Intensive Care Unit Rotation
Royal Victoria Hospital, Montreal General Hospital, Jewish General Hospital

Orientation to Rotation

- **Rotation duration:** One 4-week block in first year
- **Rotation supervision**
  - **RVH:** Contact Irene Prager, Tel: 514-934-1934 ext 34643
  - **MGH:** Rotation supervisor Dr Hornstein
    Contact Diana Sarcone, Tel: 514-934-1934 ext 43255
  - **JGH:** Contact Antonietta Maglio amaglio@icu.jgh.mcgill.ca Tel: 514-340-7500,
    Adult Critical Care Department, B-300

- **On the first day report for orientation with Objectives of Training document to:** Contact people above.
- **Schedule:** During this rotation, the Resident is expected to participate in the clinical activities, rounds etc. as assigned

Orientation

For MGH rotation, an orientation session will be given immediately following morning rounds on the first Monday of the rotation in the conference room (E9-173); refer to the Orientation Handbook.

For the JGH rotation, orientation is given on the first Monday of the rotation at 10:30 in our conference room B-303, right after morning rounds.

- **JGH Daily schedule** 7:15-7:30 - Arrive in ICU 8:00 am - Rounds begin 10:30-11:30 - Teaching 2:00 - Radiology Review 4:30 - Sign out
- **JGH weekly schedule** Tuesdays 12:00-1:00 - Family Rounds Tuesdays 2:00 - Rehab/Multidisciplinary Rounds Last Wednesday each period 10:30-12:00 - M&M Rounds, Fridays around 3:00 - Staff sign out

Goal

- The primary goal of the resident’s ICU rotation of 4 weeks is to achieve competency in the areas described below during their rotations in the Intensive Care Unit. To recognize the importance of the inter-disciplinary team members in the optimal care of the critically ill patient
• To be aware of the uniquely stressful environment of the ICU, and its effect on patients, families, and medical staff
• To communicate with, and to support families confronted with critical illness
• To understand the role of both aggressive and comfort-oriented care
• To understand the importance of ensuring adequate patient flow in the optimal utilization of critical care resources

Specific Objectives and CanMEDS competencies

The role of medical expert is central to the function of the obstetrician-gynaecologist, and draws on the competencies for the roles of scholar, communicator, health advocate, manager, collaborator, and professional.

1. Medical Expert

KNOWLEDGE
• To be able to recognize, diagnose, and understand the causes and mechanisms of respiratory failure
• To recognize the risk factors, and to understand the pathophysiology of acute respiratory distress syndrome
• To be able to initiate a plan for the investigation and management of acute respiratory failure
• To understand the mechanisms, and to be able to differentiate the various types of shock
• To assess and provide acute management of the hypotensive patient
• To understand the effects and clinical indications for vasopressor/inotropic therapy
• To understand the pathophysiology of systemic inflammatory response syndrome, sepsis and septic shock
• To establish a differential diagnosis of etiological pathogens and to choose appropriate empirical antibiotic therapy for life-threatening infectious syndromes
• To institute immediate management and supportive care for patients with sepsis and septic shock
• To assess and provide immediate support for the patient with suspected intoxication
• To understand the principles of management of the use of specific toxic ingestions, including supportive measures, means of altering absorption, increasing elimination, and antidotes
• To assess and institute immediate care for the patient with altered level of consciousness
• To provide a differential diagnosis, diagnostic approach, and plan for ongoing supportive care
• To diagnose and understand the implications of brain death

PROCEDURAL SKILLS
Technical Skills Related to Critical Care Medicine:
• To have an understanding of the indications, techniques, and complications of oxygen therapy (nasal prongs, masks, nebulizers)
• To have an understanding of airway management - suction, oropharyngeal airways, endotracheal intubation and non-invasive ventilation
• To have an understanding of mechanical ventilation: modes, lung protective strategies, weaning and unconventional approaches
• To have an understanding of monitoring: ECG, pulse oximetry, invasive and non-invasive blood pressure
• To have an understanding of invasive hemodynamic monitoring: PA catheter insertion and interpretation of hemodynamic data
• To have an understanding of venous access - chest tube thoracostomy /pericardiocentesis, NG tube insertion/ Blakemore tubes/ bronchoscopy/ dialysis

2. Communicator

Physician/Patient Relationship
• To demonstrate effective tools for gathering historical information from patients and their families in the critical care setting
• To demonstrate effective tools for gathering collateral information from patients' families in the critical care setting
• To be able to compassionately deliver bad news to patients
• To be able to have discussions with patient’s surrogate decision makers about the patient’s ongoing care.
• To be able to communicate effectively with a multi-disciplinary team

Verbal Communication Skills
• The resident should demonstrate appropriate communication skills when interacting with clinic administrative staff and other members of the multidisciplinary health care team.

3. Collaborator

Team Relations
• Be able to identify the need to and benefit of consulting other physicians and health-care professionals.
• Be able to contribute effectively to interdisciplinary team activities.
• Be able to participate in and lead an emergency team in a positive, organized, and effective manner, and to prioritize tasks in critical contexts.

4. **Manager**

**Time Management**
• To develop the ability to perform focussed histories and physical examinations in the intensive care unit
• To develop time management skills to reflect and balance priorities for patient care, sustainable work practice, and personal life
• To appreciate the difficult task of balancing the provision of critical care and being fiscally responsible
• To appreciate the importance of attempting to keep ICU beds open to ensure flow of patients through the various services in the hospital (i.e. ward, E.R., O.R.)

**Resources and Allocation**
• Be able to use health-care resources cost-effectively.

**Administrative Skills**
• Be able to work efficiently and effectively in the context of multiple demands on a resident’s time while managing critically-ill patients

5. **Health Advocate**

**Determinants of Health/Health Advocacy**
• To identify opportunities for patient counselling and education regarding their medical conditions
• To understand future pressures on critical care resources

6. **Scholar**

**Self Directed Learning**
• Be able to critically appraise sources of medical information.

**Teaching Skills**
• Be able to educate patients and their families regarding their medical condition.

• Be able to teach medical students, residents, and other health-care professionals.

• Be able to contribute to the development of new knowledge, through the completion of or participation in a research project.
7. Professional

Self Assessment Skills/Insight
- The resident should demonstrate the ability to communicate with attending staff and request assistance in patient management when appropriate.
- The resident should consult ancillary services when required to enhance patient care.
- The resident should develop an individual learning plan with regards to, with assistance of the attending staff.
- Be able to recognize and deal with unprofessional behaviours in clinical practice.

Ethics
- Be able to recognize and resolve ethical issues as they arise in clinical practice. Specifically, be able to understand and deal with the ethical issues that arise in the critically-ill patient including:
  - Consent and capacity: Level of intervention discussions and end-of-life decision. Substitute decision-makers. Advance directives

Written Skills and Record Keeping
- The resident shall complete Health Records in a timely manner.

Determinants of Health/Health Advocacy
- The resident will identify the important determinants of health affecting patients and contribute effectively to improved health of patients and communities
- Recognize and respond to those issues where advocacy is appropriate.

Evaluation

Residents will be evaluated by the ICU staff on the above goals and objectives by means of the standard monthly global evaluation form (MRESOne45). This includes the evaluation by the physicians of the Resident’s interpersonal and communication skills, and professionalism. The Resident will also need to complete an evaluation of their ICU (on-line MRES-one45), to contribute to future improvements.

Recommended Readings

Society of Critical Care Medicine
Available through the website at www.sccm.org

The ICU Book. 3rd Edition, Paul L Marino, Lippincott Williams and Wilkins

CCM Tutorials Website
http://www.ccmtutorials.com/