

## Rotation Specific Objectives for Surgical Foundations

### 1. Medical Expert

Demonstrate diagnostic and therapeutic skills for ethical and effective patient care; Access and apply relevant information and therapeutic options to clinical practice; demonstrate effective consultation services with respect to patient care, education and legal options; recognize personal limits of expertise. Knowledge requirements:

#### Knowledge: Basic Science & Anatomy

- A) Basic neuroanatomy and neuropathology sufficient to understand clinical presentation, and management of common neurosurgical conditions (below)
- B) Head injury, spine injury, and peripheral nerve injury, wound healing, response to trauma; these principles include shock, resuscitation, post-operative care and complications and the response to trauma, fluid, electrolyte and acid base disturbances, infections, bleeding, coagulation and thrombosis
- C) Coma, peripheral nerve entrapment syndromes, hydrocephalus, cerebrovascular conditions, brain and spine tumors, and infections related to the nervous system
- D) Pharmacology including principles of metabolism, action and toxicity of drugs commonly used in neuro surgery

#### Knowledge: Clinical

- A) Medical history: concise, accurate and appropriate
- B) Physical examination: relevant, sufficiently elaborate, and appropriate
- C) Diagnostic tests: order appropriate tests in a cost-effective, ethical and useful manner
- D) Medical imaging tests: interpretation of basic x-ray, CT, MRI and radionuclide studies
- E) Clinical diagnosis and decision-making: formulate diagnosis and therapeutic strategy for common neuro surgical problems
- F) Documentation/presentation: well-documented and organised assessments and recommendations
- G) Preoperative planning: understand the concept; order of appropriate preoperative investigations to assist in planning; execution of preoperative plan before surgery