2-YEAR SPECIALISED FOUNDATION PROGRAMMES AT KING'S COLLEGE LONDON SCHOOL OF MEDICINE (KCL)

1. INTRODUCTION

There are 19 places comprising different specialty-based academic programmes.

Successful applicants are recruited to a specific 4-month research placement in their F2 post. This post sits within a generic 2-year foundation programme with 5 other clinical placements, balanced to enable acquisition of foundation competences. Applicants should note that clinical placements are subject to change dependent on service need and provisional until confirmed by the employing Trust.

2. DETAILS OF TRAINING PROGRAMMES

A spread sheet summarising all of the available programmes is available to download from https://london.hee.nhs.uk/recruitment/medical-foundation

Programme Reference	Programme Theme	Based at
2526/KCL/01	Paediatrics	King's College Hospital
2526/KCL/02	Diabetes	King's College Hospital
2526/KCL/03	Hepatology	King's College Hospital
2526/KCL/04	Cardiovascular	King's College Hospital
2526/KCL/05	Haematology	King's College Hospital
2526/KCL/06	Clinical Neuroscience	King's College Hospital
2526/KCL/07	Imaging	Guy's & St Thomas' Hospitals
2526/KCL/08	Rheumatology	Guy's & St Thomas' Hospitals
2526/KCL/09	Obstetrics	Guy's & St Thomas' Hospitals
2526/KCL/10	Allergy & Respiratory Medicine	Guy's & St Thomas' Hospitals
2526/KCL/11	Clinical Genetics	Guy's & St Thomas' Hospitals
2526/KCL/12	Medical Education	Guy's & St Thomas' Hospitals
2526/KCL/13	Infectious Diseases	Guy's & St Thomas' Hospitals
2526/KCL/14	Oncology	Guy's & St Thomas' Hospitals
2526/KCL/15	Surgery	Guy's & St Thomas' Hospitals
2526/KCL/16	Cardiovascular Medicine	Guy's & St Thomas' Hospitals
2526/KCL/17	Nephrology	Guy's & St Thomas' Hospitals
2526/KCL/18	Psychological Medicine and Psychiatry	King's College Hospital/ Guy's & St Thomas' Hospital/SLaM
2526/KCL/19	Neurology	King's College Hospital

KING'S COLLEGE LONDON (KCL)

Each of the 19 speciality-based schemes offers core clinical and generic academic training. The programmes are based at Guy's and St Thomas' NHS Foundation Trust (GSTT) or King's College Hospital NHS Foundation Trust (KCH) and KCL for two years. The F2 year comprises a 4-month clinical placement with a leading firm, a 4-month high-quality dedicated academic placement during which they complete a research project, and a 4-month attachment in A&E or an Acute Medicine Admissions Unit (high intensity training in acute medicine) to enable the acquisition of core competencies.

A combined induction is held for F1 and F2 trainees at the start of the academic year and a range of opportunities are presented, including funding, teaching and

mentoring. Trainees will meet with their academic supervisors in their F1 year to begin preparations for their F2 project.

During the two-year specialised Foundation Programme, all trainees attend mandatory academic monthly training which consists of a 90-minute research training session (topics listed below), followed by a keynote lecture by a senior King's Health Partners clinical academic.

- Concepts of epidemiological study design
- Research Ethics
- Bibliographic software – Introduction to RefWorks
- Research using electronic health records
- Developing and evaluating behaviour change interventions
- Sample size calculation
- GCP training
- Principles of stratified medicine
- How to get a grant/how to get published/writing a research proposal
- Involving patients in research: Why? And how?
- Designing non-randomised studies
- Academic careers
- Introduction to health economics
- Meta-analysis
- Research Governance/Clinical Trials
- Applications of genetics
- Analysis of randomized trials
- Evaluating diagnostic tests
- Analysis of non-randomised trials
- Assessing study quality

At the end of the F2 year, trainees present their research to their peers and judges and prizes are awarded for the best presentations.

Page Break

3. PLACEMENTS

Programme 1 – Paediatrics – based at King's College Hospital
Reference: 2526/KCL/01

Individual Placement Descriptor (IPD) for the four-month academic placement
Separate IPDs for clinical placements are available on foundation school websites

Type of programme The research placement will be based within the Lung Biology research group (Paediatrics) in the School of Life Course Sciences, Faculty of Life Sciences and Medicine.	
Employing trust: King's College Hospital NHS Foundation Trust	*Academic placement based at:* King's College Hospital
Brief outline of department The Lung Biology research group is led by **Professor Anne Greenough**. The research programmes are internationally competitive and in 2005, the MRC and Asthma UK established an MRC-Asthma UK Centre in Allergic Mechanisms of Asthma in partnership with, Imperial College and associated NHS Trusts. Professor Greenough collaborates with colleagues in the Centre, as well as with those from	

paediatric surgery, paediatric haematology, fetal medicine, obstetrics, and virology. International collaborations include being part of European networks investigating the impact of respiratory syncytial virus, congenital diaphragmatic hernia, and inhaled nitric oxide.
Structure of academic project/what expected The research interests of the Lung Biology group include factors affecting antenatal lung growth, optimisation of neonatal and paediatric mechanical ventilation, prevention of chronic respiratory morbidity and the impact of viral and chronic paediatric disorders on lung function, in particular preventing and treating the adverse respiratory consequences of sickle cell disease The trainee will undertake a well-defined research project within the research programme according to their interests usually leading to a peer reviewed publication. It is anticipated they will write a review with AG and contribute as a co-author to a research study of one of the other members of the research group.
Clinical commitments during academic placement During the clinical placement, the trainee will develop core competencies within the context of the healthcare management of newborn infants and their families, assist in teaching of undergraduate students and be involved in the research interests of the group. There are no clinical commitments during the four months of the academic programme.
Departmental academic teaching programme (if applicable) Weekly journal club, grand round, and research meeting.
Academic Lead: Professor Anne Greenough

Programme 2 – Diabetes – based at King's College Hospital
Reference: 2526/KCL/02

Individual Placement Descriptor (IPD) for the four-month academic placement
Separate IPDs for clinical placements are available on foundation school websites

Type of programme The Diabetes Research programme at Denmark Hill offers opportunities for research ranging from laboratory science in islet physiology, through experimental medicine studies in human metabolism to qualitative research into patient experience and education and complex intervention development in diabetes and mental health. We have a particular interest in applied clinical research of diabetes education, diabetes technology and mental health as we are delivering clinical care to a diverse population.

Employing trust:	*Academic placement based at:*
King's College Hospital NHS Foundation Trust	King's College Hospital

Brief outline of department The Diabetes Research Group encompasses the islet physiology laboratories on the Denmark Hill and Guy's campuses, where basic research into islet function and growth inform clinical studies in beta cell replacement in type 1 diabetes (Professors Salem, Jones and Persaud, Dr Husain) and the clinical Diabetes research group at Denmark Hill exploring human metabolism with applied clinical research of diabetes technology and education, with a special emphasis on diversity and mental health (Dr Stadler, Prof Ismail, Dr Harris, Dr Rosenthal) applied use of diabetes technology in inpatient settings (Dr Mustafa), the use of new technologies in insulin delivery and glucose sensing in the improvement of diabetes control for groups with complex diabetes (Ms Gallen, Dr Cheah), investigation of the mechanisms by which metabolic surgery and incretin therapies improves metabolic control (Professor Rubino, Dr Sen Gupta, Prof McGowan); and research into the prevention and management of diabetes in pregnancy (Dr Hunt, Professor Forbes); research into person reported outcome measures and data observatories (Prof Forbes, Dr Stadler, Dr Hamilton). We use laboratory, experimental, qualitative methods, and clinical trials in these investigations. We also have an award-winning programme in mental health in diabetes (Professor Ismail), focusing on the mechanisms for interaction between depression and diabetes outcomes; the interaction between type 1 diabetes and eating disorders (Dr Stadler) and the use of psychotherapy in the prevention of problematic hypoglycaemia (Dr DeZoysa, Ms Rogers).	
Structure of academic project/what expected We offer options in clinically based or laboratory-based projects for ACFs and Academic F2 trainees- the trainee will chose their project supervisor depending on their interests. Recent projects have investigated personality traits as predictors of response to hypoglycaemia avoidance algorithms, the prevalence of specific cognitive barriers to hypoglycaemia avoidance in participants in the US Type 1 diabetes exchange registry, new bench assays to assess activation of clotting cascades by human islets: and social drift in people with a new diagnosis of diabetes; inpatient use of closed loop insulin delivery peri-liver transplantation; phenotypes of type 1 diabetes disordered eating. The project is planned during the clinical attachment to Medicine in the first four months and carried out in four months of protected research time from December to March and will be tailored to the trainee's interests and training needs. The year concludes with four months in A and E at KCH. Supervision and training are provided throughout, putting the trainee's development and their career aspirations at the centre, and all our recent trainees have had the opportunity to present research findings at national and international meetings and author peer reviewed publications.	
Clinical commitments during academic placement There are no fixed clinical commitments during the dedicated research attachments. The clinical training periods comprise an initial 4-month clinical placement with the clinical firm delivering diabetes and endocrinology with internal medicine based on the relevant ward at King's College Hospital; with a final four months in the Emergency Department of the hospital but the research months will be clear of timetabled clinical work.	
Departmental academic teaching programme (if applicable)	

There are weekly academic meetings in diabetes at Denmark Hill and weekly lab meetings on the Guy's (islets, Fri am) and Denmark Hill (Monday am, Thursday am) throughout the year. In addition, there are weekly clinical meetings Monday and Thursday am; diabetes MDT meeting Thursday afternoons. One to one supervision in aspects of research methodology is provided to support the project work with opportunities to attend national and international academic diabetes meetings
Academic Leads: Dr Marietta Stadler, Senior Clinical Lecturer, Hon Diabetes Consultant Marietta.stadler@kcl.ac.uk Clinical Lead: Dr Omar Mustafa, Diabetes Consultant, TPD for Diabetes and Endocrinology omarmustafa@nhs.net

Programme 3 – Hepatology – based at King's College Hospital
Reference: 2526/KCL/03

Individual Placement Descriptor (IPD) for the four-month academic placement
Separate IPDs for clinical placements are available on foundation school websites

Type of programme Within the Roger Williams Institute of Liver Studies, we will be offering a choice of research projects which the specialised foundation year can choose from, encompassing immunomonitoring and development of novel immunosuppressive strategies in liver transplantation, immunopathogenesis of autoimmune liver diseases and alcohol-related liver disease, gut microbiota and innate immune dysfunction in the context of acute and chronic liver disease.	
Employing trust: King's College Hospital NHS Foundation Trust	*Academic placement based at:* King's College Hospital/Roger Williams Institute of Liver Studies, King's College London
Brief outline of department The Roger Williams Institute of Liver Studies mission is to produce research that impacts directly on patient care by perfecting surgical techniques and supportive management of the failing liver and elucidating mechanisms of liver damage to develop specific and more efficient modes of treatment.	
Structure of academic project/what expected The specialised foundation year allocated to this programme will perform translational laboratory research (from bedside to bench or vice versa) on a project within our research portfolio which will be tailored to the interests and skills of the specialised Foundation Year Trainee.	
Clinical commitments during academic placement Friday morning complex hepatology clinic with Professor Shawcross or a clinic of the trainee's choosing relevant to their research area.	

Departmental academic teaching programme (if applicable)

- Weekly Wednesday morning hepatology teaching from 8.00 – 9.00am.
- Participation in the Roger Williams Institute of Liver Studies and School of Immunology and Microbial Sciences Academic Programme Activities including academic seminars and postgraduate student activities.
- Opportunity to attend national (British Society of Gastroenterology and British Association for The Study of the Liver) and international liver conferences (EASL/AASLD) to complete postgraduate course and/or present research data in abstract form as appropriate.

Professor Debbie Shawcross
Professor of Hepatology and Chronic Liver Failure
Debbie.shawcross@kcl.ac.uk

Professor Alberto Sanchez Fueyo
Head of Liver Sciences
sanchez_fueyo@kcl.ac.uk

Dr Mark McPhail
Senior Lecturer and Consultant in Liver Critical Care and Hepatology
Mark.mcphail@kcl.ac.uk

Professor Phil Newsome
Phillip.newsome@kcl.ac.uk

Programme 4 – Cardiovascular – based at King's College Hospital
Reference: 2526/KCL/04

Individual Placement Descriptor (IPD) for the four-month academic placement
Separate IPDs for clinical placements are available on foundation school websites

Type of programme

A combined clinical and research training programme ideally suited to individuals with prior undergraduate research experience who are interested in a cardiovascular clinical academic career.

Employing trust:	*Academic placement based at:*
King's College Hospital NHS Foundation Trust	King's College Hospital

Brief outline of department

The Cardiovascular Clinical-Academic Grouping integrates the KCL School of Cardiovascular Medicine & Sciences and the King's Health Partners clinical cardiovascular services. We host the joint-largest UK British Heart Foundation Centre of Research Excellence, recently renewed for a third term. The school has ~45 PIs (including 4 BHF Professors) and >50 PhD/MD students among 200 staff. There are a wide range of internationally leading laboratory-to-bedside research programmes covering major disease areas (https://www.kcl.ac.uk/scms/index). Clinical training is undertaken at King's College

Hospital (KCH), a leading UK cardiac centre with a comprehensive range of cardiology/cardiac surgery services and a strong track record of clinical innovation.
Structure of academic project/what expected A 4-month full-time laboratory attachment based within the James Black Centre, a state-of-the-art institute with outstanding research facilities at KCH. Projects are agreed between the trainee and educational supervisor at the beginning of the F2 year. Research areas include cardiac hypertrophy, heart failure, heart regeneration, vascular dysfunction, vascular aging, proteomics, and inflammation - each led by a senior PI and all within multi-disciplinary groupings. You will be involved in a topical project with exposure to state-of-the-art research techniques and develop some ideas about future PhD training projects. It may be feasible to continue some research during the 4-month clinical cardiology rotation that follows the academic placement.
Clinical commitments during academic placement No formal clinical commitments but attendance at clinical educational seminars is encouraged.
Departmental academic teaching programme (if applicable) A weekly laboratory seminar programme, 1-2 BHF Centre international seminars per month, a large variety of other technology workshops/research seminars that you can attend if you wish.
Academic Lead: Professor Ajay M Shah BHF Professor of Cardiology & Director of the King's BHF Centre of Excellence. ajay.shah@kcl.ac.uk

Programme 5 – Haematology – based at King's College London
Reference: 2526/KCL/05

Individual Placement Descriptor (IPD) for the four-month academic placement
Separate IPDs for clinical placements are available on foundation school websites

Type of programme Research	
Employing trust: King's College Hospital NHS Foundation Trust	*Academic placement based at:* King's College Hospital
Brief outline of department The Department of Haematological Medicine is a large department covering all aspects of haematology at both clinical and academic levels. The department is based at Denmark Hill, with research laboratories on the same site in the Rayne Institute. Across haematology, there is a wide range of translational research in the different sub-specialities supported by expertise in a broad range of molecular and cellular biology techniques and excellent infrastructure.	

Structure of academic project/what expected

The four-month clinical attachment will be based in the Department of Haematological Medicine. It will provide exposure to a broad spectrum of the different sub-specialities, including sickle cell disease and other inherited anaemias, paediatric haematology, porphyria, haemato-oncology and bone marrow failure, thrombosis and haemostasis, and blood transfusion.

It is envisaged that the trainee spends time in each sub-specialty, depending on their interest, during which they will attend the relevant consultant-led clinics, speciality ward rounds and clinical meetings, in addition to the weekly departmental seminars, joint X ray, joint histopathology and case-of-the week meetings. Each sub-speciality will have its own timetable of meetings and clinics.

There is no on-call or out-of-hours commitment in this post, but it is expected that the trainee will be able flexible about hours to encompass the demands of research. The research/laboratory attachment will be with Professor Rees's red cell haematology group (Head, Professor Rees) or any of the other haematology sub-groups, depending on the interests of the trainee. Haematology research laboratories are based in the Rayne Institute on the Denmark Hill site.

The trainee will be exposed to data collection and analysis and a broad range of clinical and non-clinical research. The trainee will undertake a well-defined project within the research programme under the guidance of one of the principle investigators in haematology; this may include some bench work.

Clinical commitments during academic placement

Variable depending on interests, but attachment to all the major haematology sub-specialties.

Departmental academic teaching programme (if applicable)

N/A

Academic Lead:

Professor David Rees
Consultant Paediatric Haematologist
david.rees2@nhs.net

Programme 6 – Clinical Neuroscience – based at King's College Hospital
Reference: 2526/KCL/06

Type of programme Research	
Employing trust: King's College Hospital NHS Foundation Trust	*Academic placement based at:* King's College Hospital
Brief outline of department The Department of Basic and Clinical Neuroscience at King's College London and the associated Regional Neurosciences Unit at King's College Hospital include internationally recognised clinician scientist leaders in epilepsy, neurodegeneration (Alzheimer's disease and motor neuron disease), headache, neuro-oncology, movement disorders, brain injury, demyelinating disease and functional neurological disorders. Past projects include: neurophysiological studies in motor neuron disease and in models of epilepsy; next generation sequencing projects in motor neuron disease; an RNA expression study in Alzheimer's disease; and stroke in brain tumour patients.	
Structure of academic project/what expected During the research attachment, trainees will be able to choose a supervisor from principal investigators (PIs) in the school of Neurosciences. Areas of activity include Mendelian and complex genetics, molecular cell biology, cellular electrophysiology, neuroimaging, proteomics and bioinformatics. During the academic rotation, trainees are encouraged to attend research seminars and other activities organised by the Department of Basic and Clinical Neuroscience, as well as the Clinical Grand Round at King's College Hospital. The post-holder is expected to teach a Masterclass seminar on the MSc in Clinical Neuroscience, two hours a week, in conjunction with the F2A in Neurology. A list of principal investigators with brief outlines of their areas of research and likely projects is available at the start of the academic year. Trainees are encouraged to make contact with a range of PIs so that they can select a PI and project at least 3 months prior to starting the research rotation. The associated F2 clinical attachments will be in Neurology (King's College Hospital is the largest regional neuroscience centre in the country) and A&E.	
Clinical commitments during academic placement The trainee is expected to attend the Neurology Grand Round at King's College Hospital and to present a weekly seminar to the Clinical Neurosciences MSc students. Teaching on the MSc is an important component of the post.	

Departmental academic teaching programme (if applicable) There is a programme of research presentations from the department, a programme of visiting lecturers, and weekly journal clubs and seminars in various research topics. The post-holder is also welcome to attend lectures and seminars from the MSc Clinical Neuroscience and the MSc Neuroscience
Academic Lead: Dr Gerald Finnerty Senior Clinical Lecturer & Honorary Consultant Neurologist gerald.finnerty@kcl.ac.uk gfinnerty@nhs.net

Programme 7 – Imaging – based at St Thomas' Hospital
Reference: 2526/KCL/07

Individual Placement Descriptor (IPD) for the four-month academic placement
Separate IPDs for clinical placements are available on foundation school websites

Type of programme A combined clinical and research training programme ideally suited to individuals with prior undergraduate research experience who are interested in an imaging clinical academic career.	
Employing trust: Guy's and St Thomas' NHS Foundation Trust	*Academic placement based at:* Division of Imaging Sciences and Biomedical Engineering, King's College London St Thomas's hospital
Brief outline of department The Division of Imaging Sciences and Biomedical Engineering has a focus on translational with scientists in biomedical engineering, imaging chemistry and biology developing fundamental technologies that are refined and translated into clinical applications by clinical academics. There is a strong focus in cardiovascular disease, cancer and neuroscience and our clinical and research activity occurs at St Thomas' hospital. Within the Division 70% of the academic team are engineers or physical scientists who work closely with clinicians and biologists focusing on disease of worldwide significance. The Division hosts a number of Centres including Wellcome/EPSRC Medical Engineering Centre of Research Excellence and the Imaging theme of our recently renewed NIHR Biomedical Research Centre. Current research strengths relevant to this post include computational modelling (development of models which can give us insights into mechanisms of disease), Image guided interventions (including new methodologies such as MRI guidance) and MRI, PET and ultrasound research (particularly to better the physiology and pathology of disease).	
Structure of academic project/what expected	

A 4-month full-time attachment based within the Imaging and Biomedical Engineering Division (with state-of-the-art research facilities including dedicated research scanners, laboratories and high-performance computing facilities). Projects are agreed between the trainee and educational supervisor at the beginning of the F2 year. Research areas include Cardiovascular imaging (MRI, CT) and biophysical computational modelling, Cancer imaging (PET, MRI combined PET/MRI), bio-statistical and machine learning methodologies and neuroscience (MRI including 7T and PET) including neuro-receptor modelling. The trainee should expect to be involved in a topical project with exposure to state-of-the-art research techniques and develop some ideas about future PhD training projects. It may be feasible to continue some research during the 4-month clinical rotations that follows the academic placement.
Clinical commitments during academic placement The academic F2 will be required to be on an out of hours rota at Guy's and St Thomas' NHS Foundation Trust which comprises of 1 in 4 weekend twilight shifts and will not affect the academic weekday timetable. The F2 is expected to attend the monthly F2 teaching and encouraged to engage with other relevant clinical educational events where applicable.
Departmental academic teaching programme (if applicable) A weekly seminar programme in Imaging.
Academic Lead: *Professor Reza Razavi* Director of Wellcome Trust/EPSRC Centre in Medical Engineering reza.razavi@kcl.ac.uk

Programme 8 – Rheumatology – based at Guy's and St Thomas' Hospital
Reference: 2526/KCL/08

Individual Placement Descriptor (IPD) for the four-month academic placement
Separate IPDs for clinical placements are available on foundation school websites

Type of programme A combined clinical and research training programme ideally suited to individuals with prior undergraduate research experience who are interested in a clinical academic career focused on immunity and inflammation.	
Employing trust: Guy's and St Thomas' NHS Foundation Trust	*Academic placement based at:* Guy's or Denmark Hill Campus (depending on chosen research project), KCL

Brief outline of department

The Academic Rheumatology is led by Professor Andrew Cope. The faculty has a long track record in basic laboratory research with an emphasis on the immunobiological and inflammatory basis of rheumatic diseases, epidemiology, statistics and health outcomes relating to musculoskeletal disease, early phase experimental medicine studies and clinical trials. In the laboratory current research focuses on pathways of T cell activation and differentiation, functional genomic studies of genetic variants that contribute to disease, and pathways of inflammation. This programme is undertaken in the Centre for Inflammation Biology and Cancer Immunology (CIBCI). A new emerging programme of work focuses on studying cancer patients who develop autoinflammatory syndromes following cancer immunotherapy with immune checkpoint inhibitors. On the Denmark Hill campus the focus is on clinical trials, health outcomes and epidemiology. The group hosts the Arthritis Research UK funded Experimental Arthritis Treatment Centre and is currently leading the first ever multi-centre RA prevention study. It also runs one of only three MSc in Rheumatology in the UK.

Structure of academic project/what expected

Previous specialised foundation trainees have been offered a variety of research projects depending on their own specific interests. Previous trainees have undertaken clinical projects (e.g., imaging, clinical studies), data centred projects (e.g., analysis of large datasets) or laboratory-based projects (e.g., mouse models, in vitro cellular immunology, high resolution imaging or biochemistry). During their attachment trainees will acquire Good Clinical Practice certification and acquire core skills required for completing clinical trial assessments. Depending on the choice of research group, trainees may gain skills cellular and molecular immunology, cell culture and flow cytometry, as well as an understanding of the approach to analysis of large clinical and trial datasets. Trainees will be encouraged to present their work at weekly laboratory meetings.

Clinical commitments during academic placement

The academic F2 will be required to be on an out of hours rota at Guy's and St Thomas' NHS Foundation Trust which comprises of 1 in 4 weekend twilight shifts and will not affect the academic weekday timetable. The F2 is expected to attend the monthly F2 teaching and encouraged to engage with other relevant clinical educational events where applicable.

specialised Foundation trainees have the option of full-time laboratory research, or if the research project dictates, the option of running (or attending) a specialist clinic e.g., inflammatory arthritis, remission, imaging clinic.

Departmental academic teaching programme (if applicable)

Weekly CIBCI Work in Progress (WIP) meeting; weekly Divisional Research Under Construction (RUC) meeting; weekly journal club, weekly laboratory research meeting; weekly postgraduate clinical department meeting (optional).

Academic Lead: Professor Andrew P. Cope andrew.cope@kcl.ac.uk

Programme 9 – Obstetrics – based at Guy's and St Thomas' Hospital
Reference: 2526/KCL/09

Individual Placement Descriptor (IPD) for the four-month academic placement
Separate IPDs for clinical placements are available on foundation school websites

Type of programme Research	
Employing trust: Guy's and St Thomas' Hospital NHS Foundation Trust	*Academic placement based at:* St Thomas' Hospital
The Department of Women and Children's Health at the King's Health Partners Academic Health Sciences Centre is one of the largest academic groupings in women's health in Europe. There is strong representation throughout the translational research pipeline, from basic science to clinical trials and implementation research. The research groups include Preterm and Term Birth, Maternal Metabolic Disorders, Reproductive Medicine, Developmental & Reproductive Biology, Global Health, Maternal Hypertension, Women's Mental Health, Maternal Health Policy, Systems and Implementation. The KCL Division of Women's Health is known as a thriving and energetic multidisciplinary academic community, with a strong emphasis on global health research.	
Structure of academic project/what is expected Prior to starting the academic placement, the academic lead will work with the trainee to identify a group and supervisor that fits their research interests. The breadth of the Division's research ensures that placements can be undertaken ranging from discovery science laboratory projects through to translational clinical research. The trainee will be adopted into one of the research groups and develop a well-defined project with the intention of completion and write-up within the placement to submit for publication, together with presentation at a regional or national meeting. Previous academic foundation year trainees have undertaken exploratory biomarker analyses of biobanked samples to address ancillary research questions, secondary analyses of datasets, and/or undertaken systematic reviews of the literature. Teaching opportunities are available if the trainee wishes to gain experience.	
Clinical commitments during academic placement The academic F2 will be required to be on an out of hours rota at Guy's and St Thomas' NHS Foundation Trust which comprises 1 in 4 weekend twilight shifts and will not affect the academic weekday timetable. The F2 is expected to attend the monthly SFP teaching and encouraged to engage with other relevant clinical educational events where applicable. The trainee will be offered the opportunity to attend one of the research clinics relevant to their project (e.g., maternal hypertension, preterm birth, diabetes in pregnancy or obstetric medicine) as appropriate.	

Departmental academic teaching programme (if applicable) Weekly research group meetings, monthly seminars, monthly journal clubs.
Academic Lead: Dr Caroline Ovadia Clinical Senior Lecturer in Obstetrics caroline.ovadia@kcl.ac.uk

Programme 10 – Allergy and Respiratory Medicine – based at Guy's and St Thomas' Hospitals
Reference: 2526/KCL/10

Individual Placement Descriptor (IPD) for the four-month academic placement
Separate IPDs for clinical placements are available on foundation school websites

Type of programme Research	
Employing trust: Guy's and St Thomas' NHS Foundation Trust	*Academic placement based at:* Guy's and St Thomas' Hospitals
Brief outline of department *Respiratory Medicine and Allergy clinical, translational and basic research programmes are internationally competitive.* There is close integration between clinical departments at GSTT/KCH and KCL research-intensive departments. Opportunities for research exist within the MRC-Asthma UK Centre in Allergic Mechanisms of Asthma at KCL in partnership with Asthma UK, Imperial College and associated NHS Trusts; Sleep and Ventilation/Lane Fox Unit; Interstitial Lung Diseases Unit that has close links with Rheumatology/Lupus Unit; Critical Care Unit; Thoracic Oncology in collaboration with Thoracic Surgery, Imaging Sciences, Cancer Studies and Randal Centre for Cell and Molecular Biophysics. Broad research areas covered include IgE structure, function and regulation; airways inflammation fibrosis and remodelling; prevention and therapy of allergy, asthma and chronic respiratory morbidity; tight junction biology; the EFGR network in normal airway epithelium and lung cancer; and Endobronchial Ultrasound in the diagnosis and management of Thoracic Diseases and lung physiology. Close interactions between non-clinical and clinical scientists provide improved opportunities for new ideas to arise and for discoveries from gene to bedside to be fully exploited for the benefit of health care.	

Structure of academic project/what expected The trainee will undertake a well-defined research and training programme specific to his/her needs by affiliating with one or more PIs. We offer flexibility and encourage trainees to take a broad view of training and research opportunities available to them
Clinical commitments during academic placement The academic F2 will be required to be on an out of hours rota at Guy's and St Thomas' NHS Foundation Trust which comprises of 1 in 4 weekend twilight shifts and will not affect the academic weekday timetable. The F2 is expected to attend the monthly F2 teaching and encouraged to engage with other relevant clinical educational events where applicable. Blocked clinical training in subspecialty respiratory medicine – including lung fibrosis, lung cancer, Sleep & Ventilation/Lane Fox Unit, specialist asthma, adult allergy/drug desensitisation, infection, cystic fibrosis is potentially available to the trainee
Departmental academic teaching programme (if applicable) On-going training programme with laboratory meetings, research in progress meetings and generic research methods training.
Academic Lead: Professor George Santis george.santis@kcl.ac.uk

. **Programme 11 – Clinical Genetics – based at Guy's and St Thomas' Hospitals**
Reference: 2526/KCL/11

Individual Placement Descriptor (IPD) for the four-month academic placement
Separate IPDs for clinical placements are available on foundation school websites

Type of programme The clinical genetics academic placement programme is research led. The placement is designed to provide training and insight into either discovery, translational or clinical projects around genetic diseases and disorders.	
Employing trust: Guy's and St Thomas' NHS Foundation Trust	*Academic placement based at:* Guy's and St Thomas' Hospitals
Brief outline of department The department of Medical & Molecular Genetics, in the faculty of Life Sciences and Medicine, is a vibrant and ambitious department with an excellent reputation in research, teaching and clinical genetics with research expertise around understanding the genetic basis of human disease in the areas of rare genetic disease, common complex disorders, statistical genetics, epigenetics, cancer genetics, immune genetics, population genetics and genomics	

and bioinformatics. There are close research links to (1) the St John's Institute of Dermatology, a world-leading centre for the study, teaching and treatment of severe skin diseases on the adjacent floor, which has a strong portfolio in translational research across cancer, inflammation and genetic skin diseases with a focus on biomarker discovery and experimental medicine, built upon excellent clinical resources; (2) The King's Centre for Stem Cells and Regenerative Medicine which has state of the art research facilities, enabling cutting edge studies of cellular interactions between skin cells critical for developing effective therapies in the clinic; and (3) The Twin Research Unit which is the home of TwinsUK, one of the most comprehensively genotyped and phenotyped cohorts in the world and conducts a wide variety of common complex traits research projects.

For further information see our website:
https://www.kcl.ac.uk/bmb/our-departments/department-of-medical-molecular-genetics

Structure of academic project/what expected

The academic project is developed along with the academic supervisor and their team of researchers. This project can take several forms depending on the interests of the candidate and the availability of supervisors. With the breadth of research interests currently available, this can take the form of anything from a discovery science experimental study alongside bench researchers or a bioinformatics-based 'big' data analysis project which is increasingly relevant to personalised medicine efforts, such as using 100,000 genomes project data, to a more clinical centred project with translational or clinical research goals. This flexibility is afforded by the breadth of our faculty, but the choice should be driven by the motivation and interests of the individual candidate.

Clinical commitments during academic placement

The academic F2 will be required to be on an out of hours rota at Guy's and St Thomas' NHS Foundation Trust which comprises of 1 in 4 weekend twilight shifts and will not affect the academic weekday timetable. The F2 is expected to attend the monthly F2 teaching and encouraged to engage with other relevant clinical educational events where applicable.

Trainees are welcome to and encouraged to engage with the clinical geneticists and indeed may involve themselves in projects which have a clear clinical facet to them during their placement.

Departmental academic teaching programme (if applicable)

The departments have a range of seminar programmes and journal clubs.

Academic Lead:

Professor Tim Hubbard
Department of Medical & Molecular Genetics
tim.hubbard@kcl.ac.uk

Programme 12 – Medical Education – based at King's College London, Guy's Campus
Reference: 2526/KCL/12

Individual Placement Descriptor (IPD) for the four-month academic placement
Separate IPDs for clinical placements are available on foundation school websites

Type of programme

The specialised Foundation Programme in Medical Education offers practical involvement in medical education and educational research.

Employing trust:	*Academic placement based at:*
Guy's and St Thomas' NHS Foundation Trust	Guy's and St Thomas' Hospitals

Brief outline of department

The School of Medical Education, with our collaborating partner, The University of Washington in Seattle, have been awarded BICC Status. A BICC is an international collaborating centre committed to identifying and promoting best evidence in medical education. We are committed to educational research and evidence based medical education practices. (BICCs are part of the Best Evidence Medical Education (BEME) Collaboration, sponsored by the Association of Medical Education in Europe, AMEE).

Previous foundation doctors have been involved with projects at the Simulation and Interactive Learning (SaIL) Centre, Institute of Psychiatry and the School of Population Health & Environmental Sciences, as well as contributing to on-going projects at the GKT School of Medical Education, in areas such as ethics and law, e-learning, delivery of the curriculum, learning in clinical settings and teams, including learning in the context of crisis. More recently foundation doctors have been involved in research studies of key modules within the MBBS undergraduate curriculum. Their work has been presented at national and international conferences and published. There are opportunities to be involved with teaching at both Guy's and St Thomas' NHS Foundation Trust and King's College London School of Medicine during the two years of the Programme.

Structure of academic project/what expected

The F2 appointee would be expected to participate in the teaching and assessment activities of the School of Medical Education and would be expected to do a research project within medical education which would be supervised by Medical Education Research staff. Research areas include curriculum planning, teaching and learning practices in classroom and clinical settings, feedback and assessment, admissions, technology supported learning and faculty development. Innovative ideas would be welcomed, and forward planning of the projects will be required as ethics permission may need to be sought. Research findings would be presented locally, nationally and if appropriate internationally. Publication of results will be encouraged and supported, where appropriate.

Clinical commitments during academic placement

The academic F2 will be required to be on an out of hours rota at Guy's and St Thomas' NHS Foundation Trust which comprises of 1 in 4 weekend twilight shifts and will not affect the academic weekday timetable. The F2 is expected to attend the monthly F2 teaching and encouraged to engage with other relevant clinical educational events where applicable.

Departmental academic teaching programme (if applicable) There is a programme of Medical Education Lectures throughout the year. Opportunities for support and mentorship.
Academic Lead: Dr Anne McKee Senior Lecturer Director of Educational Research and Innovation Anne.Mckee@kcl.ac.uk

Programme 13 – Infectious Diseases – based at Guy's and St Thomas' Hospitals
Reference: 2526/KCL/13

Individual Placement Descriptor (IPD) for the four-month academic placement
Separate IPDs for clinical placements are available on foundation school websites

Type of programme Research	
Employing trust: Guy's and St Thomas' NHS Foundation Trust	*Academic placement based at:* Guy's and St Thomas' Hospitals

Brief outline of department

The Department of Infectious Diseases supports multi-disciplinary research that bridges rich clinical resources in the areas of infectious diseases and sexually transmitted diseases with the strengths of KCL's Health Schools in basic biomedical research. The Department comprises research laboratories at two sites: virology is undertaken in the Borough Wing of Guy's Hospital, while microbiology is studied in the North Wing at St Thomas' Hospital (Centre for Clinical Infection and Diagnostics Research, CIDR). The Department is also home to the KCL Infectious Diseases Biobank, which serves as a centralised archiving and molecular analysis facility that assists scientists undertaking cohort-based projects.

Our virologists exploit assorted molecular genetic, cultured cell, biochemical, structural, bioinformatic, systems and cohort-based methodologies to study the biological and molecular principles that underpin virus transmission, replication, pathogenesis and immunity. Current areas of interest include HIV/AIDS, human coronaviruses (including SARS-CoV-2), filoviruses (e.g., Ebola virus), influenza viruses, rhinoviruses, HCV, host-virus interactions, innate and adaptive immune responses, viral assembly and stem cell manipulation. The CIDR is organised into four sections: healthcare associated infections, epidemiology and modelling, diagnostics and clinical infection. Its chief objectives are to translate output from clinically relevant observational, intervention and pathogenesis studies, together with diagnostic development, to the prevention and treatment of infectious diseases. In 2020, the Dept has formed a close-working multi-disciplinary partnership to address urgent clinical needs in COVID-19 and has developed and evaluated diagnostic tests that are in clinical use. Through the careful curation of patient and community specimens, the Dept is positioned to undertake future cutting-edge research on many aspects of COVID-19, stretching from fundamental biology to infection control and vaccine development.

Previous trainees have worked on mechanisms of cell-mediated control of HIV infection, HIV budding and the determinants of MRSA transmission. http://www.kcl.ac.uk/lsm/research/divisions/diiid/index.aspx
Structure of academic project/what's expected Projects in the Department involve full-time research. It is likely that this will involve extensive "wet-lab" experimentation, often handing infectious micro-organisms, though certain projects may have a heavier computational/bioinformatic focus. In all cases scientific rigour, discussion and collaboration are expected. A diverse portfolio of projects is on offer, and the final selection is determined by the specific interests of trainees and project availability. Participation in relevant research presentations, seminar series and lab meeting are required.
Clinical commitments during academic placement The academic F2 will be required to be on an out of hours rota at Guy's and St Thomas' NHS Foundation Trust which comprises of 1 in 4 weekend twilight shifts and will not affect the academic weekday timetable. The F2 is expected to attend the monthly F2 teaching and encouraged to engage with other relevant clinical educational events where applicable.
Departmental academic teaching programme (if applicable) The Department undertakes undergraduate and postgraduate teaching.
Academic Lead: Professor Michael Malim Head, School of Immunology & Microbial Sciences michael.malim@kcl.ac.uk

Programme 14 – Oncology – based at Guy's and St Thomas' Hospitals
Reference: 2526/KCL/14

Individual Placement Descriptor (IPD) for the four-month academic placement
Separate IPDs for clinical placements are available on foundation school websites

Type of programme Research	
Employing trust: Guy's and St Thomas' NHS Foundation Trust	*Academic placement based at:* Guy's and St Thomas' Hospitals
Brief outline of department Cancer research at KCL comprises a multidisciplinary research portfolio that maps onto and spans the entire cancer patient journey. Programmes are directed towards innovative patient care, with a presence at all stages of the iterative bench-to-bedside-to-bench cycle. We are among the UK's largest cancer service providers (~7,500 new patients/annum) offering exceptional opportunities for clinical innovation. Our	

research embraces basic and translational cancer biology, patient-based molecular data collection, bioinformatics, intervention development, clinical trials and trial analysis.

The Division is organised into 13 research programmes of cancer epidemiology, population and global health, quantitative genomics, epigenomics and banking, lymphoma, leukaemia and myeloma, cancer immunology and immunotherapy, experimental oncology, head and neck cancer, cancer imaging, biobanking, breast cancer, lung cancer, cancer biology, uro-oncology and gastrointestinal cancer.

These research programmes are allied by cross-cutting activities and expertise in tissue banking and analysis, proteomics, genomics, statistics, cell and tissue imaging, gene therapy, cancer stem cells, tumour microenvironment, signal transduction, cell cycle and transcription, genetics, functional imaging and psycho-social oncology.

Structure of academic project/what expected

The trainee will join a PI within the Division and will undertake a well-defined research project matched to the interests of the trainee, with associated training programme specific to their needs.

Clinical commitments during academic placement

The academic F2 will be required to be on an out of hours rota at Guy's and St Thomas' NHS Foundation Trust which comprises of 1 in 4 weekend twilight shifts and will not affect the academic weekday timetable. The F2 is expected to attend the monthly F2 teaching and encouraged to engage with other relevant clinical educational events where applicable.

Dependent on the exact project to be undertaken, the F2 may benefit from attendance at specialist outpatient clinics.

Departmental academic teaching programme (if applicable)

N/A

Academic Lead:

Dr Debashis Sarker
Senior Lecturer in Medical Oncology
debashis.sarker@kcl.ac.uk

Programme 15 – Surgery – based at Guy's and St Thomas' Hospitals
Reference: 2526/KCL/15

Individual Placement Descriptor (IPD) for the four-month academic placement
Separate IPDs for clinical placements are available on foundation school websites

Type of programme Specialised Foundation Year Training (Research) Programme	
Employing trust: Guy's and St Thomas' NHS Foundation Trust	*Academic placement based at:* Guy's and St Thomas' Hospitals
Brief outline of department King's Health Partners Vascular Unit at St Thomas' Hospital is the largest in the country and is a leading centre for the treatment of complex vascular diseases including aneurysms, carotid, peripheral arterial, venous thrombotic and lymphatic disease. The combined clinical-academic unit is part of the BHF Centre of Research Excellence for Cardiovascular Disease. It comprises a Professor of Vascular Surgery, a Professor of Vascular Science, 2 Senior Clinical Lecturers, an NIHR Clinical Lecturer, post-doctoral scientists, Clinical Research Fellows, and two NIHR Academic Clinical Fellow. Our research uses a multi-disciplinary approach that includes the development and application of biochemical, physiological, genetic, molecular and imaging techniques, as well as relevant models of vascular disease. It is facilitated by local, national and international collaborations that have enabled many publications in high impact factor journals and successful funding from MRC, Welcome, BBSRC, BHF and the Royal College of Surgeons.	
Structure of academic project/what expected The full spectrum of projects is made available to the trainee by virtue of the fact that we have both basic science and clinical research interests. The unit has laboratory facilities including molecular biology, tissue culture and histology and access to state-of-the-art equipment and expertise. There will also be opportunity to develop generic and specific research skills at training courses within KCL. Clinical projects are facilitated by the wealth of patient data collected for each of the aforementioned vascular pathologies, particularly patients undergoing treatment of aortic pathologies. The majority of the academic projects undertaken to date by Specialised Foundation Trainees placed in the Department have been presented at a national/international meeting and subsequently published.	

Clinical commitments during academic placement The academic F2 will be required to be on an out of hours rota at Guy's and St Thomas' NHS Foundation Trust which comprises of 1 in 4 weekend twilight shifts and will not affect the academic weekday timetable. The F2 is expected to attend the monthly F2 teaching and encouraged to engage with other relevant clinical educational events where applicable.
Departmental academic teaching programme (if applicable) The unit holds an academic meeting for juniors and consultants on the first day of each week. The department has four postdoctoral scientists who can teach research techniques and methodology as required. A culture of teamwork and is encouraged with more established MD/PhD students offering support and guidance to students on shorter term placements. The successful candidate will have access to researcher development courses run by KCL.
Academic Lead: Professor Bijan Modarai PhD FRCS Professor of Vascular Surgery Honorary Consultant Vascular Surgeon British Heart Foundation Senior Fellow bijan.modarai@kcl.ac.uk

Programme 16 – Cardiovascular Medicine – based at Guy's and St Thomas' Hospitals
Reference: 2526/KCL/16

Individual Placement Descriptor (IPD) for the four-month academic placement
Separate IPDs for clinical placements are available on foundation school websites

Type of programme Research	
Employing trust: Guy's and St Thomas' NHS Foundation Trust	*Academic placement based at:* Guy's and St Thomas' Hospitals
Brief outline of department The Cardiovascular Clinical-Academic Grouping integrates the KCL School of Cardiovascular and Metabolic Medicine and Science and the King's Health Partners clinical cardiovascular services. We host the joint-largest UK British Heart Foundation Centre of Research Excellence, recently renewed for a third term. The school has ~45 PIs (including 4 BHF Professors) and >50 PhD/MD students among 200 staff. There are a wide range of internationally leading laboratory-to-bedside research programmes covering major disease areas (https://www.kcl.ac.uk/scms/index). Clinical training is undertaken at Guy's and St Thomas' Hospital (GSTT), a leading UK cardiac centre with a comprehensive range of cardiology/cardiac surgery services and a strong track record of clinical innovation.	

Many critical cellular processes that determine myocardial viability and function are regulated through intracellular signalling pathways that respond to environmental or mechanical stimuli and lead to chemical modification of downstream targets. The focus of our work is on the signalling pathways that determine myocardial viability and function within the context of ischaemic heart disease. Our particular interest is in clinical and experimental studies of adaptation to ischaemia through the growth of coronary collaterals and adaptive changes in blood flow within the microcirculation. We investigate these using the whole range of basic and clinical laboratory techniques as well as advanced cross-sectional imaging. The Research theme lies in the Cardiovascular School on the St Thomas' Hospital Campus and involves an interdisciplinary group of clinicians and scientists based in the Rayne Institute and within the clinical cardiology unit at Guy's and St Thomas'. The other relevant investigators working with Michael Marber include Simon Redwood, Divaka Perera, Michael Shattock, Amedeo Chiribri, Reza Razavi, Rene Botnar, Andrew Webb and Haseeb Rahman.

Structure of academic project/what expected

Various projects are available and can be tailored to career ambitions and academic interests. Generally, the projects involve the examination of invasive physiological flow and pressure information and their comparison to non-invasive indices obtained by cross-sectional imaging. The purpose is to validate new non-invasive techniques to measure cardiac function and predict clinical outcome. The cardiovascular diseases on which we focus are myocardial ischaemia, heart failure and aortic stenosis.

Clinical commitments during academic placement

The academic F2 will be required to be on an out of hours rota at Guy's and St Thomas' NHS Foundation Trust which comprises of 1 in 4 weekend twilight shifts and will not affect the academic weekday timetable. The F2 is expected to attend the monthly F2 teaching and encouraged to engage with other relevant clinical educational events where applicable.

Departmental academic teaching programme (if applicable)

The Cardiovascular School hosts a comprehensive range of training programmes for clinical and non-clinical scientists. We host a prestigious BHF 4-year programme in Cardiovascular Biology and through the BHF Centre run a novel inter-disciplinary PhD training programme to attract engineers, mathematicians and biophysicists into the cardiovascular field. We also have standard 3-year PhD and MD(Res) studentships/fellowships for non-clinicians and clinicians. These are funded by a range of sources including Research Councils, industry and charities. There are currently 79 registered PhD/MD students. The appointee will be able to access these training resources and educational programmes.

Academic Lead:

Professor Divaka Perera
Professor of Cardiology, King's College London
Consultant Cardiologist, Guy's & St Thomas' Hospital
divaka.perera@kcl.ac.uk
Divaka.Perera@gstt.nhs.uk

Programme 17 – Nephrology – based at Guy's and St Thomas' Hospitals
Reference: 2526/KCL/17

Individual Placement Descriptor (IPD) for the four-month academic placement
Separate IPDs for clinical placements are available on foundation school websites

Type of programme Research	
Employing trust: Guy's and St Thomas' NHS Foundation Trust	*Academic placement based at:* Guy's and St Thomas' Hospitals
Brief outline of department The nephrology placement offers a range of clinical and scientific research opportunities within the School of Immunology and Microbial Sciences, The MRC Centre for Transplantation and The NIHR Biomedical Research Centre Transplant Theme. Major research programmes within the centre include complement, innate immunity, complement, coagulation, immune biology, immune regulation, T cell development, genetics, imaging, and tolerance biology. Its science base embraces liver, kidney, pancreas, bone marrow, islets, hepatocyte and stem cell transplantation, in what is one of the largest patient groups in Europe. There are also a number of major clinical trials in progress.	
Structure of academic project/what expected The trainee may undertake a research project in the laboratory. There are also opportunities for clinical projects and to gain experience of clinical trials.	
Clinical commitments during academic placement The academic F2 will be required to be on an out of hours rota at Guy's and St Thomas' NHS Foundation Trust which comprises of 1 in 4 weekend twilight shifts and will not affect the academic weekday timetable. The F2 is expected to attend the monthly F2 teaching and encouraged to engage with other relevant clinical educational events where applicable.	
Departmental academic teaching programme (if applicable) N/A	
Academic Lead: Dr Michael Robson Consultant nephrologist and Senior Lecturer michael.robson@kcl.ac.uk	

Programme 18 – Psychological Medicine and Psychiatry – based at King's College Hospital/Guy's and St Thomas' Hospital

Reference: 2526/KCL/18

Individual Placement Descriptor (IPD) for the four-month academic placement
Separate IPDs for clinical placements are available on foundation school websites

Type of programme Research	
Employing trust: Guy's and St Thomas' NHS Foundation Trust	*Academic placement based at:* King's College Hospital/Guy's and St Thomas' Hospitals
Brief outline of department The Department of Psychological Medicine sits within the division of Academic Psychiatry, part of the Institute of Psychiatry, Psychology and Neuroscience (IoPPN). The IoPPN is a School of King's College London and the largest academic community in Europe devoted to the study and prevention of mental illness and brain disease. The IoPPN comprises three Academic Divisions in Neurosciences; Academic Psychiatry; and Psychological & Systems Sciences. These encompass researchers with interests in addictions, biostatistics, child and adolescent psychiatry, basic and clinical neuroscience, forensic mental health sciences, health service and population research, neuroimaging, psychology, psychological medicine, old age psychiatry and psychosis studies.	
Structure of academic project/what expected The successful applicant for the F2 programme can therefore choose from a huge range of fields in which to carry out research. These can be seen on the website of the IoPPN http://www.kcl.ac.uk/ioppn/divisions/index.aspx. This includes general hospital (liaison) psychiatry, neuropsychiatry, epidemiology, psychosis, dementia, PTSD, depression, perinatal psychiatry, neuroimaging, eating disorders, psychological treatment, etc.	
Clinical commitments during academic placement The academic F2 will be required to be on an out of hours rota at Guy's and St Thomas' NHS Foundation Trust which comprises of 1 in 4 weekend twilight shifts and will not affect the academic weekday timetable. The F2 is expected to attend the monthly F2 teaching and encouraged to engage with other relevant clinical educational events where applicable.	
Departmental academic teaching programme (if applicable) N/A	
Academic Lead: Professor Allan Young Professor of Mood Disorders Interim Vice Dean, Division of Academic Psychiatry allan.young@kcl.ac.uk	

Programme 19 – Neurology – *based at King's College Hospital*
Code: 2526/KCL/019

Individual Placement Descriptor (IPD) for the four-month academic placement
Separate IPDs for clinical placements are available on foundation school websites

Type of programme Research	
Employing trust: King's College Hospital NHS Foundation Trust	*Academic placement based at:* King's College Hospital
Brief outline of department including reference to department web site The Department of Basic and Clinical Neuroscience at King's College London and the associated Regional Neurosciences Unit at King's College Hospital include internationally recognised clinician scientist leaders in epilepsy, neurodegeneration (Alzheimer's disease and motor neuron disease), headache, neuro-oncology, movement disorders, brain injury, demyelinating disease and functional neurological disorders. Past projects include: neurophysiological studies in motor neuron disease and in models of epilepsy; next generation sequencing projects in motor neuron disease; an RNA expression study in Alzheimer's disease; and stroke in brain tumour patients.	
Structure of academic project/what expected This post is particularly suited to those interested in Neurology and Neuropsychiatry. During the research attachment, trainees will be able to choose a supervisor from principal investigators (PIs) in the School of Neurosciences at King's College London and the Regional Neurosciences Centre, King's College Hospital. Areas of activity include Mendelian and complex genetics, molecular cell biology, cellular electrophysiology, neuroimaging, proteomics and bioinformatics. During the academic rotation, trainees are encouraged to attend research seminars and other activities organised by the Department of Basic and Clinical Neuroscience, as well as the Clinical Grand Round at King's College Hospital. The post-holder is expected to teach a Masterclass seminar on the MSc in Clinical Neuroscience, two hours a week, in conjunction with the F2A in Neurology. A list of PIs with brief outlines of their areas of research and likely projects is available at the start of the academic year. Trainees are encouraged to make contact with a range of PIs so that they can select a PI and project at least 3 months prior to starting the research rotation. The associated F2 clinical attachments will be Psychiatry and A&E.	
Clinical commitments during academic placement The academic F2 will be required to be on an out of hours rota at Guy's and St Thomas' NHS Foundation Trust. The F2 is expected to attend the monthly F2 teaching and encouraged to engage with other relevant clinical educational events where applicable. The trainee is expected to attend the Neurology Grand Round at King's College Hospital, and to present a weekly seminar to the Clinical Neurosciences MSc students. Teaching on the MSc is an important component of the post.	
Departmental academic teaching programme (if applicable)	

There is a programme of research presentations from the department, a programme of visiting lecturers, and weekly journal clubs and seminars in various research topics. The post-holder is also welcome to attend lectures and seminars from the MSc Clinical Neuroscience and the MSc Neuroscience
Academic Lead: Gerald Finnerty Senior Clinical Lecturer & Honorary Consultant Neurologist gerald.finnerty@kcl.ac.uk gfinnerty@nhs.net

4. KING'S COLLEGE LONDON AND PARTNER TRUSTS

KING'S COLLEGE LONDON AND PARTNER TRUSTS
Faculty of Life Sciences & Medicine

As one of the largest and most successful centres for research and education in the UK, we benefit from extensive international and local partnerships that encourage innovative and progressive collaboration.

Educate to inspire and improve
Our thriving student community consists of more than 5,000 students who are supported by over 500 leading scientists and educators. We deliver courses for talented aspiring clinicians and health professionals in partnership with our NHS partners, including the world-renowned Guy's, King's College and St Thomas' Hospitals.

Research to inform and innovate
Research is core to what we do and how we educate. We are strategically aligned to King's Health Partners, bringing together academics and clinicians who are committed to ensuring efficient translation and adoption of research innovation into clinical practice.
In the most recent Research Excellence Framework (REF 2014), over 91.8 percent of our research was rated 4 star or 3 stars. The faculty is ranked:

- 14th in the world for Pharmacy & Pharmacology (QS World University Rankings 2019)
- 16th in the world for Anatomy & Physiology (QS World University Rankings 2019)
- 17th in the world for Clinical, Pre-Clinical and Health (Times Higher Education World University Rankings 2019)

The faculty is located at four central London campuses - Guy's Hospital Campus at London Bridge, St Thomas' Hospital and Franklin Wilkins Building at Waterloo and King's College Hospital in South London. Our locations reflect the faculty's close alignment to our NHS partners.

King's Health Partners
King's Health Partners is one of the UK's eight Academic Health Sciences Centres and brings together a world leading research led university (King's College London) and three NHS Foundation Trusts (Guy's and St Thomas', King's College Hospital and South London and Maudsley).

The partnership brings together more than 40,000 NHS staff with 30,000 students and academics, to translate cutting-edge research into excellent patient care through world-class education and training. King's Health Partners delivers high impact

innovation - discovering new insights into disease, transforming diagnostics and unlocking new therapies and digital tools. For more information, visit: www.kingshealthpartners.org

Guy's and St Thomas' NHS Foundation Trust

Guy's and St Thomas' provide 2.6 million patient contacts in acute and specialist hospital services and community services every year. As one of the biggest NHS trusts in the UK, with an annual turnover of almost £1.5 billion, it employs around 17,100 staff. The Trust is able to provide specialist care for services such as cardiac surgery, children's care, oncology, dermatology and ophthalmology. It is committed to becoming the major university hospital in the UK and to staying at the forefront of patient care, teaching and research.

King's College Hospital NHS Foundation Trust

King's College Hospital NHS Foundation Trust is one of the UK's largest and busiest teaching hospitals, training over 900 dentists, 750 doctors and 300 nurses every year. The Trust is recognised internationally for its work in liver disease and transplantation, neurosciences, cardiac, haemato-oncology, stroke and major trauma. On 1 October 2013, King's took over the running of the Princess Royal University Hospital in Bromley and Orpington Hospital, as well as some services at Beckenham Beacon and Queen Mary's Hospital, Sidcup. The new enlarged organisation has over 12,000 staff and provides over 1 million patient contacts a year. 9,000 babies are delivered by our hospitals each year, and over 750 patients come to our Emergency Departments every day.

King's College Hospital NHS Foundation Trust prides itself as an investor in people and on providing a friendly and supportive climate to enable all staff to achieve their best potential.

Change made	Requested by
Updated the academic lead of programme 16 to be Prof Divaka Perera	Mike Marbler
Added Andrew Webb and Haseeb Rahman to the 'other investigators' section	Divaka Perera