



MEDICINE SUMMER SCHOOL

2012 Schedule

Day 1 :

10.30 – 10.45: Welcome and Introduction

10.45 – 11.45: Dealing with Patients

Students will be introduced to the techniques which medical professionals use to gain vital information from patients who may find it difficult to describe their own symptoms or may be reluctant to give a full account of their history. We will look particularly at the way in which medical professionals categorise pain using the SOCRATES acronym. To conclude this session, students will engage in role-play exercises using the techniques which they have learnt.

11.45 – 1.00: Haematology

This session is devoted to the study of blood and disorders of the blood. After an overview of the constitution and functions of the blood, students will learn about the role of antibodies, antigens and the Rhesus factor, including its affect upon Haemolytic disease. We will look at case studies involving anaemia, septic shock and malaria, explaining their causes, the mechanism of infection, symptoms and treatment.

1.00 – 2.00: Lunch

2.00 – 3.30: Radiology

Radiologists study medical images in order to make or refine a diagnosis. Students will learn about the varied processes and advantages of different medical imaging technologies including: radiography, CT scanning, Mammograms, Fluoroscopy, Ultrasound and MRIs. Each group will then take the role of radiologists in our detailed case studies, making decisions on which tests and procedures should be performed and then presenting their diagnosis and treatment recommendations.

3.30 – 4.30: Ethical Issues – HIV, Disclosure and Patient Confidentiality

This session will explore the mechanism of the HIV virus and its impact upon white blood cell count. Students will be presented with a medical dilemma, which raises questions connected with issues of patient confidentiality in relation to HIV status. The class will



debate the ethical implications of various responses to this dilemma for the individuals concerned, and for the wider role of doctors in maintaining public health.

Day 2:

10.30 – 11.30: Introduction to Neurology

Neurology is the branch of medicine which deals with the function and pathologies of the brain, spinal cord and peripheral nervous system. This session will cover the anatomy of the brain and central nervous system, looking at which areas are responsible for language, personality, development, memory etc. and the consequences of brain injury of these areas.

11.30 – 1.00: Vision, Somatic Sensation, Reflexes and Hearing

A major role of the neurological system is to control our senses and reflexes. During this session, the mechanisms of each sense will be explored, and we will look at how the senses interact with the central nervous system and manifest in the brain and our subjective experience of sense impressions. The session will also allow students to perform some key tests on one another's senses and reflexes.

1.00 – 2.00: Lunch

2.00 – 3.30: Neurological Conditions

We will be examining the mechanisms, symptoms and treatment of conditions which develop as a result of neurological problems including Parkinson's disease, Muscular Sclerosis and Myasthenia Gravis.

3.30 – 4.30: Ethical Issues – Huntington's disease and transplant waiting lists

This session will include an in-depth study of Huntington's disease, how it occurs and develops as well as its mechanism and symptoms. We will then proceed to the neuropsychiatric symptoms of Huntington's and discuss its relationship with alcoholism. Finally, we will use a Huntington's case study to debate issues related to the allocation of medical resources such as transplant organs, or expensive medication, to patients with self-inflicted or partially self-inflicted conditions.

Day 3:

10:30 – 12:30: Cardiology

In this seminar we will uncover the complexity of the cardiovascular system, and take a particularly close look at the system of valves within the heart. This will be followed by consideration of the various conditions that develop when there are malformations of the heart including hypertrophic cardiomyopathy. Students will learn how to diagnose heart



defects such as mitral stenosis and aortic regurgitation simply by listening to the rhythm of the heart.

12.30 – 1.00: Dissection video and Anatomy

After a discussion of the practice and benefits of dissection as a method of anatomical study, this seminar focus on a teaching film of a thoracic cavity dissection, which will guide the students through the anatomy of the chest, and abdomen and the complex terminology used to categorise the anatomy.

1.00 – 2.00: Lunch

2.00 – 3.15: Pulmonary System

After an introductory look at the principles of gas exchange, the cycle and regulation of breathing and lung capacity, students will be test their own lung capacity. Once students have a detailed familiarity with the normal function of the lungs we will look at the effects of conditions such as tuberculosis and cystic fibrosis and the treatments available in such cases.

3.15 – 4.30: Trauma

Our final session will focus on one of the key skills in emergency medicine or trauma: suturing a wound. Students will learn about how to treat lacerations and about the various types of suturing used in different situations. The class will then have a chance to practice their own suturing skills, performing the simple interrupted stitch, which will simulate the close of a mid sized injury to arm or leg.