

Applied Surgical Sciences and Critical Care Course for MRCS Part B OSCE

DATE: 25th April 2013 (Thursday)

VENUE: School of Biosciences, Sir Martin Evans Building, Cardiff University

Course Programme

0815 – 0825 : Registrations

MORNING SESSION

0825 – 0830 : Welcome, introduction and format (Mr Stuart Enoch)

0830 - 0940 : Cardiovascular System (Dr Jason Seewoodhary)

- Cardiac pressure cycle
- Control of cardiac output
- Blood pressure and its control mechanisms
- Inotropes and their actions

0940 - 1020 : General Physiological Principles 1 (Dr Melvyn Jenkins-Welch)

- Bleeding and coagulation

1020 - 1100 : General Physiological Principles 2 (Dr Melvyn Jenkins-Welch)

- Resuscitation, sepsis and septic shock
- Hypothermia

Coffee Break: 1100 – 1120 hrs

1120 - 1200 : Gastrointestinal system (Dr Jason Seewoodhary)

- Post-operative ileus
- Nutrition
- Re-feeding syndrome

1200 - 1250 : Central nervous system (Dr Melvyn Jenkins-Welch)

- Cerebral autoregulation
- Causes and management of raised intra-cranial pressure including space-occupying lesions
- Pain management
- Epidural anaesthesia

Lunch Break: 1245 - 1325

AFTERNOON SESSION

- 1330 – 1430 : Endocrine physiology (Dr Jason Seewoodhary)
- Function of pituitary
 - Basic physiology of thyroid and parathyroid glands
 - Disorders of calcium metabolism
 - Basic physiology of adrenal gland and glucocorticoids
 - Glucose homeostasis and diabetes in surgery
 - Hypothyroidism and hyperthyroidism
 - Corticosteroids in surgery
- 1430 - 1530 : Renal system (Dr Gareth Scholey)
- Renal autoregulation
 - Renin-angiotensin system
 - Types and management of renal failure
 - Erythropoietin
- 1530 - 1600 : General Physiological Principles 3 (Dr Gareth Scholey)
- Homeostasis, feedback loops and applied acid-base balance
- Coffee Break: 1600 - 1620 hrs**
- 1620 - 1700 : Burns (Mr Stuart Enoch)
- Assessment
 - Indications for referral
 - Pathophysiology and principles of management
- 1700 - 1730 : OSCE Scenarios (Mr Stuart Enoch)
- 1730 - 1830 : Respiratory system (Dr Teresa Evans)
- Normal ventilatory cycle
 - Controls of ventilation
 - Causes and management of post-operative respiratory failure
 - Indications for ventilatory support and weaning off ventilator
 - Intermittent positive pressure ventilation
 - Acute (adult) respiratory distress syndrome
 - Applied critical care physiology during the peri-operative period
- 1830 - 1845 : OSCE Tips (Mr Stuart Enoch)
- 1845 - 1900 : Summary and Feedback

1900: END OF COURSE!