Cardiff MRCS OSCE Course: 20th Applied Surgical Sciences & Critical Care

Feedback - January 2015
In the final part of the MRCS exam, the surgical trainees are expected to have a good working knowledge of general physiological principles, core knowledge of the physiology of specific systems and an understanding of their application in surgical practice.

This intensive one-day revision course provides the candidates with an overview of basic physiological principles, and the physiology of the respiratory, cardiovascular, renal, endocrine, gastrointestinal, and the central nervous systems.

The interactive lectures were delivered in a manner to help candidates answer the OSCE/Viva stations in a structured, systematic and concise manner.

Topics:
- General physiological principles
- Acid-base imbalance (metabolic & respiratory acidosis/alkalosis) & their management
- Fluid balance & fluid replacement therapy
- Renal physiology
- Bleeding & Coagulation
- Management of sepsis & septic shock
- Homeostasis & thermoregulation
- Hypothermia
- Principles of epidural anaesthesia
- Gastrointestinal system
- Cardiovascular system & critical care
- Endocrine physiology
- Neurophysiology & management of head injury
- Burns
## Course Programme

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<td>0815 - 0840</td>
<td>Registration, Welcome &amp; Introduction</td>
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<td>General Physiological Principles 1</td>
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<td>0915 - 0945</td>
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<td>0945 - 1100</td>
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<td>Break for Refreshments</td>
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<td>General Physiological Principles 3</td>
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<td>Principles of Epidural Anaesthesia / Assessment:</td>
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<td>Lunch</td>
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Course Programme

1340 - 1420 Burns
- Assessment
- Indications for referral
- Pathophysiology & principles of management

1420 - 1520 Cardiovascular System
- Cardiac pressure cycle
- Control of cardiac output
- Blood pressure and its control mechanisms
- Inotropes & their actions

1520 - 1625 Endocrine Physiology
- Function of pituitary
- Basic physiology of thyroid and parathyroid glands
- Disorders of the calcium metabolism
- Basic physiology of adrenal gland & glucocorticoids
- Glucose homeostasis and diabetes in surgery
- Hypothyroidism & hyperthyroidism
- Corticosteroids in surgery

1100 - 1115 Break for Refreshments

1645 - 1720 Central Nervous System
- Central auto-regulation
- Causes & management of raised intra-cranial pressure including space-occupying lesions
- Head Injury

1720 - 1745 Resuscitation, Temperature Regulation & Hypothermia

1745 - 1845 Renal System
- Renal auto-regulation
- Renin-angiotensin system
- Types & management of renal failure
- Erythropoietin

1900 Summary, Feedback & End of Course
Faculty List

Dr Paul Morgan, FRCA
Examiner – Royal College of Surgeons of England
Consultant Intensivist, Adult Critical Care
University Hospital of Wales, Cardiff

Professor Stuart Enoch, MB BS, PhD, PGCert (Med Sci), MRCSEd, MRCS (Eng)
Senior Lecturer; Director of Education & Research
Doctors Academy Group

Dr Jason Seewoodhary, BSc (Hons), MBBCh (Hons), MRCP (UK)
Speciality Registrar in Endocrinology
University Hospital of Wales, Cardiff

Dr Teresa Evans, FRCA
Consultant Anaesthetist
Royal Gwent Hospital, Newport

Dr. Melvyn Jenkins-Welch, FRCA
Consultant Anaesthetist
University Hospital of Wales, Cardiff

Dr. Gareth Scholey, MRCP, FRCA
Consultant in Intensive Care Medicine
Adult Critical Care
University Hospital of Wales, Cardiff
Overall Course Feedback to the Questions:

- **How was the overall content of the course?**
  - Excellent: 69%
  - Very Good: 31%

- **How was the clarity of presentations/demonstrations?**
  - Excellent: 46%
  - Very Good: 54%

- **How do you rate the relevance of this course to your exam?**
  - Excellent: 54%
  - Very Good: 38%
  - Neutral: 8%

- **How would you rate the general academic standard of the lectures?**
  - Excellent: 54%
  - Very Good: 46%

- **Would you recommend this course to a friend?**
  - Excellent: 38%
  - Very Good: 62%

- **Do you think this course provided good value for money?**
  - Excellent: 31%
  - Very Good: 46%
  - Neutral: 23%
Overall Teaching Feedback for the Area of

**Cardiovascular Physiology**
- Excellent: 54%
- Very good: 23%
- Neutral: 8%
- Fair: 15%
- Poor: 2%

**Respiratory Physiology**
- Excellent: 46%
- Very good: 54%
- Neutral: 8%
- Fair: 15%
- Poor: 2%

**Homeostasis & Acid-base Balance**
- Excellent: 54%
- Very good: 31%
- Neutral: 15%
- Fair: 8%
- Poor: 2%

**Sepsis/Septic Shock**
- Excellent: 38%
- Very good: 54%
- Neutral: 8%
- Fair: 8%
- Poor: 2%

**Hypothermia**
- Excellent: 62%
- Very good: 23%
- Neutral: 15%
- Fair: 2%
- Poor: 2%

**Bleeding / Coagulation**
- Excellent: 46%
- Very good: 23%
- Neutral: 23%
- Fair: 8%
- Poor: 2%
Overall Teaching Feedback for the Area of:

- **Epidural Anaesthesia**: 54% Excellent, 23% Very good, 23% Neutral
- **Management of Burns**: 69% Excellent, 31% Very good
- **Endocrine Physiology**: 39% Excellent, 38% Very good, 8% Neutral, 15% Fair, 8% Poor
- **Central Nervous System**: 46% Excellent, 31% Very good, 15% Neutral
- **Pain Management**: 38% Excellent, 31% Very good, 23% Neutral, 8% Fair, 8% Poor
- **Trauma & Post-op Management**: 54% Excellent, 38% Very good, 8% Neutral
Overall Teaching Feedback for the Area of

Surgical Microbiology

- Excellent: 50%
- Very good: 29%
- Neutral: 21%

Necrotising Fasciitis

- Excellent: 46%
- Very good: 54%

Legend:
- Excellent
- Very good
- Neutral
- Fair
- Poor
Individual Comments

Very useful.

Dr James Mbuvi
Wythenshawe Hospital, Manchester, UK

The best MRCS course I have attended.

Ms Herjyot Dharni
Royal London Hospital, London, UK

Well programmed course and full use of time.

Dr M Alabdullah
Nottingham City Hospital, Nottingham, UK

Relevant to exam syllabus.

Ms Sieu Ming Ng
University Hospital of Wales, Cardiff, UK

Great.

Ms Tiffany Berrington
Derriford Hospital, Plymouth, UK

Very good.

Dr Ankit Patel
Princess Royal University Hospital, Orpington, UK

Excellent.

Dr Yan Mei Goh
Royal Blackburn Hospital, Blackburn, UK
Individual Comments

Very good, better than I expected.

Dr Tetyana Myronenko
Withybush General Hospital, Haverfordwest, UK

Overall good course but some lectures such as Bleeding, CNS pathology, pain management were not exam focussed. They felt like university lectures rather than information that is taught on an exam preparation course.

Dr Anuja Mitra
Chelsea and Westminster Hospital, London, UK

Great Course. Helped me feel more confident.

Mr Ehab Elbur
Wythenshawe Hospital, Manchester, UK

Well organised course. Good venues/food. Very good and helpful staff (Thanks Chloe). Clinical examinations day was particularly useful, especially spine and shoulder examination (the Reg was clearly very experienced), same for the Hip and Knee (Mr Tandon made it really easy), Abdominal examination (again reg was very experienced and showed how to approach abdo examination for the exam in systematic way). Great station on telephone conversation with ITU consultant, was very helpful to hear advice from real ITU cons to calibrate one’s performance. One day intensive anatomy course was just great! Prof Enoch and lady who taught skull base/chest/solid organs were very very helpful, managed to highlight a lot of important / relevant subjects for MRCS B. Definitely feel more confident now and know what should be improved in last weeks before the exam. Overall I really liked the course. Hope Doctors Academy will continue to organise such a great courses.

Dr Iskandar Rakhimov
St George’s Hospital, London, UK
Doctors Academy is an UK-based International Non-Profit Organisation comprising of doctors, dentists and scientists that undertakes a diverse range of educational activities globally. The aim of the Academy is to disseminate information and exchange medical knowledge between professionals from diverse backgrounds working in a variety of healthcare settings. This is achieved by the provision of a number of attendance courses, publishing house, online resources and international events/competitions.

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- Final Year Medicine and Surgical Revision Courses
- Training the Clinical Anatomy Trainer
- Clinical Anatomy as Applied to Trauma and Emergency Medicine
- Surgical Anatomy of Important Operative Procedures
- Future Surgeons: Key Skills (RCSEd delivered)
- Structured Introduction to Surgical Skills

**Postgraduate:**
- MRCS Part A
- MRCEM Part A
- MRCS Part B OSCE
- DOHNS: Intensive Revision & OSCE
- Intercollegiate Basic Surgical Skills (RCSEd delivered)
- MRCP PACES Part 2
- FRCS (General Surgery) Exit Exam
- Cadaveric Ultrasound-Guided Musculoskeletal Intervention Course
- Ultrasound-Assisted Botulinum Toxin Injection for Neuromuscular Disorders
- Live Advanced Laparoscopic Colorectal Course

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- **International Medical Summer School**
  *Manchester, 1st - 5th August 2016*

- **International Academic and Research Conference**
  *Manchester, 6th August 2016*

- **World University Anatomy Challenge**
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