The UCL Doctor

A highly competent and scientifically literate clinician, equipped to practise person-centred medicine in a constantly changing modern world, with a foundation in the basic medical and social sciences. This vision is underpinned by the values of scholarship, rigour and professionalism. The focus is on the development of the student as a scientifically informed, socially responsible professional who, in turn, can serve the health needs of individuals and communities.

The information contained in this Student Guide was correct at the time of going to press, but no guarantees can be given that it will not be amended before the commencement of, or during, the degree programme to which it refers. Please refer to the Year 4 Moodle Pages regularly throughout the year.
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Section 1: Introduction to Year 4

Welcome to Year 4 of the MBBS programme at UCL Medical School. This booklet acts as an orientation to your studies in Year 4, outlining the overall structure of the year, how learning will be organised, how you will be assessed, and the criteria for successful progression to Year 5. The information in this booklet is not exhaustive and should be used alongside the resources on the MBBS Year 4 website [http://www.ucl.ac.uk/medicalschool/staff-students/course-information](http://www.ucl.ac.uk/medicalschool/staff-students/course-information) and the Year 4 Moodle pages.

The purpose of this Student Guide

Workplace-based learning is the backbone of Year 4 and moving towards predominantly workplace-based learning can be a challenging transition for students, whether they have just completed Year 3 or Year 2 at UCL or have transferred from another university. The advice, guidance and checklists in this booklet are set out to help you make the most of the complex and varied learning environment and activities during Year 4 and focus your learning on both the aims of the year and the individual modules within Year 4.

The aims of Year 4

The theme of Year 4 is ‘integrated clinical care’. The aims of this year are to:

- help you to learn from healthcare experiences
- become skilled at interviewing and examining patients with a range of problems across the range of healthcare settings
- become familiar with the ways in which patients access the healthcare system and the pathways of care for a range of common presentations
- understand the integrated approach to diagnosing and managing patients’ problems
- safely and clearly document information about patients and their care in a clinical notes system

To achieve this, much of your learning will take place in healthcare settings to ensure you will have exposure to patients with a wide range of healthcare needs including primary care and community care presentations, chronic disease management, acute illness presentations, mental health issues, and pre/peri and post-operative care.

The year is not focused on rotating through as many specialties as possible, but instead about spending time in longer, more generic and integrated attachments to better understand illness prevention, presentation and management. You will have further learning opportunities in many of these specialties in year 5 and particularly year 6 so do not feel that year 4 is only about learning about the medical and surgical specialities: it is about learning how to learn in the clinical setting and becoming experienced in taking histories and examining patients. However, you will see some specialist services and patients with rare conditions during the modules and you should make the most of these unique learning opportunities that you might not see again until you are qualified. Year 4 is also a time when you will be both looking backwards: to your past learning, and understanding how theory and understanding of health and disease links to practice; and
forwards: using the learning in this year as a key part of your journey to becoming a Foundation doctor.

By the end of Year 4 you should:

- be an excellent workplace learner: being able to make the most of experiential learning opportunities
- understand how the NHS works and the roles of a range of healthcare providers within it
- understand how a range of common diseases present and are managed in both community and hospital settings
- be able to communicate well with patients
- have developed a wide range of clinical skills and be able to carry out practical procedures competently
- be able to use the information gathered from patients, together with your developing understanding of medicine, to produce a differential diagnosis and problem list

The structure of the Year

- The year begins with an Introduction and Orientation Module (IOM) of three weeks, which comprises:
  - a general introduction and orientation to Year 4 including details of in-course and end of Year assessments
  - opportunities to develop key skills in communicating with and examining patients
  - supported visits to clinical settings to reinforce these skills
  - an introduction to some of the modules that run through Year 4 and to begin to define your learning needs as you move into your next module
- You will then undertake three further 13-week modules in rotation, mostly, but not exclusively, at one of the three main clinical campuses. Each module will consist of a one week introductory teaching programme followed by 12 weeks of clinical placements
- Your medicine in the community attachment in general practice will run in parallel to your hospital firms throughout the year
- Following one week of personal revision time, you will complete the summative assessment at the end of the year
- During the year you will: maintain a portfolio, including in course assessments; complete your record of completed procedures card; complete the Case of the Month activities; attend your General Practice placements; attend the Cancer Patient Pathway and attend the additional Clinical and Professional Practice teaching sessions which usually, but not exclusively, take place on Thursday afternoons
- Progression to Year 5 will depend on satisfactory progress in the summative assessments, completion of required course work, satisfactory sign off in Modules A, B and C, and the submission of a satisfactory portfolio.
- You will have been sent details of the sites where you will undertake each module, your allocated GP practice for the year and your Clinical and Professional Practice group details before you begin Year 4
Timetable for the Year

The following is an overall timetable for Year 4 in the academic Year 2017-2018. You are advised to check the UCL Medical School website for the most up to date information.

<table>
<thead>
<tr>
<th>Dates</th>
<th>Schedule</th>
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<tbody>
<tr>
<td>29/08/2017 - 15/09/2017</td>
<td>Introduction and Orientation Module</td>
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<tr>
<td>18/09/2017 - 22/09/2017</td>
<td>Module A, B and C Core Teaching Weeks (CTWs)</td>
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<tr>
<td>25/09/2017 - 15/12/2017</td>
<td>Modules A, B and C (holiday 18/12/17 - 01/01/18)</td>
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<tr>
<td>02/01/2018 - 05/01/2018</td>
<td>Module A, B and C CTWs (Bank Holiday 01/01/2018)</td>
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<tr>
<td>08/01/2018 - 06/04/2018</td>
<td>Modules A, B and C (Holiday 29/03, 30/03, 02/04, 03/04, 04/04)</td>
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<tr>
<td>09/04/2018 - 13/04/2018</td>
<td>Module A, B and C CTWs</td>
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<tr>
<td>16/04/2018 - 06/07/2018</td>
<td>Modules A, B and C (Bank holidays on 7/5/18 and 28/5/18)</td>
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<tr>
<td>09/07/2018 - 13/07/2018</td>
<td>Personal revision</td>
</tr>
<tr>
<td>17/07/2018 - 19/07/2018</td>
<td>Clinical assessments</td>
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<tr>
<td>26/07/2018</td>
<td>Written assessments</td>
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<tr>
<td>02/08/2018 10:00 – 12:00</td>
<td>Results</td>
</tr>
<tr>
<td>02/08/2018 PM and 03/08/2018</td>
<td>Student Support Appointments for unsuccessful candidates</td>
</tr>
</tbody>
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The Year 4 timetables are complicated, sometimes with more than one learning opportunity at the same time. The flow chart below indicates the priorities for your attendance in Year 4.

**Year 4 Teaching Priorities**

1st
- GP Days
- Clinical and Professional Practice Teaching

2nd
- Clinical Skills (Module B)
- Large Group Tutorials

3rd
- Firm specific teaching sessions (eg including bedside)

4th
- Cancer Patient *

5th
- Ward work; clerkings; surgery; consultant ward rounds; out patient clinics

* Students should attend between 3 - 5 cancer patient visits between October – March, please note that you do not need to attend every appointment with your patient. If attending patient visits is precluded by timetabling please discuss specifically with your firm lead and get their permission to miss teaching before you go and please inform your module administrator once the consultant has agreed.

Any Student Support or Personal Tutor appointment takes priority over all teaching activities.
Section 2: The Horizontal modules in Year 4

The Introduction and Orientation Module (IOM)

During this three week module, you will begin to develop the skills, competencies and understanding to help you make the most of your experiences in Year 4. A range of teachers and clinical teams contribute to your learning in the Year 4 IOM. This includes the PALS: senior students in their final year at UCL, who will help you make this important transition into patient based learning in the context of delivering clinical care. You will spend time in the lecture theatres, in the clinical skills centres, in small group work sessions, in general practices, and on hospital wards.

All students take the IOM together then students rotate through the three remaining Year 4 modules.

The aims of the Year 4 IOM are to:

- prepare you for the integrated clinical care year
- prepare you for maximising the benefits of workplace-based learning that is the backbone of Year 4
- ensure that you recognise a range of issues that contribute to the provision of safe, high quality, patient-centred care
- equip you with foundation skills in the following
  - interviewing (history taking)
  - clinical examination
  - completing and documenting a full medical clerking
  - developing a problem list and an action plan for a patient
  - developing an understanding of clinical reasoning

The timetable for the IOM can be found on the Year 4 Moodle site and will be available to subscribe to on your phone.

Module A

During this 13-week module you will learn skills and knowledge central to being a doctor. The emphasis is on the global management of individuals as well as pathways of care for specific presentations and disease conditions.

The aims of Module A are for you to:

- become fully competent in undertaking a full history and examination
- acquire competence in differential diagnosis, problem lists and patient management
- observe and participate in medical practice i.e. to be a junior apprentice
• be aware of pathways of care for common presentations and conditions
• participate in on-take activities including out of hours

Module B

The aims of Module B are for you to:

• gain competence in the clinical assessment, diagnosis, investigation, and medical and surgical treatments of patients presenting with the common problems related to digestive health
• gain competence in the clinical assessment, diagnosis, investigation and medical and surgical treatments of patients presenting with common musculoskeletal problems and trauma
• obtain competence in the fundamentals of surgery, and experience the culture of a surgical hospital firm
• obtain competence in the principals of pre-intra and post-operative care
• meet patients in the community with problems related to digestive health; movement; or post-operative care
• acquire and gain confidence in undertaking basic clinical skills

Module C

The aims of Module C are for you to:

• become fully competent in undertaking a full medical history from any patient and to be able to perform a full physical examination
• be able to begin to formulate differential diagnoses from the information obtained
• know how to look up and interpret all relevant investigations pertaining to the patient - biochemical, pathological and radiological - and to be able to discuss these intelligently
• learn how to document all the above in a structured way
• develop an awareness of common chronic diseases and how these are managed
• learn how patients are managed in a specialised unit in conjunction with a GP
• learn how to work effectively in a team
• be proactive in seeking out learning opportunities
Section 3: Core conditions and common presentations

The learning experiences in the MBBS programme are focused on a set of core conditions and presentations. This list is included here. Those conditions and presentations in **BOLD** are most likely to be seen or addressed in learning in Year 4.

Remember:

- This list is not exhaustive but it should form the basis of your learning
- Workplace-based teaching takes place in the context of clinical care. This means that we cannot guarantee you will see all conditions and presentations on this list nor that patients will present only with these conditions and presentations
- You will need to see patients and you will need to read around the subject: neither approach is sufficient on its own
- In clinical practice, patients present with symptoms and problems, not necessarily with a diagnosis as laid out in a textbook, so your learning needs to reflect this
- You should recognise that in up 30% of cases, no firm diagnosis is ever made
UCL MBBS Core Conditions and Presentations

NOTE: this list applies to the whole of MBBS, and not just Year 4. It is likely that many of these conditions and presentations will be encountered in Year 4, and others more likely in Year 5 for example.
However, if a learning experience presents itself that will improve your knowledge or skills that is not expected in a certain year or is strictly defined as ‘required’ here then it should still not be overlooked.

Common presentations
- Abdominal pain
- Acute confusion and coma
- Blackouts / loss of consciousness
- Bloating
- Change in bowel habit
- Chest pain
- Cough
- Dizziness
- Falls
- Fever
- Headache
- Itching / pruritis
- Low back pain
- Nausea / Vomiting
- Obesity
- Palpitations
- Polysymptomatic
- Rectal or other GI bleeding
- Shortness of breath
- Sleep problems
- Swollen legs
- Tired all the time
- Urinary symptoms
- Weight loss
- Wheeze

Cancer
- Breast
- Head and neck
- Larynx
- Metastatic cancer - Bone, Liver, Brain
- Prostate
- Testes
Child health

- Autism, Aspergers & ADHD
- Birth asphyxia
- Bronchiolitis
- Cerebral palsy
- Coeliac disease
- Congenital heart defects – ventricular septal defect and patent ductus arteriosus (PDA)
- Congenital infections
- Croup
- Cystic fibrosis
- Developmental delay
- Developmental dysplasia of the hip
- Down syndrome
- Failure to thrive / Faltering growth
- Febrile convulsions
- Gastro-oesophageal reflux disease
- Henoch-Schönlein purpura
- Immune thrombocytopenia
- Infantile colic
- Infantile hypertrophic pyloric stenosis
- Inherited disorders of metabolism
- Intussusception
- Kawasaki disease
- Neonatal jaundice
- Neuroblastoma
- Normal development and puberty
- Pre-term infants
- Respiratory distress syndrome/Hyaline membrane disease
- Rickets
- Separation anxiety / school refusal
- Transient synovitis
- Turner syndrome
- Wilms tumour

Circulation and breathing

- Arrhythmias - atrial fibrillation, flutter, nodal tachycardia, ventricular ectopics, tachycardia, fibrillation first, second & third degree (complete) heart block
- Asthma
- Blood vessel disorders (aneurysms, varicose veins, peripheral arterial disease, atherosclerosis)
- Chronic obstructive pulmonary disease including bronchiectasis
- Heart failure and its consequences
- Hypertension
• Interstitial lung disease
• Ischaemic heart disease
• Pericarditis & tamponade
• Pleural effusion
• Pneumothorax
• Lung cancers
• Respiratory failure: type 1 and 2
• Superior vena cava obstruction
• Thromboembolism - arterial and venous
• Upper and lower respiratory tract infections including infections in immunocompromised patients
• Valvular heart disease including infective endocarditis

Endocrine system regulation and reproduction and genetics
• Adrenocortical insufficiency and excess
• Diabetes mellitus Type 1 and type 2
• Diabetic emergencies: ketoacidosis, hypo and hyper glycaemia, hyperosmolar non-ketotic Coma
• Disorders of calcium metabolism
• Endocrine emergencies: Addisonian crisis, thyrotoxicosis, myxoedema, phaeochromocytoma, pituitary failure
• Gonadal dysgenesis
• Lipid metabolism disorders
• Metabolic syndrome
• Pituitary and adrenal tumours
• Syndrome of inappropriate anti-diuretic hormone (SIADH) and diabetes insipidus
• Thyroid cancer
• Thyroid dysfunction: hyperthyroidism, hypothyroidism, goitre

Ear, nose and throat
• Acoustic neuroma
• Acute vertigo/ Meniere’s disease
• Cholesteatoma
• Epistaxis
• Facial palsy
• Hearing loss
• Obstructive sleep apnoea
• Otitis Media and Externa
• Otosclerosis
• Pleomorphic salivary adenoma
• Presbyacusis
• Rhinitis
• Safe perforations
• Salivary gland disorders
Gastroenterology

- Alcoholic liver disease
- Anal conditions – abscess, haemorrhoids, fistula, fissure
- Cancers of the bowel, stomach, oesophagus, liver and pancreas
- Diverticular disease
- Enteropathies and malabsorbtion
- Functional disorders of the GI tract
- Gallstone disease
- Gastrointestinal (GI) bleeding
- Gastro-oesophageal reflux disease (GORD) / Dysphagia
- Hepatitis, cirrhosis, drug related liver injury and metabolic liver disease
- Infection and infestations of the GI tract
- Inflammatory Bowel Disease
- Jaundice
- Oesophagitis / Barrett’s oesophagus
- Pancreatic disorders - pancreatitis, insufficiency
- Ulcers – peptic and duodenal

Haematology

- Anticoagulation
- Bleeding disorders: thrombocytopenia; disseminated intravascular coagulation (DIC); haemophilia
- Blood transfusion
- Haematological malignancies: lymphoma; leukaemia; myeloma
- Haemolysis
- Iron deficiency
- Megaloblastic anaemia
- Neutropaenic sepsis
- Polycythaemia
- Thrombophilia

Infection and defence

- Bone and joint infection: osteomyelitis, septic arthritis of joints, TB
- CNS infections: meningitis; encephalitis; abscess; infections in the immunocompromised
- ENT infections
- Genitourinary infections: syphilis; gonorrhoea, chlamydia
- Hepatobiliary infections
- HIV
- Imported fevers including malaria
- Septic shock
- Tuberculosis
- Urinary tract infection and pyelonephritis
• Vaccination
• Viral hepatitis

Kidneys and urinary tract

Acute Kidney Injury
• Functional anatomy of the kidney
• Creatinine as marker of AKI
• Differentiating AKI from CKD
• Emergency treatment of hyperkalemia and fluid overload
• Pre-renal, post-renal and intrinsic renal causes of AKI
• Assessment of volume status
• Assessment of renal tract obstruction
• Exogenous and endogenous toxins as a cause of AKI

Chronic Kidney Disease
• Relationship between plasma creatinine and GFR
• Use of estimated GFR and urinary albumin to stage CKD
• Common causes of CKD - diabetes, vascular disease
• Hypertension and the kidney
• Blood pressure management in CKD
• Management of fluid overload/hypertension/proteinuria in CKD
• Mineral Bone Disorder (particularly hyperparathyroidism)
• Anaemia
• Drugs and the kidney
• Prostatic hypertrophy and renal tract obstruction
• Assessment and significance heamaturia and proteinuria
Intrinsic kidney disease
- Nephrotic syndrome
- Acute Nephritic Syndrome
- Glomerular disease as a cause of AKI and CKD
- Glomerular disease as part of systemic inflammatory disorders
- Interstitial nephritis
- Vesicoureteric reflux and chronic pyelonephritis
- Treatment of glomerulonephritis e.g. Rapidly progressive GN

Renal replacement therapy
- When should dialysis be started in end-stage kidney disease?
- Types of dialysis
- Dialysis access and infection
- Conservative care of end stage kidney disease
- Kidney Transplantation and major complications

Renal and urothelial cancers

Movement and musculoskeletal biology
- Bone cancers
- Common disorders and injuries of the hip, knee, ankle, foot, neck, back, shoulder, elbow, wrist and hand
- Common fractures of upper and lower limbs including principles of treatment
- Compartment syndrome
- Connective tissue disorders including systemic lupus erythematosis (SLE)
- Gout & pseudogout
- Inflammatory arthropathies including rheumatoid arthritis (RA)
- Management of spinal injuries
- Metabolic bone disease e.g. Paget's, osteoporosis and Vitamin D
- Osteoarthritis
- Rehabilitation after joint replacement, fractures or severe injuries, especially spinal injuries
- Seronegative arthritis

Mental health
- Alcohol and substance misuse
- Anxiety including generalised anxiety disorder, phobias, post traumatic stress disorder (PTSD) and obsessional-compulsive disorder (OCD)
- Deliberate self harm and assessment of suicide risk
- Depression and anxiety related to physical health
- Eating disorders : anorexia and bulimia nervosa
- Mental health problems in people with learning disabilities
- Mood (affective) disorders including depression and bipolar disorder
- Personality disorders
- Post-partum mental health disorders
- Psychoses, and schizophrenia
- Sexual dysfunction
- Somatoform disorders including somatisation and hypochondriacal disorder

**Neuroscience and behaviour**
- Cerebrovascular disease including transient Ischaemic episodes (TIAs), intracerebral thrombosis and haemorrhage
- Cranial nerve lesions
- Dementias - vascular, Alzheimer's, Lewy Body
- Functional neurological disorders
- Guillain Barré syndrome
- Intracranial and spinal tumours
- Migraine
- Motor neurone disease
- Multiple sclerosis
- Myaesthenia gravis
- Myopathies
- Nerve root and cauda equina compression
- Organic causes of psychiatric disorders
- Parkinson's disease
- Peripheral and autonomic neuropathy
- Seizure disorders
- Spinal cord compression

**Ophthalmology**
- Cataracts
- Causes of acute and gradual visual loss
- Children and the eye
- Diabetes and the eye
- Eye in systemic disease
- Glaucoma
- Neurophthalmology – diplopia, ptosis, visual field defects, pupils
- Red eye
- Screening and public health in Ophthalmology
Plastic surgery / skin
• Acne
• Benign & malignant lesions of skin and oral mucosa
• Blistering disorders
• Breast reconstruction & reduction
• Burns
• Cutaneous infections
• Cutaneous manifestations of systemic disease
• Dermatological emergencies
• Leg ulcers/ chronic venous insufficiency
• Papulosquamous disorders - eczema, psoriasis, lichen planus
• Pigment disorders
• Pressure sore

Surgical care and interventions
• Acute abdomen
• Benign breast disease: fibroadenoma and cyst
• Benign enlargement of the prostate
• Bowel obstruction
• Causes of persistent fistulae
• Diagnosis & management of shock
• Diagnosis of postoperative pyrexia
• Haemorrhoids
• Hernias
• Lipoma, cysts, ganglion, inclusion dermoid, warts & moles
• Phimosis, paraphimosis, balanitis
• Testicular problems including maldescent and torsion
• Urinary calculi: renal, ureteric & vesical

Women's health
• Abnormal menstruation
• Abortion
• Benign gynaecological conditions including: pelvic pain, endometriosis and polycystic ovarian disease
• Care of the pregnant woman and delivery of her baby and placenta
• Complications of early pregnancy, including ectopic pregnancy
• Congenital genital tract abnormalities
• Congenital infections of the newborn
• Contraception
• Drugs in pregnancy
• Foetal development – normal and abnormal
• Genital tract cancers including ovary, uterus, cervix and vulva
• Infertility and fertility
• Menopause
• Obstetric emergencies – haemorrhage, eclampsia, delivery emergencies, amniotic fluid embolism
• Medical complications of pregnancy - pre-eclampsia, gestational diabetes, cholestasis
• Urinary incontinence
• Vaginal discharge

Special situations
• Anaphylaxis and allergy
• Deprivation of liberty
• Domestic violence
• Drug reactions
• Health promotion
• Major trauma
• Medically unexplained symptoms
• Multiple co-morbidities, especially in the elderly
• Pain and analgesics
• Palliative care
• Public health disasters
• Safeguarding including child protection and female genital mutilation
Section 4: Contributing to patient notes, prescribing and data interpretation

Writing patient notes is a challenging but important skill to acquire. Patient notes are important for clearly communicating the patient’s condition and management plan to a range of health professionals.

More legal actions are lost on behalf of doctors because of poor note keeping than for any other reason. You will not be believed as a defendant if you have no contemporaneous notes to support you. Each time you have the opportunity to write up case notes, look at this list of best practice and check you have written acceptable notes. Do this until keeping good case notes is well established in your mind.

Written succinct and legible notes should include:

- History of presenting complaints, past, personal, family and drug history allergies
- Patients’ ideas and/or concerns and their expectations
- Written legible, ordered details of the physical examination
- Documented risks factors and the aspects of social occupational history relevant to the patient’s care
- A summary, including differential diagnosis and problem lists
- On each notes entry: time and date; name, DOB and hospital number of patient; your name, signature and grade.

During Year 4, you will have opportunities to write in patients’ paper notes or to make entries into clinical information systems; the electronic patient record, both in hospital and Primary Care settings. Learning how to use these systems is a key part of the Year. Take every opportunity to observe doctors entering and retrieving data in these systems, and where appropriate, and under supervision, make your own entry into written and electronic notes, observing the best practice outlined above.

Therapeutics and Prescribing

You need to ensure that you can have a solid understanding of therapeutics to begin to prescribe medicines safely. You should begin to use the British National Formulary (BNF) to enable you to do this, learn through practice how to complete a drug chart, how to complete a discharge prescription, and how to complete a prescription in general practice.

Year 4 will provide you with opportunities to develop and practise these skills. It is important however to remember that students MUST NEVER sign prescriptions in hospital or general practice.

- understand how drugs work, why they are prescribed and how they interact with each other (having revised previous studies in pharmacology and through Uses of Medicines Course Material in Year 4)
- take an accurate drug history, including current and past treatment and adverse reactions
- explain drug treatment to patients
• assess adherence to medication and the reasons for non-compliance with recommended drug treatments
• write prescriptions according to guidelines for prescription writing in the BNF in both primary and secondary care settings
• write prescriptions for intravenous infusions
• understand drugs commonly associated with drug interactions and how to interpret the information on drug interactions in the BNF
• become familiar with all the drugs listed in the UCL Student Formulary

**Data Interpretation**

During the course of Year 4, you will be expected to become able to identify normal results as well as correctly interpret examples of common abnormalities in radiology, all disciplines of pathology, electrocardiography and pulmonary function/blood gases.

This list is not exhaustive but will prompt you to develop your skills. Make sure you have seen plenty of x-rays, scans, ECGs and blood results.

**Data Interpretation: Imaging – Chest**

- Normal chest x-ray
- Pleural effusion
- Pneumonia
- Pulmonary oedema
- Pneumothorax
- Haemothorax
- Fractured ribs
- Pulmonary fibrosis
- Hilar mass/adenopathy
- Solitary/multiple round shadows
- Apical tuberculosis
- Pulmonary embolus
- Cardiomegaly

**Data Interpretation: Lung function/blood gases**

- Normal & reduced peak flow
- Normal & reduced vital capacity
- Complex lung function for changes to residual volume or diffusion
- Reduced arterial O₂ with or without raised CO₂
- Changes to arterial pH & CO₂
Data Interpretation: Imaging – Skeletal

- Fractures, e.g. clavicle, neck of humerus, Colles, neck of femur, femoral/tibial shaft, ankle
- Osteoporosis with vertebral collapse
- Sclerotic & lytic metastases
- Paget's disease spine/pelvis/long bone
- Spine degenerative changes
- Osteoarthritis – hip/knee
- Rheumatoid arthritis – hands
- Gout with tophus
- Nuclear scan of the skeleton

Data Interpretation: Imaging – CT/MRI Brain

- Subarachnoid haemorrhage
- Brain haemorrhage
- Cerebral infarct
- Cerebral atrophy
- Intracerebral lesion with oedema, e.g. primary secondary tumour
- Mid-line shift
- Pituitary tumour
- Extradural/subdural haematoma

Data Interpretation: Electrocardiography

- Sinus rhythms
- Atrial & ventricular ectopic beats
- Atrial fibrillation & flutter
- Atrial & nodal tachycardia
- Wolff-Parkinson-White (WPW) syndrome
- Ventricular tachycardia
- Ventricular fibrillation
- Atrial ventricular conduction defects
- Bundle branch blocks
- Bradyarrhythmias (heart block of varying degrees)
- Ischaemic changes
- T wave changes
- Myocardial infarction/acute coronary syndrome
- Ventricular hypertrophy
- Changes in pericarditis
- Changes in pulmonary embolus
- Screening tests for coronary artery disease
- Functional tests of coronary blood supply
Data Interpretation: **Pathological Sciences**

- Changes to red cell count & indices
- Leucocytosis/leucopenia
- Haematinics
- Thrombocytosis/thrombocytopenia
- Lengthened / therapeutic International normalised ratio (INR)
- Other clotting defects (Prothrombin time (PT), Activated Partial Thromboplastin Time (APTT))
- Raised Erythrocyte sedimentation rate (ESR) / C-reactive protein (CRP)
- Screening for haemoglobinopathies
- Common electrolyte changes, including high or low values for sodium, potassium, calcium, magnesium & phosphate
- High plasma creatinine & urea
- Disordered liver function tests for obstruction, hepatitis or haemolysis
- pH changes – acidosis or alkalosis
- Typical laboratory results in cardiovascular and pulmonary disease (including troponin T and I, D-Dimer)
- Blood glucose changes & glucose tolerance tests
- Common hormonal changes, especially thyroid, and dynamic function tests
- Changes in immunological tests in arthritis & GI disease
- Immunological changes in thyroid disease
- Viral/Immunological results in hepatitis/HIV
- Common bacterial culture results from sputum, urine, stool, blood & cerebrospinal fluid (CSF)
- Aminoglycoside levels
- Therapeutic drug monitoring

Data Interpretation: **Pathology**

You will be expected to:

- Demonstrate your knowledge of gross anatomical changes visible to the naked eye for common major pathologies and to identify them in pictures or pots
- Recognise the histological changes in common major pathologies
- Explain the causal and other links between the gross pathology and histopathology on the one hand and the patient’s symptoms, signs and prognosis on the other
Information technology
You will be expected to use (and understand the limitations of):
- Hospital medical records (paper/ electronic)
- GP electronic records and patient summaries (drugs/ allergies/ PMH)
- Referral letters / Discharge summaries as key methods of communication between 1y and 2y care
- An awareness of the NHS spine and summary care record
- Develop an awareness of security of patients confidential medical records (in whatever format)
Section 5: Professional Skills – communication skills

Eliciting a flexible, patient centred medical history is the fundamental task of professional communication in medicine. By now you should have polished all the elements of this process. However, history taking skills form only a small part of the set of communication skills you need. Each medical consultation also includes some explaining, negotiating and planning.

The Calgary-Cambridge Guide to the Medical Interview:
The Expanded Framework

A full range of communication skills is a key tool in clinical medicine and will be put to the test in your final MBBS and everyday as a Foundation Year 1 doctor. Below is a checklist of the areas you will need to develop over the next year during your attachments. You may only get to watch some of these skills in use while another professional practises but many you should try to do yourself, with support if appropriate, or in role play with peers.

Remember to practise explaining, negotiating and shared decision making as this will help you commit to a hypothesis or diagnosis and force you think about management planning. Try to get feedback on your skills from patients, peers and practising health professionals.
**Communication skills checklist**

Take a medical history in a flexible but focused and organised manner
- Agree a problem list or diagnosis with a patient
- Explain an illness/management plan to a patient/their family & to reach agreement with them
- Explain tests to patients (MSU, FOB, endoscopy)
- Explain use of medicines to a patient (MDI, Steroids, insulin, warfarin)
- Demonstrate the skills of shared decision making and negotiation
- Explain discharge arrangements to a patient/family

**Handover a patient to a colleague**

**Present a case to an audience**
- Use basic audio visual techniques effectively
- Present a topic verbally or by poster display

**Teaching and feedback skills**
- Teach a student a basic skill
- Give constructive feedback to a colleague or junior

**Under supervision:**
- Communicate effectively with a GP or hospital doctor on the phone
- Communicate with: a distressed patient/family
- Communicate with a deaf person
- Communicate with a person with learning difficulties
- Communicate with a person using English as a 2nd language with or without an interpreter
- Communicate about sensitive issues including prognosis, risk & uncertainty
- Break unwelcome/bad news
- Deal with complaints & conflicts
### Section 6: Staff contact details

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<thead>
<tr>
<th>MBBS Management contacts</th>
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<tbody>
<tr>
<td><strong>Year 4 Manager</strong></td>
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<tr>
<td><strong>Year 4 Student Administrator</strong></td>
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<td><strong>Student Support Clinics</strong></td>
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<td><strong>Personal Tutors</strong></td>
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<th>Academic Leads</th>
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<td><strong>Academic Lead for Year 4</strong></td>
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<td><strong>Academic Lead for Module A</strong></td>
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<td><strong>Academic Lead for Module C</strong></td>
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<th>Module Teaching Administrators</th>
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<td><strong>Royal Free Campus</strong></td>
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<td>Module A &amp; C</td>
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<td>Module B</td>
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<td><strong>Whittington Campus</strong></td>
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<td>Module A &amp; C</td>
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<td><strong>Bloomsbury Campus</strong></td>
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<td>Module A &amp; C</td>
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<td>Module B</td>
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<td><strong>General Practice</strong></td>
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<th>Clinical and Professional Practice Teaching</th>
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<tr>
<td><strong>CPP Academic Lead</strong></td>
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<td><strong>Head of MBBS Management</strong></td>
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<td><strong>CPP and QA</strong></td>
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<td><strong>CPP Teaching Co-Ordinator</strong></td>
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<td><strong>CPP Administrator</strong></td>
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<th>Absence reporting</th>
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<td>Please contact the relevant module administrator from the list above and email the Year 4 generic email address on <a href="mailto:medsch.year4@ucl.ac.uk">medsch.year4@ucl.ac.uk</a>. If you miss a CPP session please email the CPP generic email on <a href="mailto:medsch.cpp@ucl.ac.uk">medsch.cpp@ucl.ac.uk</a>.</td>
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<th>Absence reporting - GP</th>
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<td>If you are on your allocated GP day please contact the practice directly AND inform the GP administrator</td>
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