in identifying areas in toxicology where gaps in knowledge or expertise exists by retrieving the essentials of the literature, summarizing the evidence to date and develop research ideas to fill these gaps while being able to demonstrate the clinical relevance of finding answers to the question at hand
- Teaching skills
  1. Residents should be able to explain the mechanisms of poisoning and share knowledge with others in a manner that helps others to develop their own skills
  2. Residents should be available to answer questions or discuss common toxicological problems

## PROFESSIONAL

Residents should be familiar with medical, legal, psychiatric and social aspects of toxicology. They should approach situations with the highest level of integrity and honesty. Resident should more specifically demonstrate professionalism in the following issues:

- Obtaining consent for therapeutic modality or research study inclusion by the patient or the next of kin
- Respect patients' rights to confidentiality and neutrality in the face of authorities involvement whilst fulfilling social and legal obligations as per the medical ethics code and the local regulations
- Recognize the limitation of medical practice in the face of threat or assault and decide when appropriate to involve legal authorities.
- Recognize the impact of delivering care to a patient with impaired judgment due to intoxication, and their capacity to make appropriate decisions.
- Be aware of your own strengths and weaknesses and when to ask for help. Seek appropriate advice from consultants to achieve the best therapeutic or management plan for these patients.

### SUPERVISORS:

### ADMINISTRATIVE COORDINATOR:

### TELEPHONE:

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## TRAUMA

### MEDICAL EXPERT

#### *Basic Scientific Knowledge:*

- Discuss the principles of anatomy and physiology specifically relating to traumatic disorders, in particular:
  1. The various zones of the neck
  2. The posterior chest
  3. The posterior abdomen and flanks
- Compare blunt and penetrating mechanisms of injury, further differentiating gunshot wounds and stab wounds.
- Describe the indications and limitations, mechanism of action, interactions and complications of pharmacologic agents used in the context of trauma:
  1. Analgesic agents
  2. sedatives and induction agents
  3. paralytic agents
  4. antibiotics
  5. vasopressor agents
  6. corticosteroids
- Knowledge of the principles of fluid therapy in a multiply injured patient.
- Learn a systems approach to trauma management at local and provincial levels.
- Learn the principles of pre-hospital trauma care

#### *Basic Clinical Knowledge:*

- Describe the presentation, pathophysiology, natural history and therapy of various injuries/ syndromes related to trauma of body systems in the adult, pediatric and geriatric population. More specifically, knowledge about:
  1. Immediately life-threatening injuries
  2. Potentially life-threatening injuries
  3. Limb-threatening injuries
  4. Closed head injuries
  5. Raised ICP
  6. Facial trauma
  7. Blunt and penetrating neck trauma
    - a) Zone I, II, III injuries
    - b) Airway injuries
    - c) Esophageal injuries
  8. Blunt and penetrating chest trauma
    - a) tracheobronchial injuries
    - b) pneumothorax
    - c) hemothorax
    - d) aortic injuries
    - e) lung contusion
    - f) diaphragmatic injuries
  9. Blunt and penetrating abdominal trauma
  10. Posterior chest and abdominal injuries
  11. Pelvic trauma, including uro-genital trauma
  12. Spinal cord trauma and syndromes
  13. Extremity trauma, including peripheral vascular injuries, partial or complete amputations, fractures, tendons injuries, lacerations
  14. Compartment syndrome
- Describe special considerations in the evaluation and management of the pregnant, pediatric and geriatric trauma patient

- Demonstrate the principles of trauma resuscitation, stabilization, and disposition
- Describe principles of burn management
- Describe principles of inhalation injuries
- Assess and develop the appropriate differential diagnoses of clinical presentations in the trauma patient, describing the various potential lesions associated with specific mechanisms of injury
- Acquire knowledge of indications and limitations of the following tests with respect to the trauma patient: plain radiography, CT scanning, echography, angiography, endoscopy, blood work

#### *History & Physical Examination:*

- Competently complete a clinical assessment of a trauma patient in an organized and timely fashion
- Demonstrate knowledge of common signs of major traumatic injuries
- Demonstrate knowledge of the Glasgow Coma Scale

#### *Interpretation and Utilization of Information:*

- Assess and develop the appropriate differential diagnoses of specific clinical presentations in the adult, paediatric and geriatric population (e.g. abdominal pain, UGI bleed, LGI bleed etc)
- Compare/ contrast the use of diagnostic peritoneal lavage, ultrasound and CT scan in the evaluation of abdominal trauma
- Compare/contrast the use of CT scanning, echocardiography and angiography for thoracic aortic injuries

#### *Clinical Judgment & Decision Making:*

- Identify indications for immediate laparotomy and thoracotomy
- Set the priorities, and initiate the required resuscitation, stabilization, investigation and disposition of the traumatized patient
- Identify the needs for consultation/admission/transfer of such patients presenting to the Emergency Department
- Initiate the appropriate management of acute traumatic conditions in the adult, paediatric and geriatric patient according to injuries identified

#### *Technical Skills Required in the Specialty:*

- List the indications, techniques and complications of manipulative procedural skills:
  1. Endotracheal intubation with C-spine precautions
  2. Cricothyroidotomy
  3. Needle decompression of chest
  4. Chest tube insertion
  5. Resuscitative thoracotomy
  6. Cardiorrhaphy (suturing the heart)
  7. Diagnostic peritoneal lavage
  8. F.A.S.T. exam
  9. Venous cutdown
  10. Insertion of large bore peripheral lines
  11. Insertion of central venous lines (IJ, subclavian and femoral)
  12. Naso and orogastric tube insertion
  13. Suturing of basic and complex wounds
  14. Reduction of major joint dislocations
  15. Pelvis immobilization
  16. Foley catheter insertion
  17. Proper splinting and reduction of extremity fractures

18. Local wound exploration in penetrating trauma

- Perform the required manipulative/procedural skills
- Ability to interpret specific radiological tests in a trauma patient:
  1. Plain films of the cervical, thoracic, lumbar spine; chest; pelvis, extremity
  2. Focused ultrasonography of the abdomen/pericardium
  3. CT of the head for the presence of the epidural and subdural hematoma, cerebral contusion, subarachnoid hemorrhage,
  4. Perform and interpret a retrograde urethrogram

## COMMUNICATOR

### *Interprofessional Relationships with Physicians and with Other Allied Health Professional*

- Communicate effectively with the multi-disciplinary team

### *Communications with Patients*

- Demonstrate skill and behavior towards alleviating patient anxiety, appropriate for patient age and gender.
- Demonstrate ability to discuss the patient's care and counsel regarding risk modification with the patient and family.
- Show skill in explaining risks, benefits and obtaining consent for relevant procedures and surgeries.

### *Communications with Families*

- Demonstrate ability to discuss and explain to families "bad news" in a sensitive, concise and understandable manner
- Demonstrate ability to discuss living wills, advanced directives and do not resuscitate orders

### *Written Communication and Documentation*

- Ability to document concisely and precisely pertinent findings on history and examination as relevant to the trauma patient

## COLLABORATOR

### *Interacts and Consults Effectively With All Health Professionals by Recognizing and Acknowledging Their Roles and Expertise*

- The resident will recognize the role of each health care team member with respect to the patient's care
- Demonstrate ability to resolve common team conflict problems
- Demonstrate ability to work in a multi-disciplinary team, work as part of a trauma team
- Consults appropriate services for the definitive care of the patient

### *Delegates Effectively*

- Demonstrates ability to delegate various parts of the evaluation and procedures during a trauma resuscitation.

## MANAGER

### *Uses Health Care Resources Cost-Effectively*

- Recognize resources of tertiary care trauma centres and the use and rationalization of these for the individual patient and the population served
- Demonstrate knowledge of trauma systems and the function it serves to the hospital and the region
- Comprehend the rationale, organization and resources required to create trauma centers and systems

### *Organization of Work & Time Management*

- Ability to establish priorities in a single complex trauma patient under stressful conditions
- Be capable of managing multiple ill patients concurrently

## HEALTH ADVOCATE

### *Advocates for the Patient*

- Be capable of discussing with patients risk and harm reduction strategies
- Be the patient's advocate at all times, particularly when they are unable to do so themselves

### *Advocates for the Community*

- Learn principles of disaster management
- Be able to discuss and promote injury prevention
- Be aware of organ procurement procedures

## SCHOLAR

### *Motivation to Read and Learn*

- Be consistent in reading around clinical cases and improving trauma knowledge base

### *Critically Appraises Medical Literature*

- Demonstrate knowledge and applicability of landmark (specialty relevant) studies in trauma care

### *Teaching Skills*

- Demonstrate ability to supervise students and more junior residents in the evaluation of the traumatized patient and performance of procedures

## PROFESSIONAL

- Show respect at all times for the patient's:
  1. Race/Ethnic background
  2. Language
  3. Religion/belief system
  4. Gender/sexuality
  5. Confidentiality
- Be insightful of one's own strengths and weaknesses (and when to call for back up)
- Be able to receive and accept constructive feedback
- Display ethical behaviour compatible with a physician at all times with:
  1. Patients and their families
  2. Allied health staff
  3. Attending staff, residents, students
- Be a role model for colleagues and other health care professionals.

### **SUPERVISORS:**

### **ADMINISTRATIVE COORDINATOR:**

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## ELECTIVES

Residents should be using their elective time to complement core rotations concentrating on areas of weakness or interest, or to develop a field of expertise. All electives must be approved by the Program Director.

Residents will be expected to establish specific objectives for their electives before starting the rotation. These should be discussed with and submitted to the Rotation Coordinator and the Program Director. In this way we can all ensure that your elective rotation will be productive and tailored to achieve your objectives. This must be completely arranged at least two months prior to the beginning of the rotation.

In addition, for any out of town electives, residents are encouraged to communicate with the Program Director well in advance. Residents must ensure adequate time to register with the **(1)** local University and/or College of Physicians, **(2)** CMPA, and **(3)** the local medical licensing agency. As above, residents must **(4)** clearly identify the rotation supervisor who has a copy of the **(5)** objectives you and your Program Director have discussed. The rotation supervisor will be asked to submit to the Program a formal evaluation of your rotation. All this must be completely arranged at least two months prior to the beginning of the rotation.

### **WRITTEN CONFIRMATION OF THE ABOVE FIVE IS A PREREQUISITE FOR APPROVAL**

A block of a few months can be used as a "Fellowship" type of rotation to develop a specific area of expertise. Any resident wishing to do this will be expected to organize this block rotation with the Program Director well in advance.

The residents will find an Elective Binder in the Secretary's office. Comments from residents are welcome additions to this binder. This list is by no means exhaustive; be creative and try to get the maximum out of your elective time.



## COMMITTEES & ROLES

### COMMITTEES:

1. Residency Program Committee (RPC)
2. Residency Research Committee (RRC)
3. Promotions Committee (old system)
4. Competency Committee (CBD cohort)
5. Selection Committees
6. Curriculum Committee
7. Ad Hoc Committees

### 1. RESIDENCY PROGRAM COMMITTEE (RPC)

As per the General Standards of accreditation, section B.1.2, the Residency Program Committee assists the Program Director in the planning, organization and supervision of the Program. The general responsibilities of the RPC include (but are not limited to) the following:

- Establishing, organizing and reviewing educational components and resources of program (clinical facilities, teaching facilities etc., to maximize the learning experience)
- Development and operation of program so that it meets standards of accreditation, as per the Royal College of Physicians and Surgeons document "General Standards of Accreditation"
- Setting educational goals and periodically reviewing them. The Goals and Objectives shall comply with the Royal College of Physicians and Surgeons (RCPS) document titled "Specific Requirements and Guidelines for Accreditation of Residency Programs in Emergency Medicine"
- Ensure that trainees and the Faculty get copy of educational goals
- Establish mechanism to provide career planning and counseling for residents

#### **Membership**

- Program Director (Chair)
- Program Site Coordinators (RVH, MGH, JGH, MCH)
- Resident representation from each of the 5 years
- Chief residents

#### **Ex-officio members include:**

- Associate Dean of Postgraduate Education
- Program Director (CFPC-EM)
- Adult Emergency Department Directors of the major teaching hospitals (RVH, MGH, JGH, MCH)

#### **Frequency of Meetings**

- The RPC meets on the 4th Wednesday of each rotation

## **Minutes**

Minutes of the meeting are:

- Kept by the Program Coordinator
- Edited by the Program Director
- Approved by 2 members of the RPC
- Distributed to all residents and staff

## **2. RESIDENCY RESEARCH COMMITTEE (RRC)**

### ***The role of the RRC is:***

- To guide the resident through their 5 periods of research, ensuring that the resident has an appropriate research topic, research supervisor/preceptor, and that the resident is progressing at an appropriate pace
- To ensure that the resident produces an original research proposal. To guide and encourage the resident to bring the project to the point of either a poster or abstract presentation at a major conference, and/or publication
- To ensure that residents apply the techniques of EBM and critical appraisal (learned at JC) to their research project
- To evaluate the progress of the research project (as outlined in the Research Goals and Objectives) on a bi-annual basis
- To provide the program director with written feedback/evaluation of the progress research project
- To encourage residents to pursue research as part of their career path

*\*It should be noted that the RRC is not the actual research project supervisor/preceptor*

### **Membership**

- The two Research Chairpersons
- The Program Director

The Emergency Medicine Residency Research Committee (RRC) is accountable to the Program Director to meet the above-mentioned Goals and Objectives. Residents' progress will be monitored by their preceptor and both are accountable to the RRC to ensure selected objectives have been met after each research rotation. The RRC will establish liaison with other Departments, McGill University, and the Department of Epidemiology to facilitate resident projects

## **3. PROMOTIONS COMMITTEE**

The Emergency Medicine program has established the Promotions Committee in accordance with section B 3.3 and 3.4 of the Royal College's General Standards of Accreditation. The committee follows the guidelines outlined by both the Royal College and the post graduate office at McGill. Within the postgraduate medicine's website there is a document entitled "Assessment and Promotions." This document can be accessed at:

[https://mcgill.ca/pgme/files/pgme/pgme\\_promotions\\_july\\_1\\_2018\\_approved\\_0.pdf](https://mcgill.ca/pgme/files/pgme/pgme_promotions_july_1_2018_approved_0.pdf)

*\*The resident is strongly encouraged to review these documents*

### **Membership**

- Program Director (Chair)
- Two (2) Emergency Physicians (not the Site Coordinators)

### **Responsibilities**

- Review of 6 month and year end ITERS
- Meet with the resident twice per annum to review evaluations and progress
- Review the FITER submitted to the Royal College

- Maintain and respect confidentiality
- Review the entire record of a resident who has received a BORDERLINE or UNSATISFACTORY global evaluation during any period
- The overall performance of any resident can be reviewed by the Committee, at the discretion of the Program Director. This may occur even in the absence of BORDERLINE or UNSATISFACTORY evaluations
- Inform the Associate Dean for Postgraduate Education (in writing) of any resident that is in academic or non-academic difficulty
- Maintain an appeal mechanism in accordance with McGill's guidelines
- Establish a remedial education program for any resident placed on "probation"

#### **4. COMPETENCY COMMITTEE**

##### ***Terms of Reference***

This document provides the Postgraduate Dean, Program Director, Clinical Faculty, Competence Committee member Program Administrator, Royal College Accreditation Surveyors, as well as the Resident with information on the structure and function of the McGill Emergency Medicine Competence Committees.

##### ***Overall Goal***

The Competence Committee's (CC) goal is to ensure that all Emergency Medicine residents achieve all the requirements of the specialty of Emergency Medicine. The CC achieves this goal through the synthesis and review of qualitative and quantitative assessment data at each stage of training, and then by providing recommendations to learners on their future learning activities.

##### ***Responsibility and Authority***

The Competence Committee is a subcommittee of the RPC and reports to the Residency Program Committee via the Program Director. The CC will be responsible for:

- Monitoring and making decisions on the progress of each resident in demonstrating achievement of the EPAs or independent milestones within each stage of a competency-based residency training program
- Synthesizing the results of multiple assessments and observations and making recommendations to the RPC related to the promotion of residents to the next stage of training
- Reviewing and improving individual learning plans developed to address areas for improvement
- Monitoring the outcome of any learning or improvement plan established for an individual resident.
- Identifying trainees failing to progress within the program
- Determining readiness to challenge the Royal College examinations
- Determining readiness to enter independent practice on completion of the transition to practice stage
- Maintaining confidentiality and promoting trust by sharing information only with individuals directly involved in the development or implementation of learning or improvement plans

##### ***Reporting Structure and Appeals***

- The PD will report outcomes of the CC discussions and present their recommendations to the Residency Program Committee for validation
- Residents may appeal decisions made by the CC, according to McGill postgraduate medicine policies ([https://mcgill.ca/pgme/files/pgme/pgme\\_promotions\\_july\\_1\\_2018\\_approved\\_\\_0.pdf](https://mcgill.ca/pgme/files/pgme/pgme_promotions_july_1_2018_approved__0.pdf))

##### ***Term of Office***

- Members are appointed by the PD (in collaboration with the CC)
- Membership is for a period of 4 years (in line with other McGill University and Emergency Department positions)
- Membership may be renewed automatically once; thereafter, the position is open for applications

**Meetings**

- Meetings will be held at minimum of quarterly
- Additional meetings may be called by the CC chair on an as needed basis
- Meetings will take place face to face, virtual or some combination thereof
- Meetings will have an agenda
- Meetings will be minutes and filed electronically by the Program Assistant (PA)

**Quorum**

- 50% of the committee membership

**Conflict of Interest**

- The CC will make every effort to ensure that all decisions are fair and objective. No committee member will be permitted to vote in a situation in which a conflict of interest is identified

**Confidentiality**

- All discussion at the CC concerning residents and/or Faculty are strictly confidential

**Composition**

Members of the CC will be individuals with a keen interest and active involvement in medical education. They must be able to interpret multiple sources of qualitative and quantitative observational data and work to achieve consensus, where possible, in order to make judgments on outcomes.

**Members of the CC will include:**

- CC Chair (voting member)
- PD (voting member)
- Representatives of the 3 key sites (voting members)
  - a) CUSM - Royal Victoria Hospital site
  - b) CUSM - Montreal General Hospital site
  - c) Jewish General Hospital
  - d) 1-2 standing members with educational interest and commitment.
  - e) Ad hoc member, pediatric Emergency Medicine, as needs arise – Montreal Children's Hospital
- PA (non-voting member)
- ED chiefs and Department Chair will not sit on the CC (to avoid any perceived conflict of interest)

**Chair Responsibilities:**

- Will establish meeting dates
- Will create an agenda
- Will chair the meeting
- Will review the minutes
- Will, along with the PD, meet with the residents post CC meeting to review the outcomes of the CC discussions
- When needed, will participate in the discussion and creation of remediation plans and follow-up on the outcome of these plans
- Will lead CC CQI process

**Program Director Responsibilities:**

- Will be an active member of the CC
- Ideally will not be assigned a resident to review at the CC meeting
- Will meet with the residents following CC meetings, together with the CC Chair, to review the outcome of the CC discussions
- Will participate in the discussion and creation of remediation plans and follow-up on the outcome of these plans
- Will participate in CC CQI process

**Member Responsibilities:**

- Will be assigned a resident to present to the CC
- Will not be assigned the same resident at subsequent meetings (to avoid bias)
- Will interpret, synthesize and collate resident assessment data
- Will present data to the CC in the designated structured format
- Will make a recommendation to the CC for, or against, the promotion of the resident under review
- When needed, will participate in the discussion and creation of remediation plans and follow-up on the outcome of these plans
- Will participate in CC CQI process

**CQI**

- Will assess and reflect on the processes involved, making changes to improve the assessment of the resident and the functioning of the committee

**Modification to the terms of reference**

- May be suggested by any member of the CC
- Must be agreed upon by the majority of the CC
- Must be approved by the RPC

**5. SELECTION COMMITTEE**

The role of this Committee is to select candidates for admission to this Program. There are two Committees, one for CaRMS and one for Clinical Fellows.

**Membership**

- Program Director (Chair)
- Three (3) Site Coordinators (RVH, MGH, JGH)
- Chief Residents
- Two (2) Clinical Fellows

This gives a total of 6 or 7 people in each Committee. The Selection Committee has the mandate to review applications, select applicants to interview, interview applicants and participate in the subsequent rank order of the applicants.

**6. CURRICULUM COMMITTEE**

The role of this Committee is to oversee the Academic half-days with regards to content and distribution as well as the overall rotation curriculum of the residents. Any changes in Academic half-day structure or curriculum would be done via this committee.

**Membership**

- Program Director (Chair)
- Three (3) Site Coordinators (RVH, MGH, JGH)
- Chief Residents
- Any interested/involved residents

**7. AD HOC COMMITTEES**

As need arises, Ad hoc Committees will be established. Their terms of reference (mandate, chair, membership) will be established at the outset. In the past, there has been a Rounds Review Committee.

## ROLES

### ROLES:

1. Emergency Site Coordinators
2. Mentor
3. Chief Resident
4. Academic/Interactive Coordinators

### 1. EMERGENCY SITE COORDINATOR

#### ***Site Coordinator Responsibilities and Duties include:***

- Liaison between Program Director and Rotation Coordinators in respective institution
- Assists Program Director with the coordination of academic activities within the institution
- Assists the RPC in setting up global goals and objectives for rotations
- Acts as ED Rotation Coordinator in the respective institution; i.e. coordinates individual resident's schedule and requests; coordinates residents' supervision and evaluation, provides timely verbal evaluation at the end of the rotation
- Assigns to the resident the staff who will be evaluated for that period/rotation
- Assists Program Director and residents to address difficulties with specific rotations (i.e. non- emergency rotations) in the given institution
- Handles logistical issues concerning site-specific rotations
- Is an active member of the RPC
- Together with the ED Director, acts as liaison to the Emergency Department attending staff

### 2. MENTOR

Each resident will be assigned a mentor at the beginning of his/her residency. Barring, special circumstances, the mentor will maintain this role until the completion of the mentee's residency.

#### ***The responsibilities of the mentor include (but not limited to) the following:***

- Meet with his/her mentee at the beginning of the first year and help him/her feel welcome and part of the Program
- Meet at least once a year, thereafter, and in conjunction with the Program Director, act as a resource person
- Together with the Program Director help resident develop fields of interest or subspecialization early in his/her residency
- Assist resident to recognize his/her individual strengths and weaknesses and support activities to enrich the resident's experience

- Attend the different presentations of the mentee(s) (Case Presentation, Grand Rounds, Journal Club and Journal Watch) that are mandatory to the Program, and be available to discuss different aspects of their presentations ahead of time
- Give feedback on the various presentations using a summary of the evaluations completed by the audience
- Be available to discuss the 6-month evaluation after it has been reviewed by the Promotions Committee. The Program Director maintains the right to discuss evaluations with the resident alone or at the request of the resident. In the case of a borderline or unsatisfactory evaluation, assist to outline corrective measures in an effort to address weaknesses
- The mentor is NOT the research preceptor. Specific help can be obtained through the Resident Research Committee
- The mentor is NOT the Area of Interest Project Supervisor
- The mentor will hopefully develop a special kinship towards his/her mentee(s)
- The mentor should be a role model and conduct him/herself professionally and maturely

### 3. CHIEF RESIDENT

There are 2 chief resident positions with shared responsibilities, which will be divided equally by the chief residents at the start of their mandate.

#### **Elections**

- The Chief Resident shall be selected by all the residents currently enrolled in the McGill University Royal College Emergency Medicine Training Program by secret ballot elections. Proxy votes will not be accepted, however, residents who are out of town may cast their vote by email to the current Chief Resident
- Elections for RPC resident representatives shall be held week 3 of period 1. There is a representative from each year (R1 through R5). Term is for one year
- Each Chief Residency term lasts one year and runs from July 1st to June 30th of the following year.
- Elections should take place by period 11 of the previous year

#### **Responsibilities**

- General
  - a) Assist the Program Director and RPC in maintaining the Standard of Accreditation established by the Royal College
  - b) Act as an advocate for the residents at all levels within the McGill system. (Examples include interdepartmental scheduling problems, interpersonal conflicts, and 'troubleshooting the ER experience for the off-service residents)
  - c) Organize, attend and 'host' all academic rounds – ensure availability of necessary A/V equipment
  - d) Organize "Special Events"
  - e) Keep record of resident attendance at weekly rounds and at monthly Journal Clubs
  - f) Manage the resident budget, which includes Petty Cash Fund
  - g) Coordinate elections of new incoming Chief residents, such that they will assume their new responsibilities by July 1st. The Chief resident should also orient the incoming Chief(s) to their new responsibilities
  - h) Liaising, encouraging and scheduling 3 Adult ED site Rounds
- Committees
  - a) *Residency Program Committee*: One vote for each Chief Resident. Where appropriate, the Chief residents may assist the Program Director in preparation of the meeting's agenda
  - b) *CaRMS Selection Committee*: Each Chief Resident would act separately during interview and selection procedures
  - c) *Ad hoc Committees*
- Scheduling and Rounds
  - a) Schedule lecturers for Wednesday morning Rounds, and release the schedule by the second week of the prior month. It is the responsibility of the Chief Resident along with the Program Director and

Curriculum Committee to ensure that the program's educational objectives are being met during Wednesday Rounds

- b) Ensure that the schedule for Wednesday morning Rounds posted on the e-mail Listserv
- c) Ensure curriculum guidelines are being covered during weekly rounds, and cycle lectures every two years
- d) Maintain a database of lectures, to both further future scheduling and minimize topic overlap
- e) The Chief Resident is responsible for creating the scheduling template for the end of the year. This is a skeleton annual schedule to ensure that all residents give their appropriate number of presentations
- f) Schedule Journal Club dates, and confirm availability of the hall (Thompson House)
- g) Perform his/her academic and administrative duties as Chief Resident with professionalism; thus acting as a Role Model for the other Residents
- h) To be accessible to assist in the management of resident crises or scheduling
- i) Schedule and arrange the end-of-year party, including obtaining Senior Resident Gifts, and the Teacher of the Year Award

### ***Compensation***

About \$300/month (as determined by the contract between the FMRQ and the MSSS). In addition, the resident will do 0.5 shift/week less during an Emergency rotation (i.e. dedicated time compensation to allow the Chief Residents to fulfill their responsibilities (RVH, MGH, JGH, MCH).

## **4. ACADEMIC/INTERACTIVE COORDINATORS**

There will be 1-2 Academic/Interactive Coordinators, one for the Junior residents and one for the Senior residents. Their responsibilities include:

- Organizing the Interactive sessions, ensuring that either Tintinalli (Juniors) or Rosen (Seniors) are covered in a 2-year period
- Organizing the staff to lead these sessions
- Developing and marking an annual or biannual exams
- Submitting exam results to the Program Director



## PROGRAM POLICIES

1. Vacation
2. Number of ED shifts
3. Non-Negotiables
4. Intimidation and Harassment
5. Pharmaceutical Industry

### 1. VACATION

Residents have a total of 4 weeks of vacation per year. Vacation time can be taken any time during the academic year with the following restrictions:

- Residents must not miss more than 1/4 of a period. McGill has a policy that no more than 25% of a rotation can be missed or the rotation will be considered 'incomplete.' Consequently, once a vacation has been taken, this leaves no room for study leave, conference, personal days during that rotation.
- Residents can take 2 weeks vacations consecutively if they:
  - a) Take the last week of one period, and the first week of following period, or
  - b) Request a two-week vacation during a two-month block rotation
- Residents must inform the Rotation Supervisor with a sixty (60)-days' notice. (Please use the "Change of Schedule Request" form and submit it immediately to the Program Coordinator for submission to Unit Coordinator and EM Program Director)
- Article 25.01 of the Residents contract, states that the "rotation supervisor has the right to refuse a vacation request should this have an effect on the medical care provided by that service"

### 2. NUMBER OF ED SHIFTS

- Based on the premise that it is essential to see volume while the resident is in training
- Based on 20 shifts per month (i.e. work week of 5 days x 4 weeks)
- Based on 8-9 hours per day
- Less 4 x .5 days for Wednesday AM teaching
- Less any special days e.g. Casting at MGH
- Less Stat days. Stat days must be requested! (NB. Stat days vs. collecting overtime)

#### *Vacations*

- McGill policy is that a rotation is considered complete only if 75% of the number of shifts is done.

**ED/Research**

- One-two (2) weeks research, 2-3 weeks ED
- Number of shifts will be multiplied by 0.5
- All odd numbers will be rounded up to the closest number

**ED/Research/Vacation**

- 75% of the ED must be completed as per McGill, and Rotation Supervisor
- Odd numbers will be rounded up to the closest number.

**Policy:****Full rotation:**

- R1-R3: 18 x 8-9 hrs. . . . less stat days, less special training (casting)
- R4: 18 (or 16 x 8-9 hrs, if replaced with extra clinical duty e.g.teaching, admin.)
- R5: 14 x 8-9 hrs.

**Vacation:**

- R1-R3:  $18 \times .75 = 14$  (rounded up)
- R4:  $18 \times .75 = 14$  (or  $16 \times .75 = 12$  if replaced with teaching etc.).
- R5:  $14 \times .75 = 11$  (rounded up)

**ED/Research:**

- R1-R3: 9 x 8-9hrs
- R4: 9 (or 8 x 8-9hrs. if replaced with extra clinical duty)
- R5: 7 x 8-9 hrs

**ED/Research/Vacation:**

- 7 shifts for all R1-R5.

**3. NON-NEGOTIABLES***The emergency resident shall:*

- Show up to all Wednesday morning academic Rounds
- Show up to Rounds on time
- Show up to all Journal Clubs
- Show up to all Interactive sessions, prepared

McGill Emergency Medicine has a long established practice of having Wednesday AM academic half day. All the off service rotations know this. Nonetheless, the resident is responsible to make rotation schedule requests to ensure that they are available to attend. For reasons other than vacation, out of city rotations, conference or study leave, a sick day will be deducted from the bank of sick/personal days.

**4. PHARMACEUTICAL & INDUSTRY POLICY**

- The McGill Emergency Medicine Residency has a need to collect funds to help sponsor emergency academia and education of the residents. Consequently, the McGill Emergency Residency Education fund has been created. It is to be used for academic purposes that benefit the program as a whole (e.g. sponsoring speakers, educational equipment). It is not to be used for personal benefit (books, trips etc.) nor is it to be used for food
- (Pharmaceutical) companies may make unlimited donations (frequency and amount, with a suggested minimum of \$750) to the Emergency Medicine Residency educational fund
- No obligations or conditions can be set by the pharmaceutical companies in exchange for the donations (however, the names of donors will be listed amongst the companies making donations)

- In return, the companies will be allowed to attend up to 4 Journal Clubs per year, however, there will be only one company present per Journal Club. The company representative will set up their display outside the Journal Club room. They will not be allowed to give a formal presentation to those attending the Journal Club. Residents and staff are free to politely interact with the company representative outside of the Journal Club room
- Contributions will all go into a single fund, and the amount contributed will remain undisclosed to both the residents and the other pharmaceutical companies
- The Chief Residents will continue to manage the fund, but expenditures greater than \$100.00 will require consensus and approval by both Chiefs and the Program Director
- There will be one selected Emergency Resident who will be responsible for contacting the companies, soliciting, scheduling and collecting the donations

## SOCIETIES & CONFERENCES

### EMERGENCY MEDICINE SOCIETY MEMBERSHIP & JOURNALS

**CAEP** - *Canadian Association of Emergency Physicians* **AMUQ** - *Association des Médecins d'Urgence du Québec*

All McGill Residents should join both Associations. CAEP and AMUQ represent our interests at the National and Provincial levels. There is a joined membership available through AMUQ. It entitles you to receive free the Canadian Journal of Emergency Medicine (CJEM) as well as cheaper registration fees at CAEP and AMUQ conferences.

(CAEP 1-800-463-1158 [www.caep.ca](http://www.caep.ca); and AMUQ 1-418-658-7679 or [amuq@amuq.qc.ca](mailto:amuq@amuq.qc.ca)).

Every Emergency resident should also be a member of "AMSMU" - Association des Médecins Spécialistes en Médecine d'Urgence (also through AMUQ, [amuq@amuq.qc.ca](mailto:amuq@amuq.qc.ca)).

### **ACEP and SAEM**

Membership to "ACEP" - American College of Emergency Physicians ([www.acep.org](http://www.acep.org)) and "SAEM" - Society for Academic Emergency Medicine ([www.saem.org](http://www.saem.org)) are encouraged if not just for the two free monthly journals that are given to their members. (The Annals of Emergency Medicine with ACEP and Academic Emergency Medicine with SAEM). Both offer discounts to their members for conferences and other publications.

### **Other**

Visit the "URGENET" site [www.urgenet.qc.ca](http://www.urgenet.qc.ca). Initiated by Dr. Alain Vadeboncoeur, Emergency Physician, this site has become the cornerstone of Emergency Medicine in Quebec with links to many organizations, a chat line and the GTI document entitled Les Urgences au Québec.

### **Conferences**

You are entitled to ten days of conference leave per year. Currently, the Emergency Departments at the RVH, MGH and JGH offer to CaRMS residents \$750/year, stipend that can be used towards conferences. You cannot defer them to the next academic year so use them or lose them. Note that if you present at a conference, whether an abstract, poster presentation, etc., you are entitled to additional supplement of \$750.

## VACATION & VACATION POLICY

***Change of Schedule Request Form:*** Available at the Program Coordinator's office.

***Vacation*** time can be taken any time during the academic year with the following ***restrictions***:

- Residents must not miss more than 1/4 of a period, or it will be considered incomplete and it will have to be repeated
- Residents can take 2 weeks vacations consecutively if they:
  - a) Take the last week of one period, and the first week of following period, ***or***
  - b) Request a two-week vacation during a two-month block rotation
- Residents must inform the rotation supervisor with a sixty (60)-days' notice. (Please use the "Change of Schedule Request" form and submit it immediately to the Program Coordinator for submission to Unit Coordinator and EM Program Director)
- Residents are encouraged not to take vacation time during Orientation (1st week of July) or when Senior residents are writing exams (beginning of June)
- Article 25.01 of the Residents' Contract, states that the "rotation supervisor has the right to refuse a vacation request should this have an effect on the medical care provided by that service"

## TELEPHONE NUMBERS & ADDRESSES



A Royal College & CMQ Emergency Medicine Residency Program

### ROYAL VICTORIA HOSPITAL

*1001, Decarie, Montreal, Qc, H4A 3J1*

**LOCATING:**

**514-934-1934 ext. 53333**

**PROGRAM DIRECTOR:**

**DR CARINE HAGGAR**

**TELEPHONE (WORK):**

**514-934-1934 ext. 36974**

**FAX (WORK):**

**514-843-2875**

**E-MAIL:**

[carine.hagggar@mcgill.ca](mailto:carine.hagggar@mcgill.ca)

**ADMINISTRATIVE COORDINATOR:**

**MS ALISON HAYTER**

**TELEPHONE:**

**514-934-1934 ext. 36974**

**FAX:**

**514-843-2875**

**E-MAIL:**

[residency.emergencymed@mcgill.ca](mailto:residency.emergencymed@mcgill.ca)

### EMERGENCY DEPARTMENT

**TELEPHONE:**

**514-843-1610**

**FAX:**

**514-843-2852**

**MUHC EMERGENCY DEPARTMENT DIRECTOR**

**DR JEAN-MARC TROQUET**

**TELEPHONE:**

**514-934-1934 ext. 34277**

**ED SITE DIRECTOR:**

**TBA**

**TELEPHONE:**

**514-934-1934 ext. 34277/36375**

**ED SITE COORDINATORS:**

**DR CHRISTINE MEYERS**

**DR ELISE PAPIILLON**

**TELEPHONE:**

**514-934-1934 ext. 34277**

**EMERGENCY ADMINISTRATIVE ASSISTANT:**

**MS ANNA DEPALMA**

**TELEPHONE:**

**514-934-1934 ext. 34277**

**FAX:**

**514-843-2852**

**E-MAIL:**

[anna.depalma@muhc.mcgill.ca](mailto:anna.depalma@muhc.mcgill.ca)

# JEWISH GENERAL HOSPITAL

*D-010-3755 Cote-Ste-Catherine, Montreal, Qc H3T 1E2*

**LOCATING:** 514-340-8232

## EMERGENCY DEPARTMENT

**TELEPHONE:** 514-340-8222 ext. 3898

**FAX (Office):** 514-340-7519

**FAX (ER):** 514-340-7518

**EMERGENCY DEPARTMENT DIRECTOR:** DR MARC AFILALO  
**TELEPHONE:** 514-340-8222 ext. 5568  
**ROOM:** D-012

**ADMINISTRATIVE SECRETARY:** MS MARIA MENNA  
**TELEPHONE:** 514-340-8222 ext. 5568  
**E-MAIL:** [maria.menna@mail.mcgill.ca](mailto:maria.menna@mail.mcgill.ca)

**DEPARTMENTAL SECRETARIES :** MS ARIELLE KAMINSKY  
MS JOELLE EDERY  
**TELEPHONE:** 514-340-8222 ext. 5568

**SITE COORDINATOR:** DR JONTHAN COOPERMAN  
**TELEPHONE:** 514-340-8222 ext. 5568

**ADMINISTRATIVE COORDINATOR:** MS TASBEEHA (TEE) THOMAS  
**TELEPHONE:** 514-340-8222 ext. 23898  
**FAX:** 514-340-7917

# THE MONTREAL CHILDREN'S HOSPITAL

1001, Decarie, Montreal, Qc, H4A 3J1

## LOCATING:

514-412-4400 ext. 23333

## EMERGENCY DEPARTMENT

TELEPHONE (*medical*):

514-412-4499

TELEPHONE (*surgical*):

514-412-4489

FAX (*ER*):

514-412-4399

EMERGENCY DEPARTMENT DIRECTOR:

TBA

TELEPHONE:

514-412-4400 ext. 22772/23039

FAX:

514-412-4397

SITE COORDINATOR:

DR ANNE-MARIE GOSSELIN

TELEPHONE:

514-412-4400 ext. 22364/23039

E-MAIL:

[anne-marie.gosselin@outlook.com](mailto:anne-marie.gosselin@outlook.com)

MEDICAL TEACHING OFFICE:

MS JUDY BROWNING

TELEPHONE (*students*):

514-412-4400 ext. 24308

TELEPHONE (*residents*) :

514-412-4400 ext. 24475

CHIEF RESIDENTS' OFFICE:

TBA

TELEPHONE:

514-412-4400 ext. 22376/22740

ROOM:

TBA

PAGER:

514-406-2077/514-406-2084



# MONTREAL GENERAL HOSPITAL

B2-117.3-1650, Cedar Ave, Montreal, Qc H3G 1A4

**LOCATING:** 514-934-3333

## EMERGENCY DEPARTMENT

**TELEPHONE:** 514-934-8090

**FAX** (*front desk*): 514-934-8093

**ON-CALL PAGER:** 514-406-0858

**SITE DIRECTOR:** DR KARL CERNOVITCH

**TELEPHONE:** 514-934-1934 ext. 42501

**FAX:** 514-934-8421

**ADMINISTRATIVE OFFICE:** MS SHERLEEN-GABRIELLE FRANCOIS

**TELEPHONE:** 514-934-1934 ext. 42501

**FAX:** 514-934-8421

**SITE COORDINATORS:** DR NADINE LIESEGANG

DR MAI-ANH LEVAN

**TELEPHONE:** 514-934-1934 ext. 42501

**E-MAIL:** [sitecoordinator.mghed@outlook.com](mailto:sitecoordinator.mghed@outlook.com)