



# Cardiff MRCS OSCE Courses: Applied Surgical Sciences & Critical Care

Physiology Lecture Theatre, School of Biosciences, Sir Martin Evans Building, Cardiff University

16<sup>th</sup> April 2015 (Thursday)

0815 - 1930

## Course Programme

0815 - 0825

Registration

0825 - 0830

Welcome - **Mr S Enoch**

0830 - 0900

General Physiological Principles, Part 1 - **Dr Paul Morgan**

- Homeostasis & feedback loops.
- Applied acid-base balance.

0900 - 0930

General Physiological Principles, Part 2 - **Dr Paul Morgan**

- Sepsis.
- Septic shock.

0940 - 1045

Respiratory system - **Dr Teresa Evans**

- Normal ventilatory cycle.
- Controls of ventilation.
- Causes & management of post-operative respiratory failure.
- Indications for ventilatory support and weaning off ventilator.
- Intermittent positive pressure ventilator.
- Acute (adult) respiratory distress syndrome.

- 1100 - 1135      General Physiological Principles, Part 3 - **Dr Paul Morgan**
- Bleeding.
  - Coagulation / Anti-coagulation.
- 1135 - 1150      Principles of Epidural Anaesthesia / Assessment; Pain Pathways - **Dr Paul Morgan**
- 1150 - 1215      Resuscitation, Temperature Regulation & Hypothermia - **Dr Paul Morgan**
- 1215 - 1255      Management of Burns - **Mr Stuart Enoch**
- Assessment.
  - Indications for referral.
  - Pathophysiology & principles of management.

- 1330 - 1435      Endocrine Physiology - **Dr Jason Seewoodhary**
- Functions of the pituitary.
  - Basic physiology of the thyroid & parathyroid glands.
  - Disorders of calcium metabolism.
  - Basic physiology of the adrenal glands & glucocorticoids.
  - Glucose homeostasis & diabetes in surgery.
  - Hypothyroidism & hyperthyroidism.
  - Corticosteroids in surgery.
- 1435 - 1530      Renal System - **Dr Jason Seewoodhary**
- Renal auto-regulation.
  - Renin-angiotensin system.
  - Types & management of renal failure.
  - Erythropoietin.

1545 - 1645

Cardiovascular System - **Mr Joe Thekkudan**

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

1645 - 1730

Critical Care in Surgery - **Mr Joe Thekkudan**

1730 - 1830

Physiological Principles in the Management of Trauma - **Mr Stuart Enoch**

1830 - 1915

Essential Surgical Microbiology - **Mr Stuart Enoch**

1915 - 1930

Summary &amp; Feedback