

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

DATE: 19th April 2012 (Thursday)

VENUE: Physiology Lecture Theatre B, School of Biosciences 2, Cardiff University

Course Programme

0815 – 0825 : **Registrations**

MORNING SESSION

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

0830 - 0900 : **Cardiovascular System** (*Dr Melvyn Jenkins-Welch*)

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

0930 – 1010 : **Central nervous system** (*Dr Madhan V Kumar*)

- Cerebral autoregulation
- Causes and management of raised intra-cranial pressure
- Space- occupying lesions

1015 - 1045 : **Bleeding and coagulation** (*Dr Melvyn Jenkins-Welch*)

COFFEE BREAK: 1045 – 1100 HRS

1105 - 1205 : **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

1210 - 1245 : **Resuscitation, sepsis and septic shock** (*Dr Melvyn Jenkins-Welch*)

LUNCH BREAK: 1245 - 1325

AFTERNOON SESSION

- 1330 – 1400** : **Gastrointestinal system** (*Dr Melvyn Jenkins-Welch*)
- Post-operative ileus
 - Nutrition
 - Re-feeding syndrome
- 1400 – 1430** : **Homeostasis, feedback loops and acid-base balance** (*Dr Gareth Scholey*)
- 1435 - 1505** : **Applied acid-base analysis** (*Dr Gareth Scholey*)
- 1505 – 1600** : **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

Coffee Break: 1600 - 1620 hrs

- 1620 – 1720** : **Renal system** (*Dr Gareth Scholey*)
- Renal autoregulation
 - Renin-angiotensin system
 - Types and management of renal failure
 - Erythropoietin
- 1720 - 1800** : **Burns** (*Mr Stuart Enoch*)
- Assessment
 - Indications for referral
 - Pathophysiology and principles of management
- 1800 - 1845** : **OSCE scenarios** (*Mr Stuart Enoch*)
- 1845 - 1900** : **Summary and Feedback**

1900: END OF COURSE!