UNIVERSITY OF CAMBRIDGE
Department of Physiology, Development and Neuroscience

NST Tripos Part II BBS (Biological & Biomedical Sciences) Minor Module

Surgical and Radiological Anatomy

Course Rationale

Surgical and Radiological Anatomy (SaRA) is a BBS Minor Module to help students prepare for safe surgical and radiological practice. The need for a good working knowledge of anatomy in operative surgery and interventional radiology is evidenced by the increasing number of medicolegal negligence claims due to errors resulting from ignorance of the location of key anatomical structures and the existence of common anatomical variations.

Postgraduate membership and fellowship examinations of the Royal College of Surgeons and the Royal College of Radiologists include a number of OSCE (Objective Structured Clinical Examination) stations to test a candidate's knowledge of relevant clinical anatomy. In addition, applicants for Core Surgical Training and Specialty Radiology Training may improve their scores in the *Experience in and commitment to specialty* component by having chosen to take a relevant module such as this SaRA course.

The SaRA course provides the opportunity for students to attend operating theatre sessions or to spend time with radiologists in interventional and/or reporting sessions, thus widening their experience and enabling them to see at first-hand how these specialties operate on a daily basis. As students who are not studying medicine cannot attend hospital placements, they may complete an anatomical prosection from a list of available specimens.

Course Objectives

- Introduces students to aspects of anatomy especially relevant to surgical practice and radiological imaging
- Provides opportunities to attend operating theatre sessions ***or*** *i*nterventional radiology/reporting sessions ***or*** to produce an anatomical prosection
- Enables students to research and evaluate specific procedures related to their practical experience

Selection Criteria

Students doing medical, veterinary medicine and natural sciences are all welcome to apply. For the first few years, we were able to accept all the students who selected this option. However, there was a large number of applicants last year, so scores in the anatomy modules (FAB and HNA for MedST students) and their overall class in Parts IA and IB were considered for selection purposes, as clinical placements are limited. If you are interested in this course, do consider applying and email the course organiser if you have any queries.

NST and VetST students:
Please submit a written statement of around 500 words explaining your interest in taking SaRA. VetST students may liaise with the Queen's Veterinary School Hospital to arrange placements in Lent Term. NST students may only choose Option 3 in Lent Term.

Course Overview

Michaelmas Term

14 lectures delivered by Consultant Surgeons and Radiologists from Addenbrooke's Hospital and the Royal Papworth Hospital to prepare students for the practical aspect of the course in Lent Term. These provide students with the relevant anatomical knowledge of a specific region that will inform the student during their practical experience. Each lecture will focus on either the surgical or the radiological approach for a significant clinical area. Lecture titles will include, for example, *Surgically relevant anatomy of the ureters and kidneys, Surgical management of colorectal cancer, Radiological anatomy of hernias,* and *Spinal imaging and intervention.*

Lent Term

Students can choose ***one*** of the following options:

OPTION 1: Attendance at operating sessions, researching and recording procedures witnessed with discussion of preoperative preparation and postoperative complications, conducting and writing up a literature review pertaining to the procedure and/or evaluation of relevant research on the subject, ***OR***

OPTION 2: Attendance at diagnostic reporting and/or interventional radiology sessions, researching and evaluating the challenges for specific regions, conducting and writing up a literature review pertaining to the procedure and/or evaluation of relevant research, ***OR***

OPTION 3: Preparation of an anatomical prosection from a list of available specimens, researching, conducting a literature review, and writing up known variations and potential pathological conditions.

In addition, there are 2 skills sessions, one in Michaelmas Term to prepare students for the clinical placement, and one in Lent Term on the written report and presentation.

Assessment

Assessment is by coursework. There is no final examination.

- ***Single Best Answer MCQs*** (1 hour, 20%) based on Michaelmas Term lectures, taken online, invigilated on the first Wednesday of Full Lent Term.
- ***Written Report*** (2,500-3,000 words, 50%) on operating theatre *or* radiology session *or* anatomical prosection, including literature review, evaluation of research, imaging modality, anatomical variations and pathological conditions, to be submitted on the last day of Lent Term.
- ***Oral Presentation*** with 5 PowerPoint slides (30%) on the content of practical sessions, to be submitted in Week 2 or 3 of Full Easter Term.

Participating Clinicians

Surgeons

Mr A Abood (Plastic Surgery)
Miss S Biers (Urology)
Mr J Davies (Colorectal Surgery)
Ms I Fitzgerald-O'Connor (ENT)
Mr S McDonnell (Orthopaedics)
Mr N Moorjani (Cardiothoracic)
Mr T Santarius (Neurosurgery)

Radiologists

Dr B Agrawal (Cardiothoracic)
Dr T Das (Head & Neck Imaging)
Dr E Gerety (Musculoskeletal, Upper Limb)
Dr E Godfrey (Endoscopic US)
Dr A Grainger (Musculoskeletal, Lower Limb)
Dr T Sadler (Abdominal Imaging)
Dr J Scott (Neuroradiology)

Course Facilitators

Contact Email: hacteach@pdn.cam.ac.uk

Course Organiser
Prof Cecilia Brassett (cb457)