

**Critical Care Academic Half Day Seminar Series**

**Topic: Managing Infection / Sepsis in the ICU**

**Royal College Objectives:**

The adult critical care medicine resident must be able to:

- recognize the infective nature of the condition of a patient with catastrophic septic illness
- institute immediate life-sustaining measures;
- establish a differential diagnosis (site of origin etiological pathogens);
- embark upon a course of definitive diagnosis, continued life support and appropriate antimicrobial and/or surgery.

Demonstrate knowledge of:

- available techniques for diagnostic procedures;
- the epidemiology of host specific infections disease;
- the immunocompromised host response pathophysiology;
- preventive infection control techniques, including antibiotic prophylaxis of contacts, when appropriate;
- the pharmacology, indications, complications, interactions, monitoring and efficacy of usual antimicrobial agents;
- the occult indicators of sepsis;
- the systemic inflammatory response syndrome;
- the multi-organ dysfunction syndrome.

*When possible we ask that patient cases be used to direct the presentations as they invite participation and are more realistic*

TOPIC
<i>Viral Infections in ICU:</i> <ul style="list-style-type: none"> <li>▪ Lung</li> <li>▪ Gastrointestinal Tract</li> </ul>
<i>Fever in the ICU:</i> <ul style="list-style-type: none"> <li>▪ an approach to diagnostic work up of fever in the ICU patient</li> </ul>
<i>Line Infections:</i> <ul style="list-style-type: none"> <li>▪ how to diagnose it</li> <li>▪ how to treat it</li> <li>▪ how to prevent it</li> </ul>
<i>Infection in the Immunocompromised host</i> <ul style="list-style-type: none"> <li>▪ Approach to infections in the Neutropenic and Transplanted patient</li> </ul>
<i>CNS Infections</i> <ul style="list-style-type: none"> <li>▪ Meningitis</li> <li>▪ Encephalitis</li> </ul>
<i>Device related infections</i> <ul style="list-style-type: none"> <li>▪ Shunts, EVDS', Diagnostic Testing</li> </ul>
<i>Management:</i> <ul style="list-style-type: none"> <li>▪ CAP</li> <li>▪ HAP: emphasize diagnostic tests including sputum sampling and bronchoscopy</li> <li>▪ VAP: emphasize diagnostic tests including sputum sampling and bronchoscopy</li> </ul>
<i>Pharmacology of Antibiotics</i> <ul style="list-style-type: none"> <li>▪ Kinetics &amp; Monitoring principles</li> <li>▪ Dynamics</li> <li>▪ Resistance &amp; Empiric therapy</li> </ul>
<i>Fungal Infections</i>
<i>Clostridium Difficile</i> <ul style="list-style-type: none"> <li>▪ burden of C diff infection in the hospital</li> <li>▪ role of IV antibiotics</li> <li>▪ role of surgery</li> <li>▪ role of probiotics</li> </ul>
<i>Intra-Abdominal Infections:</i> <ul style="list-style-type: none"> <li>▪ approach to post-operative peritonitis</li> </ul>
<i>Tuberculosis</i> <ul style="list-style-type: none"> <li>▪ diagnosis &amp; treatment</li> <li>▪ Infection control precautions</li> </ul>
<i>Common infections in returning Travellers</i> <ul style="list-style-type: none"> <li>▪ diarrhea,</li> <li>▪ malaria</li> <li>▪ common viral infections</li> </ul>
<i>Endocarditis:</i> <ul style="list-style-type: none"> <li>▪ diagnosis</li> <li>▪ treatment</li> <li>▪ role of TEE</li> </ul>