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Resident Contact List

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Blair Bigham  
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Rakesh Gupta  
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Dean Vlahaki  
Kenneth Van Dewark  
Laura Morrison  
Saeed Al Qahtani  
Sameer Shaikh  
Steven Skitch  
Audra Smallfield  
Connie Tung  
Donika Orlich  
Fahad Abuguyan  
Ian Buchanan  
Jennifer Thompson  
Krystyna Samoraj  
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Introduction

i. Welcome!
Welcome to the Royal College training program in Emergency Medicine at McMaster University! We are very glad you are here with us, and we hope you find the next five years a very productive and exciting time!

The purpose of this document is to orient the resident to the goals, content and expectations of the program at McMaster. Every residency program encompasses more than a series of clinical rotations. Rather than a simple apprenticeship, the residency program also aims to develop academic skills that will benefit trainees throughout their career.

The Royal College has defined these qualities through the CanMEDS project, with the expectation that teaching, skill development and clinical practice will revolve around this skill-set.

ii. General Goals and Objectives
The Program will assist residents in the development of knowledge and skills in all seven areas described through the CanMEDS documents. The program is roughly divided into academic and clinical components. It should be noted that while the clinical component often receives the most obvious time commitment, the academic component is of at least equal if not greater importance.

The purpose of these sections is to clearly outline the minimum expectations of all residents in the Emergency Medicine program. These expectations can be loosely divided into academic and clinical domains.

Professional conduct is expected at all times by our residents, and we have not outlined specifics regarding such conduct.

You can view the official Royal College documents on the objectives of training and specialty training requirements on the Royal College website.

Above the Royal College CanMEDS diagram depicting the qualities expected of residents. For more info:
http://rcpsc.medical.org/canmeds/index.php
Section 1| Academic Expectations

The Royal College expectation of scholarly development comprises the concepts of self-assessment and self-directed learning, the purpose of which is to foster in residents a lifelong commitment to not only their own learning but also to the learning of others. To that end, residents must not simply study for themselves, but be given opportunities to teach others. Since Emergency Medicine residents are not always given opportunities to teach junior house staff in the Emergency Clinical Teaching Units, they must be given exposure elsewhere.

Section 1A | Academic Half-Day

The primary method of scholarly development is the Academic Half-Day. McMaster University provides “protected time” for the half-day, meaning that all residents must be released from clinical duties to attend. As such, attendance at the half-day is a mandatory activity of greater importance than clinical work. These sessions are essential to your academic growth and will allow you to continually cultivate knowledge in Emergency Medicine both during on-service (i.e. Emergency Medicine) and off-service rotations.

The Program Director and the Residency Program Committee review the core curriculum of the academic half-day on an ongoing basis. Changes are made to reflect the changing nature of the specialty (i.e. the integration of new skills such as Emergency Department ultrasound), and the needs of the residents. The general rotation of topics reflect the “core content” of textbooks such as Rosen’s Emergency Medicine, cycled over a two year period. It is intended that the curriculum will be covered twice during each resident’s time; this is based upon the educational principals of reinforcement, and progressive expectations. Given the time available and the amount of information the residents are required to gain it is not possible to cover the entire content of Emergency Medicine in the half-day; residents are reminded that it is simply an important part of a larger study program and that additional preparation will be required for successful completion of the residency.

**PLEASE NOTE:**

A failure to attend a half day is a serious offense - more so than missing a “call” or clinical shift.

Repeated offenses may be grounds for suspension of privileges or dismissal from the program.

**Rounds Schedule**

*Please note that the location of rounds will vary on a weekly basis.* It is important therefore that residents check the medportal rounds schedule for weekly rounds locations.

**Special Rounds:**

**Rosen’s Rounds:**

Over the first two blocks of the summer, PGY 1 residents will attend Rosen’s Residents Rounds. Rosen’s rounds are intended to cover some of the fundamentals of major core topics in Emergency Medicine (i.e. resuscitation, trauma, paediatrics etc). They will be a combination of lecture and simulation cases. Review of the applicable Rosen’s readings for these rounds is mandatory to achieve the intended goals of these sessions.

**Tintinalli Rounds:**

On the 2nd Thursday of the month, PGY2 residents will join the CCFP(EM) residents in Tintinalli rounds.

**Simulation:**

About one Thursday afternoon per month, PGY2 residents will take part in simulation teaching. Cases are designed to improve resuscitation and team leadership skills.

**Preparing for Half Days**

Topics and schedules are set in advance. When you are not presenting, it is expected that you come prepared as these sessions are supposed to be a discussion of the important concepts and current literature. To prepare, residents will be expected to have read the basic materials (i.e. relevant textbook chapters) so they are able to make meaningful contributions to the discussion. Standard texts such as Rosen’s Emergency Medicine or Tintinalli’s Study Guide and review series such as Emergency Medicine Reports would be considered basic background material. For those in PGY4/5, independent searches for importation literature references will become the standard preparation as these activities will help one to prepare for the exam. Senior residents (PGY4/5) will expect to know all knowledgeable enough to answer questions of their junior residents and guide them through thinking about important concepts and themes.

Each presentation upon completion should be emailed to Melissa Hymers to be put on the AHD-EM website for your future reference.

All objectives and core topics are found in the Appendix D.
Section 1 | Academic Expectations (cont’d)

Presenting at Academic Half Day

The academic half-day also provides a venue for residents to teach their peers and learn the essentials of presentation skills. Therefore all residents are expected to present at least twice per year. Junior residents start by preparing “Case Presentations” and progress to “Major Topics” as their skills develop.

Separate guidelines regarding the “case presentations” and “major topic presentations” will be clarified in separate documents.

A Few Important Points about Presenting at Academic Half Day

| Faculty Advisor | Every resident presentation must have a faculty advisor. Numerous faculty have offered to assist residents by reviewing their topic with them, discussing key points and landmark articles, and giving feedback on their presentation before and after the talk. Faculty Advisors can be selected by the residents based on teaching or content expertise, or can be suggested by the Chief Residents, Assistant Program Director, or Program Director. It is suggested that faculty advisors be selected well in advance of the presentation date (i.e. one month or more) |
| Format | Presentations should be done in PowerPoint or equivalent. |
| Focus | Should focus on key concepts and important recent or “landmark” articles |

Since the preparation of a thorough talk will require a literature search and review it is also an excellent way for residents to learn the material. Residents may not repeat a topic unless specifically asked to do so by the Chief Residents/Program Director.

2013-2014 Academic Half-Day Presentation Requirements

<table>
<thead>
<tr>
<th>PGY</th>
<th>CASES</th>
<th>MAJOR TOPICS</th>
<th>ROSEN ROUNDS</th>
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<td>1</td>
</tr>
<tr>
<td>CCFP-EMs</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Section 1B | Morbidity & Mortality Rounds

All PGY 2, 3, and 4 residents are required to present at M&M rounds at least once per year. Residents will be assigned their presentation date in advance of the round. The requirements for the cases are:

1. The case must involve your own error resulting in morbidity or mortality
2. NO literature review
3. Maximum of 5 slides per case
4. 15-20 minutes per case, most of the time being left for discussion

Any kind of mistake, no matter how small or large, is of educational value. For example, forgetting to check a cap sugar in a patient with altered LOC was an excellent M&M case and led to a change in the way the lab reports glucose.

Further information will be sent to presenters prior to the presentation date.

Section 1C | Journal Club

The program runs a monthly Journal Club to assist in the development of the residents’ critical appraisal skills. Currently these events are held on the second Tuesday evening of each month from September to June.

Residents are expected to attend Journal Club unless they are on-call for an off-service rotation. If a resident is working on-service in Emergency Medicine on the night of Journal Club, they will be released from their shift to attend.

Articles are sent to all residents several weeks prior to each journal club, it is expected that residents will be able to actively engage in a discussion around each set of articles. In order to ensure a worthwhile experience for all, every resident must read the articles in advance and be prepared to discuss each paper, even if they are not assigned to lead the discussion.

Presentations of articles are intended to be a critique of the article rather than a presentation of the article content. Critical appraisal tools are available on Medportal for review of most article types. Visual aids are not required. The EBM Faculty are available in advance of the session if there are questions a presenter wishes to discuss.
Section 1C| Presenting at Journal Club

PREAMBLE
Journal Club is meant to be a concise, evidence-based discussion of issues relevant to clinical Emergency Medicine. The goals of Journal Club are as follows:
- mastery of critical appraisal skills
- introduction to the "classic" Emergency Medicine literature
- opportunity to discuss novel, practice-changing papers

ARTICLE SELECTION
Article selection will be the responsibility of Senior Residents, and will occur on a rotating basis. Three articles are selected each month. With the above goals in mind, the Article Selector is responsible for choosing a theme (e.g., papers grouped by topic, grouped by study type, etc) with the goal of building-in an additional level of education in the process. Every effort should be made to vary the content from month-to-month.

The timeline (preceding journal club) for article selection should be as follows:
- ~2 month: article selection started; support as needed from faculty (see below)
- ~1 month: proposed articles to Chief Resident
- ~2 weeks: articles finalized for distribution to Presenters/Attendees

ARTICLE PRESENTATION
All residents are required to present at Journal Club. With some adjustment, the requirements are as follows:

<table>
<thead>
<tr>
<th>PGY</th>
<th>Requirement</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Presenter</td>
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<tr>
<td>2</td>
<td>Presenter, supported x 1</td>
</tr>
<tr>
<td>3</td>
<td>Presenter, Support x 1</td>
</tr>
<tr>
<td>4</td>
<td>Selector/Moderator/Support</td>
</tr>
<tr>
<td>5</td>
<td>1-2 (Selector/Support)</td>
</tr>
</tbody>
</table>

Tip #1: CONTEXT. Assume all in attendance have read the selected articles. Refresh the memories of those in attendance, but do not give a complete, detailed reiteration of the study (i.e. listing inclusion/exclusion criteria).

Tip #2: INTRODUCTION. Give a brief synopsis of why the study was performed. The PICO statement goes here (http://hsl.mcmaster.libguides.com/POC). This should not take any more than one minute.

Tip #3: CRITICAL APPRAISAL. Go over the criteria in the rubrics provided. Discuss the methods in brief – please do not dwell on the details unless there are of critical importance to the credibility of the paper (Rule #1 applies most strongly here).

Tip #4: DISCUSSION. Give the bottom line and discuss major strengths/limitations of the study. Feel free to elaborate. Provide a sense of where the paper sits within the literature; discuss how the study is (or is not) clinically applicable. Provide an explicit opinion about the paper.

Total time: no more than 5-10 minutes.
Section 1 | Academic Expectations (cont’d)

Journal Club Roles & Responsibilities

<table>
<thead>
<tr>
<th>Role</th>
<th>Responsibility</th>
</tr>
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</table>
| Article selector      | • Choose THREE articles for review. (See above guidelines.)  
                        • Submit articles to Chief Resident/Faculty Support 3-4 weeks prior to your assigned journal club.  
                        • Order and bring food to journal club; expect approximately 50 participants. Confirm with Chief Resident that sufficient cutlery etc is available. Available budget is $450/month.  
                        • The Program will pay for the food ahead of time if an itemized invoice is supplied to Melissa Hymers THREE days in advance of the event.  
                        • If you pay for the food, keep itemized receipt (and credit card receipt, if applicable) and give to Melissa Hymers for reimbursement. |
| Moderator             | • Have a detailed understanding of all critical appraisals and articles to be presented and be prepared to discuss additional details of all studies.  
                        • Prepare three clinical vignettes to be presented prior to each article that highlights the implications for clinical practice.  
                        • Ensure presenters adhere to the all guidelines outlined in this document.  
                        • Time keep and keep discussion on track so that journal club ends within 2-2.5hrs from start. |
| Senior resident*      | • Meet with Junior Resident to refine the critical appraisal  
                        • If no Junior Resident is assigned for the month, you are responsible for both roles. |

*If you are the only resident assigned to the article, you are responsible for both roles.  
**If you cannot present, it is your responsibility to find someone to present your critical appraisal.

Junior Resident

• Adhere to all guidelines presented in this document.  
• Critically appraise article using the most appropriate template. ([https://drive.google.com/a/medportal.ca/folderview?id=0B2xeuxR4Vhq5dEF5aTBJMnZPQVU&usp=sharing](https://drive.google.com/a/medportal.ca/folderview?id=0B2xeuxR4Vhq5dEF5aTBJMnZPQVU&usp=sharing))  
• Meet with and discuss your appraisal with Senior Resident  
• Appraisal must be sent to the Moderator by MIDNIGHT THE FRIDAY BEFORE JOURNAL CLUB.

RESOURCES

ABEM reading lists  
MacPLUS Federated Search  
JAMA Users’ Guide to the Medical Literature  
The Bottom Line  
Emergency Medicine Literature of Note  
Critical Care Reviews

FACULTY SUPPORT

Andrew Worster - HGH  
Jennifer Tang - HGH  
John Crossley - HGH  
Julian Owen - HGH  
Kristin de Wit - HGH  
Michelle Welsford - HGH  
Teresa Chan - HGH  
Andrew Healey - SJH  
Jonathan Sherbino - SJH  
Suneel Upadhye - SJH  
Anthony Crocco - MUMC  
Quang Ngo - MUMC  
Tanya Solano – MUMC
Resident Research Projects
Proposed Timeline

Year 1 – Identify and Develop a Scholarly Project

In the fall of the first year, residents are required to identify a research supervisor. The supervisor will help the resident identify a suitable scholarly project (e.g. primary research, systematic review, quality assurance project, etc.). The resident should aim to have a draft of a project protocol submitted to the research office within the Division of Emergency Medicine. The protocol would outline the study rationale (based on literature review), methods, including study design, inclusion exclusion criteria, data collection strategy, analysis plan, ethics considerations, etc. Once the protocol is approved, the resident should apply for ethics board approval (if applicable) in the spring of first year. By the end of the first year, the resident should have identified the data collection strategy, and put in place a plan to collect any required data.

Residents should refresh research skills (attend library session on conducting literature reviews, review the optional self directed EM division research curriculum, etc.). A progress report must be completed and submitted to the research office in January and June of the first year. The resident is also required to attend scheduled "critical appraisal" sessions.

Year 2 – Present protocol and conduct data collection

Residents are required to present their protocols to the department at the beginning of the PGY2 year. After the protocol is presented, residents should concentrate on collecting and analyzing data. Residents should schedule regular meetings with their project supervisor and/or research team (minimum 2 meetings annually). Progress reports must be completed and submitted to the research office in January and June.

Year 3 – Complete data collection, manuscript preparation

The resident should concentrate on completing any data collection and drafting the manuscript for submission to the research office and their supervisor. The resident should also identify suitable journals for manuscript submission (if applicable), and plan to present at an academic conference (e.g. CAEP, SAEM, ACEP). If analysis is complete, the resident should present project findings at the division research day (late November). Progress reports must be completed and submitted to the research office in January and June.

Year 4 – Presentation of project findings

If the resident has not presented the research findings, he or she should aim to present that the division research day (late November). The resident should also plan to present at an academic conference and/or submit project findings to a journal for consideration of publication (if applicable).

Research Advice

Dr. Mathew Mercuri
Ext: 46950
Email: mercurmd@mcmaster.ca
Section 1F | Evaluations

There are four main types of evaluations:

1) Rotation Evaluations: Following each rotation residents will be asked to evaluate the rotation.

2) Faculty Evaluations: While on EM, Residents will be asked to complete a faculty evaluation after each shift. They are anonymous and will only be given to the faculty in a collated fashion. When off service, residents will be asked to evaluate the faculty they worked with while on that service.

3) Resident Evaluations: While on EM, the EM Program office will take care of collating your daily evaluations and forwarding them to your preceptor to complete your rotation evaluations. When off-service, it is your responsibility to have the staff complete your evaluation of the rotation, called your ITER - In Training Evaluation of Resident. This evaluation must be done face-to-face and within 2 weeks after the completion of the rotation. These evaluations are online. Specific Details on how to access and complete them will be discussed separately.

3) Presentation Evaluations: At each Academic Half-Day you will be asked to evaluate the presenters. Your comments and your scoring of their presentations are then summarized into a document which is given back to the presenter. Just as you will find feedback invaluable on your own presentation evaluations, remember to give ample feedback to your peers (and faculty!) so that they may continue to learn and develop their presentations skills.

Section 1G | Practice Oral Examinations

The oral component of the RCPSC examination is an anxiety-provoking process for nearly all residents. To combat this anxiety and begin the preparation process early, the program conducts regular practice oral exams twice yearly (Spring and Fall) for all PGY 2-4 residents. At each session, residents are scheduled for two to three 45- minute exam sessions with a single faculty examiner. Feedback is given immediately following the session. Residents are evaluated both on the content of their answers and the fluency, structure, organization and completeness of their responses.

PGY1 residents are not required to participate, but are encouraged to “shadow” a senior resident in their PGY1 year, so that they get an idea of the process and format. If you are interested in shadowing a senior resident, please contact the PD/APD.

In the PGY5 year, the program attempts to hold practice oral sessions every 2-3 weeks, to further prepare the graduating residents. These practice orals examinations are more rigorously structured to fit the format of the real RC oral component. At each session, residents are scheduled for one to two 1-hour exams with one or two faculty examiners.

Section 1H | In-training Exams

Each year residents sit two in-training examinations.

1) National Exam (Canadian): Modeled after the Royal College exam, this exam consists of short-answer questions that cover topics that could be seen on the RC exam. Introduced in 2009, this exam is relatively new but gives exposure to RC exam-type questions.

2) ABEM (American): The in-training exam from the US, this is a multiple choice examination that compares us to PGY1-4s in the American EM residencies. Some educational research has shown that scoring > 80% on this exam correlates well with success on the RC Emergency Medicine Written Exam.

3) Program Block Exams: Residents are required to write block exams. These take place 3 times a year and are based on AHD topics. They are short-answer and model the format and content of the RC exam.

Section 1I | Semi-annual Review

Bi-annually, you will meet with the program director. At this meeting you may discuss rotations, conferences attended, research, rounds/journal club attendance, any exam results, your special interests or career plans, vacation plans, or current evaluation status.
Section 1J | Guidelines for Electives

Residents in the Emergency Medicine program are strongly encouraged to pursue their interest through careful selection of elective time. However, given the wide range of options and electives and the difficulty in comparing rotations across a broader range of disciplines and sub-disciplines, the following requirements are necessary for any elective requests. Any requests for electives in the upcoming year must be submitted with the annual rotation plan requests to be discussed at the Spring meeting of the REC.

- For electives taken in existing rotations offered by programs at McMaster University, the name and date of the rotation must be provided, as well as the supervisor if it is physician-based. If this rotation is not currently part of the Emergency Medicine program (i.e. a rotation offered in another residency program), the resident must also submit objectives and evaluations sheets.

- For rotations outside McMaster University but within the province of Ontario, residents must again submit names, dates and rotation supervisor. If this rotation is equivalent to one offered at McMaster University, the same objectives and evaluation forms may be used provided it is agreeable to the supervisor at the elective site.

For electives outside the province of Ontario or outside of Canada, approval must also be granted by the Dean of Postgraduate Education, currently Dr. Mark Walton. This will be coordinated by the EM Admin Office.

- Any elective that is not a pre-existing rotation must have newly developed objectives, evaluation forms and an identified supervisor. These electives must be approved in advance by the REC prior to being confirmed.

- All electives should be confirmed by the time of rotation planning. Any changes to confirmed electives or electives that have received conditional approval must be completed three months prior to the onset of the elective.

Section 1K | Defining a Resident in Good Standing

See Appendix D for complete details.

The “In Good Standing” criteria are below. Details are contained in Appendix D.

<table>
<thead>
<tr>
<th>Year</th>
<th>Academic Presentations*</th>
<th>Rounds &amp; Journal Club Attendance</th>
<th>ABEM</th>
<th>Research</th>
<th>ITERS</th>
<th>Practice Orals</th>
</tr>
</thead>
<tbody>
<tr>
<td>PGY1</td>
<td>1 case, 1 JC Article</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>PGY2</td>
<td>2 cases, 1-2 JC Articles</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PGY3</td>
<td>1 case, 1 core 1 JC Article, 1 JC Moderation</td>
<td>90% eligible 70% total</td>
<td>Meet/ exceed cohort median score</td>
<td>See research section</td>
<td>All Satisfactory. No unremediated provisional satisfactory or unsatisfactory evaluations.</td>
<td>Attend 100% Performs at expected level</td>
</tr>
<tr>
<td>PGY4</td>
<td>3 core, 1 JC Article 1 JC Article Selection/Moderation</td>
<td></td>
<td>Meets/ Exceeds 80%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PGY5</td>
<td>2 core, 1 Rosen round 1 JC Article 1 JC Article Selection</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Key: JC=Journal Club, Rosen Rounds are counted as 2 core presentations
Eligible Half Days are those when not on vacation/PL/Post Call

* The number of presentations per year will vary depending on the number and PGY distribution of residents in the program. After consultation with the PD and the APD, the chief residents will determine and circulate the final number and type of presentations per resident per year.
Section 1L | Scholarly Project

The RC Emergency Medicine stream has always offered flexibility to develop an area of special interest – whether that be clinical or academic.

Since the 2008 Revision of the RC Requirements & Objectives in Training this has now formally become incorporated into the program.

As per the RC Requirements, a resident must complete:

“1.3. A minimum of six (6) months devoted to achieving particular expertise either in a scholarly activity or a clinical area, pertinent to the practice of the specialty of Emergency Medicine. This activity must be clearly identifiable and structured, with specific activities, objectives, and measurable goals. This activity must be formally approved by the program. Some examples of these areas of expertise are: education, clinical research, health care management, pre-hospital care, pediatrics, toxicology, and critical care.”

Suggested Timeline for developing your Special Project

| PGY 1 | • Discuss with various senior residents and staff persons regarding various types of special projects.  
  |       | • Review the RC Requirements of Training to determine if you will have enough time to complete the aforementioned task. |
|       | • Narrow down your choices for the special projects |
|       | • Investigate prospective opportunities (logistics, time requirements, academic requirements) |
|       | • Discuss prospects with Program Director at December/January Semi Annual Review |
| PGY 3 | • Decide on special project |
|       | • Make relevant applications (especially if considering graduate studies or subspecialty training) |
|       | • Develop a Proposal for REC (due in Spring of PGY3) |

Areas explored by residents in the past:
- Ultrasound
- Critical Care
- Sports Medicine
- Toxicology
- Disaster Medicine
- Trauma
- Administration
- Education
- Clinical Epidemiology
- Pre-hospital medicine

Remember, the senior residents, faculty and your program director are resources for you when thinking about these opportunities.
Section 2 | Clinical Expectations

Residents are expected to perform the duties assigned to them by the supervisor on the service they are currently rotating through. Although the Goals and Objectives of the Emergency Medicine program may not include all activities on the rotation, residents are still responsible for meeting the expectations of the supervisor.

Section 2A | Mandatory Rotations

<table>
<thead>
<tr>
<th>Rotations Required of Residents**</th>
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<td><strong>PGY 1: Basic Clinical Training Year</strong></td>
</tr>
<tr>
<td>EM (HHS or SJH), 4 blocks</td>
</tr>
<tr>
<td>Internal Medicine, 2 blocks</td>
</tr>
<tr>
<td>General Surgery, 2 blocks</td>
</tr>
<tr>
<td>Pediatrics/PEM 2 blocks</td>
</tr>
<tr>
<td>Obstetrics and Gynecology, 1 block</td>
</tr>
<tr>
<td>Anesthesia, 1 block</td>
</tr>
<tr>
<td>Orthopedic Surgery, 1 block</td>
</tr>
<tr>
<td><strong>PGY 2</strong></td>
</tr>
<tr>
<td>EM (HHS/SJH), 11 blocks</td>
</tr>
<tr>
<td>Peds EM (MUMC/CHEO), 2 blocks</td>
</tr>
<tr>
<td>Longitudinal EMS Block</td>
</tr>
<tr>
<td><strong>PGY 3 Off-service, Consultation Year</strong></td>
</tr>
<tr>
<td>CCU/Cardiology, 1 block</td>
</tr>
<tr>
<td>ICU/Critical Care, 3 blocks</td>
</tr>
<tr>
<td>Pediatric ICU, 1 block</td>
</tr>
<tr>
<td>Community EM, 2 blocks</td>
</tr>
<tr>
<td>Trauma, 1 block</td>
</tr>
<tr>
<td>Selectives¹</td>
</tr>
<tr>
<td><strong>PGY 4</strong></td>
</tr>
<tr>
<td>EM (HHS and SJH), 10 blocks</td>
</tr>
<tr>
<td>Peds EM, 2 blocks</td>
</tr>
<tr>
<td>Selectives²</td>
</tr>
<tr>
<td>Electives³</td>
</tr>
<tr>
<td><strong>PGY 5</strong></td>
</tr>
</tbody>
</table>

¹PGY 3 selectives: Plastics, Orthopedics, Trauma, Research, Radiology Neurosciences, Consult Medicine, Family Medicine, OB/GYN, Community Anesthesia, Thoracics
²PGY 4/5 selectives: as above, or may be used as additional Emergency Medicine or Specialty Project time
³Electives: must be approved by the RPC, may be used as additional Specialty Project time
⁴Specialty Project: As per the Royal College of Physicians and Surgeons Specialty Training Requirements for Emergency Medicine. The project must be a minimum of 6 months in length, and may be extended depending on the personal objectives of the resident. A proposal for the project must be submitted to the RPC via the Program Director at least six months prior to commencement. Examples include (but are not limited to): education, research/clinical epidemiology, administration/health care management, pre-hospital care, pediatrics, toxicology, critical care, trauma, and sports medicine. Additional information about the specialty project is available on the Royal College Website.

** These requirements are reviewed annually by the REC and are subject to changes approved by this body. As well, all requirements are subject to change as per the Royal College.

Section 2B | Preceptoring

The Emergency Medicine Clinical Teaching Units currently use a preceptoring evaluation model for all residents. Junior residents are generally assigned one preceptor for each 2-month block.

Senior residents at the PGY3/4/5 level will choose a new preceptor for each month. Residents may choose the same preceptor for a maximum of two blocks in an academic year.

Residents should discuss any individual learning goals with their preceptor. If multiple senior residents are on the same rotation, they must communicate with each other to ensure they have different preceptors (see section 2G: Senior Scheduling Guidelines).

Upon agreeing to the preceptor relationship, the Staff Physician must:

1) Discuss objectives for the rotation with the resident and meet regularly over the rotation to assess progress.

2) Gather feedback from other attending physicians and provide feedback at the midpoint of the rotation, which should be in written form if there are concerns.

3) The supervisor is ultimately responsible for the resident’s ITER, however the CTU director may complete it at their discretion.

Should the preceptor need to make shift changes after the resident schedule is out, it is their responsibility to inform the resident. The resident may decide to work with the attending taking the shift, or follow their preceptor provided it does not conflict with another resident on the new shift — in either case the CTU director must be informed of and approve the switch.

The Resident must:

1) Meet with the preceptor to discuss objectives at the beginning of the rotation

2) Be available to meet for midterm and final evaluation.

3) Work at least 6 of their shifts/block with their preceptor.

Residents are expected to perform the duties assigned to them by the supervisor on the service they are currently rotating through. Although the Goals and Objectives of the Emergency Medicine program may not include all activities on the rotation, residents are still responsible for meeting the expectations of the supervisor.
Section 2C | Expectations of Residents

Shift Requirements
It is essential that residents be present for a certain number of shifts in a given block. This is to ensure that the resident is able to complete the requirements of the rotation as well as be around enough to be properly evaluated. The exact number of shifts per block/duration of the shifts are variable depending on the level of the resident. This number is prorated for vacation/PL and other time off and may be variable if shifts are also done in conjunction with other activities e.g. scholarly work, fellowships etc. Although there is no fixed minimum, as a general rule a resident must be present for at least 75% of the rotation to be properly evaluated.

General Conduct and Expectations
On service residents are expected to:
1) Arrive 15 minutes before a shift, in order to change and be ready to start on time
2) Review your goals and expectations for the day with the attending ERP
3) Follow through on all patients seen, and if necessary to hand over a patient at the end of your shift – discuss it with the Attending ERP prior to leaving.
4) Discuss all patients with the attending ERP prior to disposition, unless as a senior you have been advised to do otherwise – by the attending on duty for that particular shift.
5) If carrying a pager: Answer all pages in a timely manner; *1 immediate, *2 <5 minutes, *3 <15 minutes.

Specific Expectations by Post-Graduate Year

| PGY 1 | • Focus on history and physical examination skills
|       | • Focus on developing an appropriate differential diagnosis
|       | • Focus on initiating management plan
|       | • Develop laboratory and radiology interpretation skills
|       | • Exposure to the breadth of emergency medicine
|       | • Get an introduction to the emergency medicine environment
|       | • Review all cases with staff
|       | • Staff determine management plan in concert with resident

| PGY 2 and 3 | All of the above plus:
|             | • Focus on refining history and physical examination skills and prioritizing differential diagnoses
|             | • Focus on becoming efficient at patient assessments
|             | • Develop and implement a detailed management/investigation plan and liaise with referral services
|             | • Focus on deciding upon and effecting patient disposition
|             | • Participate in teaching with clinical clerks and junior house staff
|             | • Review all cases with staff
|             | • Staff determine management plan in concert with resident
|             | • Teach junior house staff with supervision

| PGY 4 | All of the above, plus:
|       | • Focus on details of patient management
|       | • Become aware of patient flow considerations
|       | • Effect thorough management and disposition of patients
|       | • Manage an area of the department independently with supervision
|       | • Teach house staff with minimal supervision
|       | • Participate in ancillary activities with minimal staff intervention
|       | • Participate in ancillary activities such as the patch phone and trauma cases with supervision
|       | • Address administration details in the emergency room with supervision
|       | • Work closely with staff to refine practice pattern
|       | • Resident determines management plan in concert with the staff

| PGY 5 | All of the above, plus:
|       | • Focus on total patient management
|       | • Manage an area of the department with minimal staff intervention
|       | • Handle administrative issues in the department with supervision
|       | • Teach house staff
|       | • Fill the role of staff physician with teaching and refinements of technique by staff
Section 2D | Scheduling
Junior Residents are scheduled by the CTU director or their designate. Most CTUs will ask residents to submit day-off requests prior to setting the schedules. As per the PARO-CAHO Collective Agreement, resident schedules should be finalized and distributed to residents 2 weeks prior to the start date of the rotation.

Senior Residents have the privilege of self-scheduling and are not scheduled by the CTU director or designate. They are responsible for ensuring that their schedules meet the following requirements: See Senior Scheduling Guidelines

Section 2E | Vacations
McMaster University’s vacation policy is available on the PGE website. Each resident is allotted 20 Vacation days per academic year (July 1 – June 30). Vacation time not used during this period will be lost and cannot be carried over. Electronic vacation requests can be made on the medportal vacation scheduler. If you have questions please contact Melissa Hymers and should be forwarded to her attention by email (hymers@mcmaster.ca) or fax (905-577-8457). Requests will then be forwarded onto the appropriate coordinator for approval. As the PARO-CAHO Collective Agreement, all requests should be submitted at least four weeks (6 weeks are recommended) prior to the commencement of the proposed time off and will be approved or denied within 2 weeks of the submission. Please note section 2C regarding minimum shift requirements, which are to be honoured even considering vacation.

Please keep in mind that many rotations evaluate each month separately (i.e. ICU, EM) such that vacations may be limited to one week (25% of the rotation). Residents wishing to take vacations longer than two weeks should discuss with the Program director at the beginning of the year. Vacations of 4 weeks are allowed but must be taken as a “block” in place of a rotation. Although lieu days may be accumulated and used on EM, it will not change shift counts on an EM block unless used with a vacation day. In general 2 days off (Vacation/PL/Lieu Days) will translate to a 1-shift reduction.

Section 2F | Reimbursements
You are reimbursed for some academic-related activities over the year. The program will reimburse up to $500 per academic year pending achieving 90% attendance at Academic Half Day. The two main subsidies you receive are with regards to: (a) Conferences; (b) CHEO Accommodations; (c) ACLS/ATLS/PALS

(a) Conference: Professional Days are available to attend approved conferences. Each resident is allotted seven (7) Professional Leave days. Requests should be submitted to Melissa Hymers on the online Medportal Vacation Request System. If you are a presenter at a conference, you may be reimbursed. Please see Teresa Vallera for more details. You will need to bring all documents which include: All original receipts (no photocopies), flight & boarding passes, certificate of attendance, proof of paid registration fees (credit card statement). All approved submissions will be put onto a University expense report. Payments can be expected between 4 and 6 weeks after expense report has been submitted to finance.

(b) CHEO Accommodations: $600 per month is available for your accommodations while in Ottawa. A list of people in the community who have rooms available for rent is provided below. Please make arrangements for your accommodations early in July.

(c) ACLS: The Postgraduate Medical Education Office (PGE) pays for all PGY1s to gain their ACLS certification. Ask Teresa Vallera.

(d) Equipment: You may also submit receipts for equipment such as laptops, computers, iPads, etc.
Section 2G | Senior Scheduling Guidelines

Last updated: May 2014

The following applies to EM residents in PGY3 or higher during emergency department rotations at St. Joseph’s Hospital and The Hamilton Health Sciences. In does not apply to rotations in Brampton, CHEO or MUMC Children’s ED.

Preamble:
Senior EM Residents have the privilege of being able to self-schedule during their Senior EM Rotations. This is intended to allow residents to choose who they work with to maximize the educational needs of the resident and to allow them to schedule around study sessions and other projects that are undertaken in more senior years.

Shift Requirements:
• Senior Residents are required to work 15 shifts per 28 day block
• Residents taking vacation will receive a shift reduction based on the following:
  • 4 Shift Reduction for each week (7 days) of vacation or PL, or for fractions of a week:
  • 1 Shift reduction for every 2 days taken as vacation or PL
• Approximately 50% of shifts must be non-day shifts (e.g. 15 shifts = 7 non-day shifts)
• Residents must work a minimum of 2 night shifts per block
• Residents must work a minimum of 4 weekend shifts (Friday Overnight/All Day Saturday/All Day Sunday) per block
• In general shift scheduling must follow the rules laid out for shift work in the PARO-CAHO Collective Agreement:
  • A minimum of 12 hours off between shifts
  • Residents may not work more than 60 hours per week including other scheduled activities
• Stacking shifts, i.e. scheduling all shifts in a shorter period in order to get consecutive days off is not permitted

FRCPG PGY5 Residents receive a shift reduction from Block 8–11 and receive additional time off for exam purposes. Specific details will be communicated to the PGY5 Residents by the CTU Director in Block 6.

Protected Time:
Residents may not be scheduled for shifts before or during academic half day (Wednesday night shifts or day shifts on Thursday). Residents may work after noon on Thursday after attending AHD as long as there are no other academic requirements in the afternoon (Practice Orals etc.).
• Residents may not be scheduled to work during Journal Club (The 2nd Tuesday of every month)

Preceptors and Preceptor Section:
Residents may choose their own preceptors with the following conditions:
• Preceptors for Senior Residents must have completed their EM residency at least 1 year prior to the rotation
• The CTU Director and/or Program Director may limit which preceptors residents can choose as their preceptors based on the educational needs of the resident.
• Residents may choose the same preceptor for a maximum of 2 blocks per academic year
• Preceptors may only have one senior resident per block
• Residents must be scheduled to work a minimum of 6 shifts per block with their preceptor

Switching Shifts:
Once the schedule has been submitted to the CTU Director, any changes to shifts must be approved by the CTU Director

Site Specific Scheduling:

St. Joseph’s Hospital
Senior residents will work 13 shifts at the downtown site and 2 shifts at the UCC per block.

Hamilton Health Sciences
• Senior Residents may not overlap at the HGH Site during the 0700 and 1000 shifts as there is insufficient volume to support two senior residents. The 1500 resident can start at 1300 if there is no 1000 resident.
• Senior Residents may choose to start the JCC Evening Shift (1500 – 2300*) at 1700 and work till 0100

Holiday Scheduling in December:
• Residents are entitled to 5 consecutive days off over either Christmas or New Years. The exact dates of these blocks will be circulated to residents in advance of the holiday period.
• Prior to this period The CTU Director will determine the holiday preferences of all Senior Residents working over the holiday period.
Section 2G | Senior Scheduling Guidelines (cont’d)

- If the number of senior residents at HHS or SJH requesting each block is even, residents will receive their stated choice. If not the most requested block will be assigned by lottery
- Residents must work at least 3 shifts over the holiday period they are assigned to work in
- Residents may also choose to work through both the Christmas and New Year period. In that case residents will be granted 5 consecutive days off that they can use as vacation time at a time of their choosing, as long as service and professional requirements are met.

Senior Schedule Coordination:
Prior to the start of the academic year, the chief residents will assign a Senior Resident to be the Schedule Coordinator for each site/block. This should ideally be someone who is working at that site in that block, however this is not required. The Schedule Coordinator is responsible for ensuring that the schedule is completed in a timely fashion.

4 weeks prior to the Start of the Block:
The CTU Director will send a copy of the staff schedule, a list of senior residents working at each site and a blank schedule template for the block to the Schedule Coordinator for each site

3 weeks prior to the Start of the Block:
The completed Senior Schedule must be submitted to the CTU Director

2 weeks prior to the start of the Block:
The completed Schedule is completed and circulated as required by the PARO-CAHO Collective Agreement A mutually agreed upon system for choosing shifts should be established. A suggested approach is as follows:
The Schedule Coordinator randomly assigns the order of residents (A, B, C D, E etc.).
- Resident A chooses their preceptor and 6 preceptor shifts first
- Resident B chooses their preceptor and 6 preceptor shifts second
- Resident C chooses their preceptor and 6 preceptor shifts third
- Resident D chooses their preceptor and 6 preceptor shifts fourth
- Resident E chooses their preceptor and 6 preceptor shifts fifth
- Resident E chooses remaining shifts first
- Resident D chooses remaining shifts second
- Resident C chooses remaining shifts third
- Resident B chooses remaining shifts fourth
- Resident A chooses remaining shifts fifth

Where required the CTU Director is available to assist/arbitrate conflicts, however as professionals, residents are generally expected to manage this process independently
Section 2H | Restricted Registration

The McMaster Emergency Medicine program is a participant in the provincial Restricted Registration (RR) program. The following is a summary of the yearly requirements that should be met by residents seeking RR licensing. Please note that though you are eligible, you must independently apply for a special RR license through the CPSO registration committee. Please see the RR website for more information (http://restrictedregistrationontario.ca/) on the process, which requires fees and has strict deadlines. When applying please note that fees for an RR license must be paid on a yearly basis for each job site regardless of how much of the year is spent working.

Guidelines for RR:
• Can apply at the end of PGY3 for starting in PGY4
• Limited to 1 additional shift/week
• Governed by PAIRO agreement with regards to hours
• ICU CCCA shifts only opportunity at present (other opportunities may be reviewed by REC in future)
• Subject to review every 6 months

Yearly Requirements to be Eligible for Restricted Registration

| Entering PGY 4 | Rounds attendance: Demonstrate adequate attendance according to previously established regulations |
|               | Journal Club attendance: Demonstrate adequate attendance according to previously established regulations |
|               | ITERS: All in PGY 2/3 minimum “Meets Expectations” |
|               | ABEM Examination: Meets/exceeds cohort median score in PGY3. |
|               | Research: (a) Presented at least once at research day (b) Major project – minimum completed literature search and proposal |
|               | Practice orals: Minimum “At expected level” for last 2 practice orals |
|               | Academic presentations: (a) Rounds; (b) Journal club as set per annum |

| Entering PGY 5 | Rounds attendance: Continues to demonstrate adequate attendance according to previously established regulations |
|               | Journal Club attendance: Continues to demonstrate adequate attendance according to previously established regulations |
|               | ITERS: All in PGY 2/3/4 minimum “Meets Expectations” |
|               | ABEM: Meets/exceeds 80% in PGY4 |
|               | Research: Project should be complete/presented or very near to completion |
|               | Practice oral examinations: Minimum “At expected level” for last 2 program practice oral exams |
|               | Academic presentations: (a) Rounds; (b) Journal club as set per annum |
|               | RR May not be done during the period after block 7 when PGY4s have a shift reduction |
Section 3A | Introduction to the Mentorship Program

Thank you for your participation in the Emergency Medicine mentorship program. We are very excited to have so many staff and residents interested in mentorship. In fact, we have had such interest and support that it resulted in more staff in each mentorship group than residents.

The program has been designed utilizing “mentorship groups”. Residents were given a questionnaire and asked to identify both their staff and resident mentors. Accordingly, the groups have been designed with an attempt to match the residents with their respective staff and resident mentors.

Included below is a description of the program and of some of the activities which should be incorporated into your mentorship groups. Also, included is a list of the members assigned to each group. As this is a new program, we welcome feedback and suggestions to further develop and improve on our mentorship process.

Again, many thanks for your participation.

Karen C. Schiff

MD, FRCPC
Assistant Program Director RCPS - EM Residency Program
Assistant Clinical Professor
McMaster University
Section 3 | Mentorship Program (cont’d)

Section 3B | Structure and Objectives of the Program

1. Staff and mentorship groups:
   
a. Combination of both FRCPC residents as well CCFP-EM residents and staff

b. One / Two resident(s) from each year per group

c. Junior residents should identify individual senior resident mentors within their groups

NB: please see page 4 for staff / residents with specific sub-speciality interests. Please note that even if a staff is not assigned to your specific mentorship group, feel free to approach that individual for guidance and assistance.

2. Meetings:

   a. Meet and greet: Mentorship groups should meet early in the academic year to welcome new members and reconnect with the group. At this meeting, group and individual objectives should be set by the residents for the year to meet the individual / group needs.
      
      i. Suggest social event (i.e. lunch / dinner)

      ii. Determine plan for the year by identifying resident goals / discussion topics for year (possible discussion topics include: Balancing personal and professional life during residency, relationships during residency, organizational skills, leadership opportunities, sub-speciality opportunities, managing work load and time management skills, communication / collaboration amongst colleagues)

      iii. Distribute welcome package and contact lists

   b. Groups should try to meet three additional times throughout the year with each meeting / event having a different focus / goal / objective to cover.

      i. Throughout the year:
         1. provide supervision / guidance for resident academic half day presentations and attempt to attend precepted presentation during half day

         2. Provide individual guidance to residents including career and subspecialty interests

         3. Provide support to residents if conflict, concern or weaknesses are identified

   Protected Time: please note that there will be four protected evenings for mentorship meetings. The first Wednesday evening in Sept, December, March and June will be protected for mentorship groups to meet.

3. Annual mentorship program excursion (for all involved in the program):
   
a. Baseball game or other sporting event; Theme park; concert

4. Annual mentorship award (resident and staff) presented at excellence in teaching dinner held in the spring.
### Section 3C | Mentorship Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Staff</th>
<th>Junior RC Residents</th>
<th>Senior RC Residents</th>
<th>EM Resident</th>
</tr>
</thead>
</table>
| 1     |       | 1. B. Bigham  
2. R. Gupta  
5. D. Vlahak  
6. F. Abuguyan  
7. K. Samoraj  
8. A. Nayar | A. Davis |
| 2     |       | 1. S. Bazak  
2. C. Skappak | 3. J. Hernandez  
4. L. Morrison  
5. A. Althenayan  
6. I. Buchanan  
7. F. Allendes | K. Dorosh |
| 3     |       | 1. S. Al Maqbali  
2. D. Clinkard | 1. K. Rigg  
2. A. Chorley  
3. C. Tung  
4. K. Caners | K. Hagerman |
## Mentorship Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>Staff</th>
<th>Junior RC Residents</th>
<th>Senior RC Residents</th>
<th>EM Resident</th>
</tr>
</thead>
</table>
| 4     | 1. Dr. Healey  
2. Dr. Opie  
3. Dr. MacDonald  
4. Dr. Ackerman  
5. Dr. Krizmanich  
6. Dr. Miller  
7. Dr. Jalayer  
8. Dr. Chan  
9. Dr. Greenwald  
10. Dr. Cowan | 1. L. Cook-Chamowitz  
2. S. Luckett-Gatopoulos  
3. S MacDonald | 1. A. Hawley  
2. S. Skitch  
| 5     | 1. Dr. Preyra  
2. Dr. Kerr  
3. Dr. Grenier  
4. Dr. Cherian  
5. Dr. McClennan  
6. Dr. Waines  
7. Dr. Baw  
8. Dr. Sollazzo  
9. Dr. Hanel  
10. Dr. Zaki | 1. M. Althobity  
2. S. Sharif | 1. J. Taves  
4. S. Al Qahtani  
5. K. Van Derwark  
6. S. Sandhanwalia | 1. D. Major Galasso |
| 6     | 1. Dr. Mallin  
2. Dr. Price  
3. Dr. Marshall  
4. Dr. Caron  
5. Dr. Crossley  
6. Dr. Kam  
7. Dr. Langmann  
8. Dr. Atrie  
9. Dr. Quinlan  
10. Dr. VanDiepen | 1. A. Asghar Mulla  
2. C. Heyd | 1. M. Piotrowski  
4. S. Shaikh  
5. A. Smallfield  
## Section 3D | Suggested Mentors for Subspecialty Interest

<table>
<thead>
<tr>
<th>Staff</th>
<th>Specialty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. M. Welsford</td>
<td>EMS</td>
</tr>
<tr>
<td>Dr. J. Sherbino, Dr. M. Ackerman, Dr. T. Chan, Dr. K. Caners*, Dr. A. Chorley*, Dr. D. Orlich*</td>
<td>Education</td>
</tr>
<tr>
<td>Dr. P. Miller, Dr. A. Pardhan, Dr. I. Preyra, Dr. W Krizmanich, Dr. C. Massarella</td>
<td>Administration</td>
</tr>
<tr>
<td>Dr. S. Upadhye, Dr. A. Worster, Dr. K. De Wit</td>
<td>Research</td>
</tr>
<tr>
<td>Dr. B. Baw</td>
<td>Toxicology</td>
</tr>
<tr>
<td>Dr. I. Preyra, Dr. J. Sherbino, Dr. P. Channan, Dr. D. Quinlan, Dr. J. Owen, Dr. F. Abuguyan*</td>
<td>Trauma</td>
</tr>
<tr>
<td>Dr. I Preyra, Dr. K. Schiff</td>
<td>Coroner/Forensics</td>
</tr>
<tr>
<td>Dr. I. Price, Dr. J. Thompson*</td>
<td>Sports Medicine</td>
</tr>
<tr>
<td>Dr. A. Healey, Dr. J. Owen</td>
<td>Critical Care Medicine</td>
</tr>
<tr>
<td>Dr. B. Mallin, Dr. D. Atrie</td>
<td>Anesthesia</td>
</tr>
<tr>
<td>Dr. C. Massarella, Dr. M. Liebregts</td>
<td>International Health</td>
</tr>
<tr>
<td>Dr. R. Valani, Dr. A. Pardhan, Dr. A. Kam, Dr. H. Cowan, Dr. K. Samoraj*, Dr. A. Smallfield*</td>
<td>Pediatrics</td>
</tr>
</tbody>
</table>
### Suggested Staff Mentors for Subspecialty Interest (cont’d)

<table>
<thead>
<tr>
<th>Staff</th>
<th>Specialty</th>
</tr>
</thead>
</table>
| Dr. P. Channan  
Dr. M. Welsford  
Dr. T. Chan | Disaster Medicine        |
| Dr. J. MacDonald | Aero-medical/Hyperbarics |
| Dr. A. Healey  
Dr. M. Hayward  
Dr. B. Trotter  
Dr. K. Van Diepen  
Dr. I Buchanan*  
Dr. S. Sandhanwalia*  
Dr. S. Skitch*  
Dr. D. Vlahaki* | Ultrasound               |
| Dr. K. Caners*  
Dr. D Orlich*  
Dr. A. Chorley* | Simulation               |
| Dr. J. Fan | Geriatrics               |

*Resident with subspecialty interest*
## Appendix A | Important Dates

### Emergency Medicine

Important Dates – 2015-2016 Academic year

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration Course (PGY 4 Residents)</td>
<td>Thursday, September 10, 2015&lt;br&gt;Thursday, November 5, 2015&lt;br&gt;Thursday, February 4, 2016&lt;br&gt;Thursday, May 5, 2016</td>
<td>1300 – 1600hrs</td>
</tr>
<tr>
<td>PGY 5 Practice Orals</td>
<td>Thursday, October 15, 2015&lt;br&gt;Thursday, November 5, 2015&lt;br&gt;Thursday, December 10, 2015&lt;br&gt;Thursday, January 14, 2016&lt;br&gt;Thursday, February 11, 2016&lt;br&gt;Thursday, March 10, 2016&lt;br&gt;Thursday, March 24, 2016</td>
<td>1230 – 1600hrs</td>
</tr>
<tr>
<td>Program Event</td>
<td>Thursday, September 3, 2015</td>
<td>1200 – 1800hrs</td>
</tr>
<tr>
<td>CITE Exam</td>
<td>Thursday, November 12, 2015</td>
<td>0830 – 1300hrs</td>
</tr>
<tr>
<td>Research Day Liuna Station</td>
<td>Thursday, November 26, 2015</td>
<td>0830 – 1330hrs</td>
</tr>
<tr>
<td>Holiday Brunch</td>
<td>Thursday, December 17, 2015</td>
<td>0830 – 1400hrs</td>
</tr>
<tr>
<td>CaRMS Social</td>
<td>Tuesday, January 26, 2016</td>
<td>1700hrs – 2300hrs</td>
</tr>
<tr>
<td>CaRMS Interviews</td>
<td>Wednesday, January 27, 2016</td>
<td>All Day</td>
</tr>
<tr>
<td>Resident Retreat</td>
<td>Friday, March 4, 2016</td>
<td>All Day</td>
</tr>
<tr>
<td>ABEM</td>
<td>Wednesday, February 24, 2016</td>
<td>0800 – 1400hrs</td>
</tr>
<tr>
<td>Practice Orals - Fall Session (PGY 2 – 4 Residents)</td>
<td>Thursday, October 1, 2015&lt;br&gt;Thursday, October 8, 2015</td>
<td>1230 – 1630hrs</td>
</tr>
<tr>
<td>Practice Orals - Spring Session (PGY 2 – 4 Residents)</td>
<td>Thursday, April 7, 2016&lt;br&gt;Thursday, April 14, 2016</td>
<td>1230 – 1630hrs</td>
</tr>
<tr>
<td>EMS Orientation (PGY 2 Residents) CPER Office</td>
<td>Thursday, July 16, 2015</td>
<td>1300 – 1700hrs</td>
</tr>
<tr>
<td>EMS Exam (PGY 2 Residents)</td>
<td>Thursday, April 7, 2016</td>
<td>1200 – 1330hrs</td>
</tr>
<tr>
<td>EMS Orals (PGY 2 Residents)</td>
<td>Thursday, April 7, 2016&lt;br&gt;Thursday, April 14, 2016</td>
<td>1330 – 1600hrs&lt;br&gt;1230 – 1600hrs</td>
</tr>
<tr>
<td>EMS – CQI Presentations (PGY 2 Residents)</td>
<td>Thursday, May 5, 2016</td>
<td>1230 – 1700hrs</td>
</tr>
<tr>
<td>10:EM – RBG</td>
<td>Friday, October 16, 2015</td>
<td>All Day</td>
</tr>
</tbody>
</table>
## Appendix A / Important Dates (cont’d)

### Emergency Medicine

**Important Dates – 2015-2016 Academic Year**

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Time</th>
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</thead>
<tbody>
<tr>
<td>PGY 1 Simulation</td>
<td>Thursday, July 16, 2015 Thursday, July 23, 2015 Thursday, July 30, 2015 Thursday, August 6, 2015 Thursday, August 13, 2015</td>
<td>1300 – 1600hrs</td>
</tr>
</tbody>
</table>
## Appendix B | Emergency Contact List

<table>
<thead>
<tr>
<th>Person</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dr. Alim Pardhan</strong>&lt;br&gt;Program Director&lt;br&gt;HGH- McMaster Clinic 2nd Floor, Room 256</td>
<td>Phone (905) 521-2100 Ext. 76212&lt;br&gt;Fax (905) 521-2337&lt;br&gt;<a href="mailto:pardhaa@mcmaster.ca">pardhaa@mcmaster.ca</a></td>
</tr>
<tr>
<td><strong>Dr. Karen Schiff</strong>&lt;br&gt;Assistant Program Director&lt;br&gt;HGH- McMaster Clinic 2nd Floor, Room 254</td>
<td>Phone (905) 522-2100 Ext. 74948&lt;br&gt;Fax (905) 577-8457&lt;br&gt;<a href="mailto:karen.schiff@medportal.ca">karen.schiff@medportal.ca</a></td>
</tr>
<tr>
<td><strong>Teresa Vallera</strong>&lt;br&gt;Program Administrator&lt;br&gt;HGH – McMaster Clinic 2nd Floor, Room 254</td>
<td>Phone (905) 521-2100 Ext. 76207&lt;br&gt;Fax (905) 521-2337&lt;br&gt;<a href="mailto:vallera@mcmaster.ca">vallera@mcmaster.ca</a></td>
</tr>
<tr>
<td><strong>Melissa Hymers</strong>&lt;br&gt;Education Program Associate&lt;br&gt;HGH – McMaster Clinic 2nd Floor, Room 252</td>
<td>Phone (905) 521-2100 Ext. 76993&lt;br&gt;Fax (905) 577-8457&lt;br&gt;<a href="mailto:hymers@mcmaster.ca">hymers@mcmaster.ca</a></td>
</tr>
<tr>
<td><strong>Dr. Cathy Sellens</strong>&lt;br&gt;HHS CTU Director</td>
<td><a href="mailto:sellens@cogeco.ca">sellens@cogeco.ca</a></td>
</tr>
<tr>
<td><strong>Dr. Amna Zaki</strong>&lt;br&gt;SJH CTU Director</td>
<td><a href="mailto:amna.zaki@medportal.ca">amna.zaki@medportal.ca</a></td>
</tr>
<tr>
<td><strong>Melanie Boichuk</strong>&lt;br&gt;SJH – Emergency Department - CTU Contact</td>
<td>Phone (905) 522-1155 ext. 33503&lt;br&gt;Fax (905) 521-6017&lt;br&gt;<a href="mailto:mboichuk@stjosham.on.ca">mboichuk@stjosham.on.ca</a></td>
</tr>
<tr>
<td><strong>Barb Brandt</strong>&lt;br&gt;HGH - Emergency Department - CTU Contact</td>
<td>Phone (905) 521-2100 Ext. 46368&lt;br&gt;Fax (905) 527-7051&lt;br&gt;<a href="mailto:brandbar@hhsc.ca">brandbar@hhsc.ca</a></td>
</tr>
<tr>
<td><strong>Dr. Kerstin De Witt</strong>&lt;br&gt;Research&lt;br&gt;HGH- McMaster Clinic 2nd Floor, Room 242</td>
<td>Phone&lt;br&gt;Fax (905) 577-8457&lt;br&gt;<a href="mailto:kerstinhogg@gmail.com">kerstinhogg@gmail.com</a></td>
</tr>
<tr>
<td><strong>Mathew Mercuri</strong>&lt;br&gt;Research Coordinator&lt;br&gt;HGH -McMaster Clinic 2nd Floor, Room 242</td>
<td>Phone (905) 521-2100 ext. 76950&lt;br&gt;Fax (905) 577-8457&lt;br&gt;email <a href="mailto:mercurmd@mcmaster.ca">mercurmd@mcmaster.ca</a></td>
</tr>
<tr>
<td><strong>Dr. Michelle Welsford</strong>&lt;br&gt;Medical Director, HHS centre for Paramedic Education &amp; Research</td>
<td>Phone (905) 643-1103&lt;br&gt;Fax (905) 603-1104&lt;br&gt;<a href="mailto:dr.m@welsford.ca">dr.m@welsford.ca</a></td>
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## Appendix C | Curriculum Overview

### Year 1 – 61 Topics

<table>
<thead>
<tr>
<th>Block</th>
<th>Topic</th>
<th>Objectives</th>
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</table>
| **Trauma** | Overview of the Multiple Trauma Patient | Prehospital management of the trauma victim  
Overview of the primary and secondary survey approach  
Identification/management of acute threats to life during the primary survey  
Management of shock in trauma victim  
Disposition of the trauma patient  
Criteria for transfer to a trauma center |
| | Management of the Trauma Airway | Rapid sequence intubation  
Technique of in-line c-spine immobilization  
Pharmacologic options  
“Neuro-protective” RSI  
Difficult airway techniques |
| | Thoracic Trauma | Evaluation of thoracic trauma  
Management of the pleural space  
Indications for surgical treatment  
Evaluation of cardiac/vascular trauma  
Cardiac contusion and aortic trauma  
Review of technique – thoracostomy/thoracotomy |
| | Head Trauma | Evaluation and stratification of head injuries  
Review of head CT guidelines  
Management of low risk/minor head injuries  
Management of concussion  
Evaluation and management of moderate and severe head injuries  
Management of raised ICP |
| | Spine Trauma | Cervical spine injuries  
Thoracic and lumbar spine injuries  
Classification of spinal cord injury  
Diagnostic imaging in spinal trauma  
Management of spinal trauma  
Spinal versus neurogenic shock – clinical features and management |
| | Abdominal Trauma | Evaluation of blunt and penetrating abdominal trauma  
Diagnostic imaging in abdominal trauma  
Approach to penetrating flank/buttock trauma  
Review of techniques – DPL and FAST  
Management of blunt and penetrating abdominal trauma  
Indications for laparotomy |
| | Genitourinary Trauma | Evaluation of the GU system in trauma  
Diagnosis and management of urethral trauma  
Diagnosis and management of bladder trauma  
Management of penetrating and blunt kidney/ureteral trauma  
Management of external genitalia trauma  
Diagnostic imaging in GU trauma |
| | Facial/Neck Trauma | Airway management issues  
Classification of facial and neck injuries  
Evaluation and management of facial fractures  
Evaluation and management of blunt and penetrating neck trauma |
| | Extremity Trauma | Evaluation of limb neurovascular status  
Review splinting of extremity injuries  
Management of open fractures  
Evaluation and management of penetrating limb trauma  
Evaluation, diagnosis, and management of compartment syndrome |
| | Pelvic Trauma | Classification of pelvic fractures  
ED management of pelvic fractures  
Injuries associated with pelvic trauma  
Hemorrhage control issues with pelvic trauma |
| | Diagnostic Imaging in Trauma | Role of the standard 3 trauma x-rays (lateral c-spine, CXR, pelvis)  
FAST – technique, indications, limitations  
CT – “pan-man-scan” versus selective areas  
Adjuncts in trauma: angiography, cystogram, retrograde urethrogram  
Review of recent literature in trauma radiology |
| | Special Resuscitations in Trauma | Special considerations with trauma in pregnancy  
Special considerations with trauma in children  
Special considerations with trauma in the elderly |
<table>
<thead>
<tr>
<th>Block</th>
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</table>
| OBGYN            | Vaginal Bleeding             | Approach to the patient that presents with VB  
Pathophysiology of VB  
Abortions (threatened, inevitable, incomplete, complete, missed)  
How to do a proper pelvic examination  
Management of VB  
Review of Rh isomunization |
|                  | Ectopic Pregnancy            | Approach to ectopic pregnancy  
Pathophysiology of ectopic pregnancy  
Discussion of the diagnostic modalities (sensitivity and specificity)  
ED management of ectopic pregnancy |
|                  | Hypertensive Disorders       | Classification of hypertensive disorders of pregnancy  
Pathophysiology of preeclampsia and eclampsia  
Pathophysiology of HELLP syndrome  
Approach and management of hypertension, HELLP, and seizures in pregnancy |
|                  | Complications of Pregnancy/Postpartum Period | Approach to complications of pregnancy (2nd trimester VB, hyperemesis, etc)  
Review of technique - emergency delivery  
Pathophysiology of postpartum complications (hemorrhage, infection)  
Management and disposition of postpartum complications |
| STD/PID          | Approach to STD/PID          | Approach to vaginal/vulvar lesions (chancre, Bartholin’s, herpes)  
Approach to vaginal discharge and pelvic pain  
Current review of management guidelines  
Decisions for admission and partner contact/treatment  
Review of antibiotic choices in pregnancy |
| Sexual Assault   | Approach to the sexual assaulted victim | Medicolegal responsibilities  
How to use the “rape kit”  
Understanding hospital policy and mobilization of the “rape team”  
Emergency contraception |
| Gastrointestinal System | GI Bleeding                  | Etiology of upper and lower GI bleeding  
Diagnostic considerations based on age  
ED management of GI bleeding  
Admission guidelines  
Indications for emergency procedures |
|                  | Hepatobiliary and Pancreatic Disorders | Overview of hepatitis (etiology and pathophysiology)  
Diagnosis and management of spontaneous bacterial peritonitis  
Hepatic encephalopathy (clinical features, grading, ED management)  
Biliary tract disorders (biliary colic, cholecystitis, ascending cholangitis)  
Pancreatitis: pathophysiology, diagnosis, and ED management |
|                  | Diarrhea                     | Etiologic agents  
Pathophysiology of diarrhea  
Diagnostic approach to diarrhea in the ED  
ED management  
Issues specific to traveler’s diarrhea |
|                  | Small and Large Bowel Disorders | Overview of small bowel diseases (appendicitis, bowel obstruction, intussusception, ischemia, IBD)  
Approach to the patient that presents with abdominal pain  
Overview of the major large bowel diseases (megacolon, volvulus, IBS, diverticular disease)  
Management and disposition of patients with small and large bowel disorders |
|                  | Anorectal Disorders          | Review of pertinent anatomy  
Hemorrhoids (diagnosis, grading, management)  
Anal fissures (diagnosis, pathophysiology, management)  
Rectal abscesses (diagnosis and management)  
Diagnosis and management of pruritis ani and proctitis  
Approach to rectal foreign bodies |
|                  | Pediatric GI Disorders       | Differential diagnosis and management of neonatal jaundice  
Diagnosis and management: pyloric stenosis, midgut volvulus, NEC  
Intussusception: clinical features, diagnosis, and management  
Review of pediatric GI bleeding and hepatobiliary disorders  
IBD: clinical features, diagnosis, management |
|                  | Pediatric GU Disorders       | Management of male genital emergencies (phimosis, paraphimosis, torsion, epididymitis)  
Urinary tract infection: etiology, diagnosis, and management  
Hematuria and proteinuria: differential diagnoses and investigations  
Hemolytic Uremic Syndrome: clinical features, investigations, and mgmt  
Differential diagnosis and management of acute renal failure in children |
<table>
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<tbody>
<tr>
<td>CVS</td>
<td>Acute Coronary Syndromes</td>
<td>Pathophysiology of ACS Risk stratification of patients with suspected ACS The ECG in ACS Pharmacologic therapy of the ACS patient Reperfusion options/strategies in the ACS patient</td>
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<tr>
<td></td>
<td>Heart Failure and Cardiogenic Shock</td>
<td>Pathophysiology of heart failure and cardiogenic shock Heart failure: etiology, diagnosis, and management Acute pulmonary edema: precipitating causes and ED treatment Management of cardiogenic shock</td>
</tr>
<tr>
<td></td>
<td>Pericardial and Myocardial Disease</td>
<td>Acute pericarditis: clinical features, diagnosis, etiology, and treatment Acute myocarditis: clinical features, diagnosis, and management Diagnosis and management of effusion/tamponade HOCM: clinical features, diagnosis, and ED management The ECG in myopericardial disease, cardiomyopathy, and effusion/tamponade</td>
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<td></td>
<td>Infective Endocarditis and Valvular Heart Disease</td>
<td>Clinical features, etiology, diagnosis, and management of endocarditis and rheumatic fever ED management of acute and chronic valvular lesions ED indications for endocarditis antibiotic prophylaxis</td>
</tr>
<tr>
<td></td>
<td>ICDs and Pacemakers</td>
<td>Review of pacemaker and ICD terminology ECG interpretation while paced Pacemaker malfunction: diagnosis and management Management of the patient who's ICD has fired ACLS pearls and pitfalls in patients with a</td>
</tr>
<tr>
<td></td>
<td>HTN</td>
<td>Pathophysiology of hypertension ED HTN definitions: emergencies vs. urgencies ED management of hypertensive emergencies and urgencies Pharmacologic options for HTN management</td>
</tr>
<tr>
<td></td>
<td>Aortic Emergencies</td>
<td>Pathophysiology risk factors for aortic diseases Clinical features of aortic dissection and AAA Diagnostic options for aortic dissection Medical and surgical management of dissection Diagnostic algorithm for suspected AAA Resuscitation of the patient with a ruptured AAA</td>
</tr>
<tr>
<td></td>
<td>Peripheral Vascular Disorders</td>
<td>Clinical features of peripheral vascular disease ED management of the acutely ischemic limb ED management of chronic arterial insufficiency Thoracic outlet syndrome: clinical features, diagnosis, management Long-term central venous access: ED pearls</td>
</tr>
<tr>
<td></td>
<td>Syncope</td>
<td>Definition and epidemiology Etiology and differential diagnosis of syncope Clinical features suspicious for worrisome pathology Diagnostic workup of the syncopal patient Risk stratification and disposition of the syncopal patient</td>
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<tr>
<td></td>
<td>Pediatric Heart Disease</td>
<td>Anatomy and pathophysiology of fetal and neonatal circulation Classification of congenital cardiac disease Investigation of the child with suspected congenital cardiac disease Management of the child with suspected congenital cardiac disease: cyanotic and non-cyanotic Etiology and management of the child with CHF Investigation and management of chest pain and syncope in children</td>
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| Neurology             | Coma and Altered LOC         | Approach the decreased LOC patient  
Review of the examination of a comatose patient  
ED management and disposition  
Headache               | Approach to the patient with a headache  
How to distinguish the dangerous headache  
Management options for migraines  
ED management of the patient with a headache  
Seizures               | Definitions  
Management of status epilepticus  
Approach to the adult with new onset seizures  
Approach to the child with an unprovoked first seizure  
Review of the medicolegal aspects of managing a seizing patient  
Stroke                 | Compare and contrast CVA vs. TIA  
TIA risk stratification and treatment  
Pathophysiology of stroke and its complications  
Management and approach to the stroke patient  
Neuromuscular Weakness | Approach to the weak patient  
Understanding to the main neurologic disorders of weakness (GBS, ALS, myasthenia, botulism, tick related, MS, muscular dystrophy)  
ED investigative approach  
Review of "what is a complete neurological examination"  
ED management and disposition  
Dementia and Delirium  | Compare and contrast dementia and delirium  
ED approach to the delirious patient  
Pathophysiology of dementia and delirium  
Review of medications that cause delirium  
ED management of delirium  
Vertigo                | Definition  
Compare and contrast peripheral and central vertigo  
Approach and management of vertigo in the ED  
Common causes of peripheral and central vertigo and their management  
Peripheral Nerve Disorders  | Overview of the major peripheral nerve problems  
Management of Bell's palsy, GBS, shingles, entrapment syndromes  
ED approach the peripheral neuropathies  
CNS Infections         | Indications, contraindications and technique of LP  
CSF analysis  
Identification of common pathogens  
ED treatment of suspected CNS infections  
Pediatric Neurologic Emergencies | Intracranial infections: clinical features, investigations, management  
Seizures: pathophysiology, investigation, and management  
Management of status epilepticus  
Classification, investigations, and management of headaches in children |
<table>
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<tr>
<th>Block</th>
<th>Topic</th>
<th>Objectives</th>
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</thead>
</table>
| Environmental       | Burns                  | Approach to the burn patient  
Burn assessment and classification  
Fluid resuscitation in burns  
Special burns (HF acid, acid, base)  
Describe the burn transfer criteria |
|                     | Bites and Stings       | Approach to bites and stings (insects, reptile, marine)  
Identification of domestic and wild animal bites  
Review of reptilian bites  
Approach and management of bee sting anaphylaxis  
Management of bites and stings |
|                     | Cold Injuries          | Definition of terms: chilblain, frost nip and frost bite, hypothermia  
Pathophysiology of frost bite and hypothermia  
Approach to frost bite and hypothermia  
Pathophysiology and clinical features of hypothermia  
Management approach and rewarming techniques |
|                     | Hyperthermia           | Approach to heat emergencies  
Pathophysiology and physiologic response to heat (conduction, convection, evaporation, radiation)  
Understand the mechanisms that predispose one to heat injuries  
Define and discuss heat exhaustion and heat stroke  
Management of heat exhaustion and stroke |
|                     | Electrical and Lightning Injuries | Review of basic electrical physics  
Identify the clinical features and complications of electrical injuries  
Indications for admission  
Approach and management of an electrical and lightening injuries |
|                     | Dysbarism and HBO      | Review of physical principles  
Pathophysiology of dysbarism  
Clinical syndromes associated with dysbarism  
Approach and management to the diving casualty  
Evidence for the use of hyperbaric oxygen |
|                     | Disorders of Altitude   | Review of physics and Boyle’s law  
Physiologic changes and acclimatization to high altitude  
Describe the high altitude syndromes  
Approach and management of high altitude illnesses |
|                     | Radiation Injuries     | Review of radiation physics  
Review of key contamination control principles  
Approach to decontamination techniques  
Complications of radiation injury  
Management of radiation injury |
|                     | Submersion Injuries    | Review of definitions relating to submersion injuries  
Review physiology relating to submersion injuries  
Clinical features of Submersion injuries  
Clinical Features of submersion injuries  
Management / resuscitation principles for submersion injuries |
<table>
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<tbody>
<tr>
<td>HEENT</td>
<td>Dental Disorders</td>
<td>Anatomy Overview of dental trauma (Ellis classification) Mandibular injury overview Approach to infections in the mouth (Ludwig's angina, peritonsillar abscess, retropharyngeal abscess) ED management of dental caries/abscesses</td>
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<tr>
<td></td>
<td>Eye Trauma</td>
<td>The ocular anatomy Review of a proper eye examination Approach to corneal abrasions Approach to anterior chamber injuries Approach to lid and lash injuries Approach to globe injuries ED management of traumatic eye injuries</td>
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<tr>
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<td>The Red Eye</td>
<td>The approach to the red eye Differential diagnosis of the red eye Management of eye infections Management of acute closed angle glaucoma How to use a slit lamp properly</td>
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<tr>
<td></td>
<td>Acute Visual Loss</td>
<td>Painful vs. painless visual loss Unilateral vs. bilateral field defects Monocular vs. binocular diplopia ED approach and management of acute vision loss How to measure intraocular pressures</td>
</tr>
<tr>
<td></td>
<td>Pediatric Otitis and Pharyngitis</td>
<td>Otitis media: etiology, pathophysiology, diagnosis, and management Otitis externa: etiology, diagnosis, and management Strep Pharyngitis: clinical features, diagnosis, mgmt, and complications Mononucleosis: diagnosis, management, and complications</td>
</tr>
<tr>
<td></td>
<td>Pediatric Upper Respiratory Tract Disorders</td>
<td>Anatomy of the pediatric airway Pathophysiology of stridor Approach to the child with upper airway obstruction Croup, RPA, epiglottitis, and tracheitis: pathophysiology, clinical features, and management Indications for, and interpretation of, the soft tissue neck X-ray</td>
</tr>
<tr>
<td>Hematology and Oncology</td>
<td>Deep Venous Thrombosis and Pulmonary Embolism</td>
<td>Pathophysiology of venous thromboembolism Clinical features of VTE Diagnostic risk stratification Evidence based evaluation and management</td>
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<td>Disorders of Bleeding</td>
<td>Review of coagulation cascade Von willebrand’s disease and hemophilia Management of congenital and acquired bleeding disorders Pathophysiology and management of DIC Complications of coagulopathies</td>
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<td></td>
<td>Anemia and Thrombocytopenia</td>
<td>Approach to the evaluation of the anemic patient Investigation of the major causes of anemia Acute presentations and management of hematological malignancies Pathophysiology of thrombocytopenia</td>
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<tr>
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<td>Emergency Complications of Malignancies</td>
<td>Emergencies related to local tumor compression Emergencies related to biochemical derangements (SIADH, hypercalcemia, etc) Emergencies related to myelosuppression</td>
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<tr>
<td>Psychiatry</td>
<td>Suicide</td>
<td>Suicide risk stratification</td>
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<td></td>
<td>Medicolegal responsibilities (Form 1 and 42)</td>
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<td>Management and assessment of a suicidal patient</td>
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<td>Psychosis</td>
<td>Pathophysiology of psychosis</td>
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<td>Psychotropic medication review</td>
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<td>Assessment and management of the psychotic patient</td>
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<td>Review of chemical and physical restraints</td>
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<td>Mood Disorders</td>
<td>Definition of depression</td>
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<td>Clinical features and assessment of mood disorders</td>
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<td>Approach and management of mood disorders</td>
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<td>Review of medications used in mood disorders and the management of their adverse effects</td>
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<td>Anxiety Disorders</td>
<td>Definition of anxiety disorders</td>
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<td>Clinical features and assessment of the anxiety disorders</td>
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<td>Approach and management of anxiety disorders</td>
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<td>Difficult/Violent patients</td>
<td>Review of chemical and physical restraints</td>
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<td>Approach to the violent patient</td>
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<td>Medicolegal aspects</td>
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<td>“Medical clearance” of the</td>
<td>Approach to medically clearing the psychiatric patient</td>
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<td>Psychiatric patient</td>
<td>Departmental policy on “medical clearance”</td>
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<td>Risk management</td>
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<td>Suicide</td>
<td>Suicide risk stratification</td>
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<td>Difficult/Violent patients</td>
<td>Review of chemical and physical restraints</td>
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<td>Approach to the violent patient</td>
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<td>Approach to medically clearing the psychiatric patient</td>
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<td>Toxicology</td>
<td>Introduction and Toxidromes</td>
<td>Review of the common toxidromes</td>
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<td>Pathophysiology behind the toxidromes</td>
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<td>Review of the common antidotes and how they work</td>
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<td>A general approach to the unknown ingestion</td>
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<td>Review of the techniques for decontamination and elimination</td>
<td>Evidence based approach to decontamination</td>
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<td>Indications for dialysis</td>
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<td>Acetaminophen</td>
<td>Approach to acute and chronic acetaminophen overdose</td>
<td>Pathophysiology of acetaminophen toxicology</td>
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<td>General management of acetaminophen toxicology</td>
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<td>Pathophysiology of antidote therapy (NAC)</td>
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<td>Indications for liver transplant</td>
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<td>Approach to salicylate toxicity</td>
<td>Pathophysiology of salicylate toxicity</td>
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<td>Management of salicylate toxicity</td>
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<td>Indications for dialysis</td>
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<td>Toxic Alcohols</td>
<td>Approach to the toxic alcohol ingestion</td>
<td>Pathophysiology of methanol, ethanol, ethylene glycol, isopropyl alcohol ingestion</td>
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<td>What and how are the antidotes used</td>
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<td>Discussion of first order kinetics with ethanol metabolism</td>
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<td>Describe osmolar gap and how is it measured?</td>
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<td>Management of acute toxic alcohol ingestion</td>
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<td>Lithium and Mood Stabilizers</td>
<td>Approach to Li, Valproate, and Carbamazepine overdose</td>
<td>ECG changes and use of serum levels in these overdoses</td>
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<td>Differentiate acute versus chronic lithium toxicity</td>
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<td>Management of valproate and carbamazepine toxicity</td>
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<td>Indications for dialysis (Li, valproate)</td>
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<td>Cardiac Drugs</td>
<td>Approach to cardiac drug overdose</td>
<td>Identify the antidotes for the specific overdoses</td>
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<td>ECG changes in digoxin overdose</td>
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<td>Management of acute and chronic digoxin toxicity</td>
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<td>What is Digibind and what are its indications for use?</td>
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<td>Management of the accidental pediatric ingestion</td>
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<td>Depressants (Opioids, Benzos, Barbiturates, etc)</td>
<td>Approach to depressant overdose</td>
<td>Pathophysiology of depressant overdose</td>
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<td>Toxidromes associated with specific overdoses</td>
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<td>Management of depressant overdose</td>
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<td>Use of specific antidotes (naloxone, flumazenil)</td>
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<td>Review unique aspects of GHB/Chloral hydrate overdoses</td>
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<td>Iron</td>
<td>Pathophysiology and clinical features of iron overdose</td>
<td>Phases of iron toxicity</td>
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<td>Use of laboratory tests and diagnostic imaging in iron overdose</td>
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<td>Management of iron toxicity</td>
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<td>Use of and indications for chelation therapy</td>
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<td>Ethanol</td>
<td>Presentation and management of alcohol ingestion</td>
<td>Complications of acute alcohol ingestion</td>
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<td>Recognition and management of alcoholic ketoacidosis</td>
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<td>Complications of chronic alcoholism (ED implications)</td>
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<td>Wernicke-Korsakoff syndrome</td>
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<td>Medicolegal pitfalls regarding alcohol in the ED</td>
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<td><strong>Toxicology (cont’d)</strong></td>
<td>Withdrawal Syndromes</td>
<td>Presentation and management of opioid/benzo/barbiturate withdrawal Management of alcohol withdrawal Clinical features of delirium tremens and management Management of alcohol withdrawal seizures</td>
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<td>Anti-Hyperglycemics</td>
<td>Presentation of hypoglycemia Mechanism of action of insulins and oral hypoglycemic (OHG) agents Management of insulin overdose Management of OGH agent overdoses (biguanides and sulfonylureas) Use of antidotes (feeding, dextrose, glucagon, octreotide) Specific issues in pediatric patients</td>
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<td>Stimulants/Hallucinogens</td>
<td>Clinical presentation of stimulant intoxication Pharmacology of cocaine and amphetamines Complications and management of cocaine/amphetamine overdose Cocaine chest pain Management of packers/stuffers Presentation, pharmacology, and management of hallucinogen OD (LSD, psilocybin, etc) Specific complications and management issues with newer “rave drugs” (i.e. Ecstasy, Methamphetamine)</td>
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<td>Pesticides</td>
<td>Clinical presentation of cholinergic toxidrome Appropriate decontamination of the pesticide exposed patient Pathophysiology of acetylcholinesterase inhibitors Differentiate carbamates and organic phosphates Management of patients with cholinergic poisoning Use of antidotes (Atropine, pralidoxime) Specific issues with chlorinated hydrocarbons, chlorophenoxy compounds, bipyridyl compounds, pyrethrins, and DEET</td>
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<td>Antidepressants/Antipsychotics</td>
<td>Presentation of TCA/SSRI/antipsychotic overdoses Pharmacodynamics of TCAs Diagnosis and management of TCA overdose Management of SSRI and antipsychotic overdoses Complications/management of MAOI use/overdose Differentiate serotonin syndrome and neuroleptic malignant syndrome ECG changes associated with these drugs</td>
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<td>Plant/Mushroom Poisonings</td>
<td>Review of the common household plant poisonings Review of the common mushroom poisonings Approach and management of plant/mushroom poisonings</td>
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<td>Inhaled Toxins (CO/CN/H2S)</td>
<td>Pathophysiology of CO, CN, and H2S poisoning Clinical features suspicious for CO and CN poisoning Diagnostic testing for CO and CN poisoning Management of the suspected CN exposure, and review of the Lilly kit components CO toxicity: standard management and HBO therapy Management of the combined CO/CN exposure</td>
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<td>Emergency Medicine Services</td>
<td>Principles of Emergency Medical Services</td>
<td>EMS: important historical and legislative aspects Organization and components of EMS systems Overview of EMS provider training and skills Online and offline medical direction</td>
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<td>Air-Medical Transport</td>
<td>Indications and considerations for air transport Comparison of fixed and rotor wing aircraft Review of aviation physiology Limitations of in-flight patient assessment and care</td>
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<td>Disaster Preparedness</td>
<td>Disaster classification and the PICE system Triage in mass casualty situations: START and SAVE Components and organization of internal and external disaster plans</td>
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<td>Weapons of Mass Destruction (CBRN)</td>
<td>Overview of personal protective equipment Decontamination procedures for CBRN events Radiologic/nuclear devices: injury patterns, decontamination, and treatment Chemical agents: potential chemicals, clinical features, decontamination, and treatment Biologic agents: likely organisms, clinical features, isolation procedures, and treatment</td>
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<td>Objectives</td>
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| Respirology  | Asthma                       | Assessment of respiratory distress  
Pathophysiology of asthma  
CAEP guidelines for adult and pediatric asthma  
Risk stratification for management and discharge planning  
Evidence based management of acute asthma  
Admission and discharge criteria  
Management of the critically ill asthmatic |
|              | COPD                         | Pathophysiology of COPD and cor pulmonale  
Etiology of acute decompensation in COPD  
Use of non-invasive ventilatory support  
Evidence based management of an acute exacerbation of COPD  
Disposition guidelines |
| Pneumonia    | Common presentations         |  
Principles of risk stratification (e.g. Fine criteria)  
Microbiology (common pathogens)  
Principles of antibiotic choices  
CAP management guidelines  
Complications of pneumonia |
| Mechanical Ventilation | Pulmonary physiology as related to mechanical ventilation  
Indications and contraindications  
Complications and barotrauma  
Principles of different modes of ventilation |
| Hemoptysis   | Etiology of hemoptysis       | Pathophysiology of respiratory compromise with pulmonary hemorrhage  
ED approach to the patient with hemoptysis  
Management of pulmonary hemorrhage/hemoptysis |
| Pleural Disease | Pathophysiology of pleural based disease  
Major manifestations; empyema, pneumothorax (spontaneous and acquired), pleural effusion  
Indications for thoracentesis and tube thoracostomy  
Review of procedures: thoracentesis, tube thoracostomy |
| Pediatric Lower Respiratory Tract illness I | Approach to the wheezing infant  
Differential diagnosis of wheezing  
Pathophysiology of bronchiolitis and asthma  
Asthma severity grading  
Evidence-based management of asthma and bronchiolitis |
| Pediatric Lower Respiratory Tract illness II | Pathophysiology and age-appropriate etiology of pneumonia  
Clinical features of pneumonia  
Age-appropriate antibiotic treatment and disposition  
Radiographic appearance of pneumonia (CXR interpretation)  
Pneumonia in special populations (SCD, immunocompromised, unimmunized, aspiration, etc) |
# Appendix D | Defining a Resident in Good Standing

<table>
<thead>
<tr>
<th>Year</th>
<th>Academic Presentations*</th>
<th>Rounds &amp; Journal Club Attendance</th>
<th>ABEM</th>
<th>Research</th>
<th>ITERS</th>
<th>Practice Orals</th>
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<tr>
<td>PGY 1</td>
<td>1 JC Article</td>
<td>1 JC Article, 1 JC Moderation</td>
<td>Meet/ exceed cohort median score</td>
<td>90% eligible 70% total</td>
<td>See research section.</td>
<td>All Satisfactory.</td>
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<td>2 cases, 1 JC Article</td>
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<td>PGY 3</td>
<td>1 care, 1 core</td>
<td>1 JC Article, 1 JC Moderation</td>
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<td>1 JC Article Selection/Moderation</td>
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<td>PGY 5</td>
<td>2 core, 1 Rosen round, 1 JC Article</td>
<td>1 JC Article Selection</td>
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## Semi-annual Reviews

Semi-annual reviews with the program director are mandatory. At this time, each category of requirements will be reviewed to ensure they are being met and address any areas of concern.

## Rounds

You are not required to attend rounds if you are post-call in off-service months, on vacation, on professional leave (max 1 per year), or sick. If you are to be absent, you must notify Teresa Vallera so as to receive credit. Notwithstanding excused rounds (ineligible to attend), you must attend a minimum of 70% of total rounds and journal clubs.

## ABEM Examination

The American Board of Emergency Medicine In Training Examination requirement of 80% is based on the ability of this score to predict success at the Royal College examination.

## Research

The research requirements are explained in detail in the research program document and are not duplicated here.

## ITERS

All In-Training Evaluation Reports (ITERS) are completed for residents in each rotation.

## Practice Orals

Practice orals are individual evaluation opportunities for residency. If you do not attend a practice oral, you must provide an excuse in writing to the program director which must reflect an extreme, unforeseen circumstance.

## Academic Presentations

Case presentations are meant to be cases encountered in clinical practice that raise a question in the resident’s own mind or raise discussion within the department. The question should be formulated and then a focused literature review be conducted to answer this question. Deviation from this format requires approval from the Assistant Program Director. It is encouraged that you review your case presentation with a senior resident (PGY 4/5) or staff physician prior to presentation. Core teaching topics are presented with a staff mentor who you may select. The program has suggestions for staff with special interests in certain areas. These presentations are meant to cover objectives outlined in the objectives document and provide a summary of the most recent literature. Interactive presentations are preferred to standard didactic sessions.

* **NB:** The number of presentations per year will vary depending on the number and PGY distribution of residents in the program. After consultation with the PD and the APD, the chief residents will determine and circulate the final number and type of presentations per resident per year.
## Appendix E: Policies and Objectives

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<td>Royal College Objectives</td>
<td><a href="http://rcpsc.medical.org/residency/certification/objectives/emergmed_e.pdf">http://rcpsc.medical.org/residency/certification/objectives/emergmed_e.pdf</a></td>
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<tr>
<td>Rotation Specific Objectives</td>
<td><a href="http://fhs.mcmaster.ca/emergmed/postgrad/academics_rotation.htm">http://fhs.mcmaster.ca/emergmed/postgrad/academics_rotation.htm</a></td>
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