

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

Date: 25th September 2014 (Thursday)

Time: 0825 – 1915 hrs;

Venue: W0.13, School of Biosciences, Sir Martin Evans Building, Cardiff University

Course Programme

0815 – 0825 : Registration

MORNING SESSION

0820 – 0830 : Welcome, introduction and format (Mr Stuart Enoch)

0830 - 0900 : General Physiological Principles 1 (Dr Paul Morgan)

- Homeostasis, feedback loops
- Applied acid-base balance

0900 – 0930 : General Physiological Principles 2 (Dr Paul Morgan)

- Sepsis
- Septic shock

0930 - 1045 : 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

Coffee Break: 1045 - 1100 hrs

1100 - 1200 : Renal system (Dr Gareth Scholey)

- Renal autoregulation
- Renin-angiotensin system
- Types and management of renal failure
- Erythropoietin

1200 - 1245 : Cardiovascular System (Dr Gareth Scholey)

- Cardiac pressure cycle

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

Lunch Break: 1245 - 1330

AFTERNOON SESSION

- 1330 - 1400** : **General Physiological Principles 3 (Dr Paul Morgan)**
- Bleeding
 - Coagulation/Anti-coagulation
- 1410 - 1440** : **Principles of Epidural Anaesthesia/Assessment; Pain pathways (Dr Paul Morgan)**
- 1450 - 1530** : **Burns (Mr Stuart Enoch)**
- Assessment
 - Indications for referral
 - Pathophysiology and principles of management

Coffee Break: 1530 - 1545 hrs

- 1550 - 1620** : **Central nervous system (Dr Paul Morgan)**
- Cerebral autoregulation
 - Causes and management of raised intra-cranial pressure including space-occupying lesions
 - Head Injury
- 1630 - 1655** : **Resuscitation, Temperature Regulation and Hypothermia (Dr Paul Morgan)**
- 1700 - 1750** : **Physiological Principles in the Management of Trauma (Mr Stuart Enoch)**
- 1830 – 1845** : **Essential Surgical Microbiology (Mr Stuart Enoch)**
- 1845 - 1900** : **Summary and Feedback**

1900: END OF COURSE!