Health Education England

London Foundation School

Specialised Foundation Programme

Applicant Guide

Programmes Commencing August 2023

Contents

Key Changes

- ***Overall Ranking Score:*** For Standard Foundation 2023 applications onwards, with the removal of Educational Achievements score for the Standard Foundation programme, the overall application score will continue to be made up of a 50:50 split between the EPM and the Situational Judgement Test (SJT) score, but the EPM decile scores will move from 34-43 to 41-50. Refer to Appendix C Calculation of Scores on page 32 – Overall ranking score.

- ***Recruitment Process for Kent, Surrey and Sussex:*** A new foundation school for Kent, Surrey and Sussex has been developed for doctors starting F1 in August 2023. The recruitment process for SFP programmes starting 2023 will not form part of one unit of application under London Foundation School. Applicants should select South East Specialised Unit of application (Wessex and KSS) for 2023 KSS programmes.

- ***Educational Achievements:*** The local SUoA scoring criteria may differ from the other Foundation School scoring criteria. **Please read the guidance carefully, as evidence once submitted cannot be amended**, and retrospective submission of evidence will not be acceptable.

- ***Specialised Foundation Programme preferencing*** – Applicants will be able to preference SFP programmes until 12:00 pm, 14th October 2022. This means should the applicants wish to; they may amend their preference options up through this date.

Introduction

The UK Foundation Programme Office (UKFPO) has published guidance for applicants to the 2023 Specialist Foundation Programme (SFP) containing comprehensive details on this year's application process plus a timeline showing key dates.

Applications to Specialist Foundation Programme (SFP) and Foundation Programme (FP) 2023 will need to be submitted during the same application window. Applications for SFP will be made as part of the main Standard Foundation application through Oriel to a maximum of two Specialised Units of Application (SUoAs), and will comprise the standard application form, plus part 2 of the application form to be completed with information required by SUoAs.

Successful SFP applicants will receive offers from SUoAs in advance of the allocation for Foundation Programme places. Successful SFP applicants who accept an offer cannot be included in the FP allocation. Unsuccessful SFP applicants, or those who decline all offers, will be included automatically in the FP allocation. The national application process is complete once all applicants have been allocated to a UoA, or when all available places have been filled (please see the UKFPO link - http://www.foundationprogramme.nhs.uk/ for more detailed information).

In order to meet the eligibility criteria for a Specialist Foundation Programme (SFP) for 2023 entry, you must either have qualified or are expecting to qualify from a UK medical school after **3rd August 2021 and by 3rd August 2023** and have been nominated by your medical school; or you must have completed an online Eligibility application form and submit the required documentation to the UKFPO's Eligibility Office **by 12:00 pm 27th July 2022** Please see www.foundationprogramme.nhs.uk for full details.

If you have a query, please contact the team via our London post graduate medical and dental education (PGMDE) Support Portal webpage by selecting Applicants General Enquiry Form

Recruitment to London Specialised Foundation Programme Unit of Application (SUoA) 2023

Prospective applicants must complete a standard national application form and provide supplementary information. Applications must be submitted online between **7th September 2022 and 20th September 2022.**

Applicants will be issued with an applicant ID number, which is a specific number assigned to each applicant when they enroll on the national online recruitment system. Please note that late applications will not be accepted under any circumstances. Applicants should plan to complete and submit their application in good time well ahead of the deadline to avoid any potential last-minute problems with internet connection or other technical issues. **Under no circumstances will late applications be accepted**.

No changes may be made to the application from once the application form has been submitted. However, applicants may amend their programme preference options by 12:00 pm on 14th October 2022.

Stage 1 – Application forms will undergo a locally-managed shortlisting process which will be carried out in two phases**.** Applicants will be informed of their application status on Monday, 17th October 2022. Successful applicants will be invited by close of business on 25th October 2022 to select their preferred interview slot via Oriel. Interview slots will be released as follows:

- 26th October – Portion of am and pm interview slots across all 4 interview episodes will be released by 12:00pm
- 27th October – Remaining portion of am and pm interview slots across all 4 interview episodes will be released by 12:00 pm

Stage 2 – 4 single-day interview episodes will take place on 2 November 2022, 16 November 2022, 23 November 2022, and 29 November 2022. Applicants will sit the SJT during 1 of the 2 SJT test windows either on 7 – 20 December 2022 or 19 to 23 January 2023.

Stage 3 - Applicants will be informed of their application status and offers made on 11 January 2023 via Oriel. Applicants will be provided with 48 hours to accept or decline an offer.

This document outlines the local process to be used by applicants applying to London Specialised Unit of Application (SUoA). For generic information on the SFP 2023 application process, please go to the Specialised Foundation Programme section of the UKFPO website and download the FP/SFP 2023 Applicant's Handbook. **Full details are available at: http://www.foundationprogramme.nhs.uk/faqs**

There will be no face-to-face interviews during this round of SFP Recruitment. All interviews will be facilitated remotely via an online platform. Please note that there may be the requirement for further changes to be made to the recruitment process due to COVID 19 or other unforeseen circumstances. If there are any changes, we will advise applicants via Oriel.

Online application Process

All applicants apply to the main Foundation Programme (FP) vacancy on Oriel via the following web link https://new.oriel.nhs.uk/Web Applicants can then select to be considered for the Specialised Foundation Programme.

The Oriel applicant portal is compatible with Internet Explorer 11, Safari 7+, Google Chrome 30+, Firefox 24+ and Edge. Applicants are advised to use one of these browsers when using the website and preferably the most up to date version of that browser. *Please note that the system is not compatible with Internet Explorer 7 – 10.*

Please note: **You should never use multiple browsers or browser tabs (including logging on a computer and your mobile phone at the same time) when accessing Oriel. You should only have one session of Oriel open at any one time and should ensure that you logout completely before closing the browser**

If you find yourself getting stuck in a 'loop' or if there appears to be an error on the system, please try to access the site from a different web browser, for example, Google Chrome, or delete your cache or internet browser history. For technical queries, please contact the technical helpdesk via support@hicom.co.uk. Please do not open Oriel in multiple browsers as your changes might not be saved.

Changes to the London and KSS Foundation Schools

London will be moving to a London Foundation School to be in place for August 2023. As the first step the previous two schools of North Central and East London and North West London merged for the August 2022 intake. Both Dr Keren Davies and Dr Anthea Parry continue to offer leadership as the Foundation School Directors for the current time. This will not affect the current trainees in programme but will allow greater flexibility going forwards where the need arises and will help with the expansion planning.

The South Thames Foundation School (STFS) has uncoupled to form a South London School and a separate KSS Foundation School. The KSS Foundation School is managed by a new team within the South East region. For 2023 recruitment process, KSS will form one unit of application with Wessex Foundation School. This will allow the medical graduates from the Kent & Medway Medical School, those from Brighton & Sussex Medical School, and other trainees who choose to train in KSS to remain within KSS for the duration of their foundation training.

London Specialised Foundation Programme – Specialised Unit of Application

The London SFP SUoA is affiliated to five medical schools/universities which together offer a total of

106 Specialised Foundation Programmes

Medical School/University	Foundation school	No. of Programmes
Imperial College London (IMP)	NLFS	30
King's College London (KCL) – Kings College Hospital	STFS	7
King's College London (KCL) - Guy's and St. Thomas'	STFS	12
Queen Mary University of London (QMUL)	NLFS	24
St George's University of London (SGUL)	STFS	12
University College London (UCL)	NLFS	21
		106

Successful applicants are recruited to a specific 4-month academic F2 post e.g., academic GUM. 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 healthcare organisation.

Details of both the London SFP SUoA application process and the programmes in this guide. There will be a webinar for how to apply to London Specialised Foundation Programme. Full details of the webinar will be circulated to the Medical Schools.

If you have a query regarding any aspect of the process for applying for a London SFP, please review the medical Foundation FAQ's in the first instance which can be accessed via the PGMDE Support Portal https://lasepgmdesupport.hee.nhs.uk/support/home Should you need to contact us, you can raise your query by selecting Applicants General Enquiry Form

London SFP application process Timeline

22 August 2022	Foundation Programme vacancy published to Oriel
25 August – 7 September 2022	National Foundation Programme (FP) Registration window
7 September 2022	National Application window opens at 9:00 am (BST). Complete online FP application which will include SFP form refer to part 2 Application **Late applications will not be considered under any circumstances.**
20 September 2022 12:00 (Midday)	National FP/SFP/FPP application window closes at 12:00 midday (BST)
21 September 2022 to 17October 2022	Local London SUoA Shortlisting process
17 October 2022	Outcome of the shortlisting process released to the applicants. Applicants provided with information on how to appeal shortlist score.
17 October to 20 October 2022	Local London SUoA Shortlist Score 72-hour appeal window
25 October 2022	Applicants informed of appeal outcome
25 October 2022	Applicants receive invitation to interview
26 October 2022	Portion of AM & PM interview slots across all 4 interview episodes released by 12:00pm
27 October 2022	Remaining AM & PM interview slots across all 4 interview episodes released by 12:00pm
28 October 2022	Deadline for applicant to have chosen interview slot (by 12:00 pm)
2 November 2022	Interview Episode 1
16 November 2022	Interview Episode 2
23 November 2022	Interview Episode 3
29 November 2022	Interview Episode 4
5 January 2023	Interview Feedback release
11 January 2023	National offer date - applicants notified of outcome of applications on Oriel (between 9am and 10am).
13 January 2023	Deadline for applicant to accept or decline offers
18 January 2023	SFP first cascade offers date (between 9am and 10am)
20 January 2023	Deadline for applicants to accept or decline offer(s) (*between 9am and 10am 48 hours later)
25 January 2023	SFP second cascade of offers (between 9am and 10am)

27 January 2023	Deadline for applicants to accept or decline offer(s) (*between 9am and 10am 48 hours later)
1 February 2023	SFP third cascade offers date (between 9am and 10am)
3 February 2023	Deadline for applicants to accept or decline offer(s) (*between 9am and 10am 48 hours later)
6 to 10 February 2023	Final 'mop up' (Clearing Round) offers to be made offline
TBC	UKFPO SFP Appeal Window to be confirmed

***Offers Process** – 48 hours to accept or decline an offer before offer expires.

CASE STUDY

Sarah applied to the West Midlands SUoA vacancy and the Scotland SUoA vacancy on Oriel. Sarah was deemed appointable and ranked highly enough to be offered a programme on both SUoAs.

On the 11 January 2023, the offer for the West Midlands SUoA became available on the system at 9.00 am. The offer for Scotland SUoA was released at 9:15 am.

The programme offer for West Midlands SUoA will expire at 9 am on 13 January 2023 whereas the programme offer from Scotland SUoA will expire at 9:15 am on 13 January 2023

London SFP Person Specification

Applicants for London specialised foundation programmes will be required to meet the criteria listed in the person specification (**see Appendix A**).

In addition to meeting the criteria laid out in the UKFPO FP/SFP 2023-person specification applicants applying for London SFPs will also be required to demonstrate the following desirable criteria:

The applicant should provide evidence of consistent high academic achievement, for example:

- 1st Class honors for a BSc and/or Distinction class (NOT merit or pass) for Postgraduate Master's degree (level 7 only), e.g., MPhil, MSc, MPharm.
- Peer reviewed publication/s
- Presentations at National or International Meetings
- Distinctions, 1st Prizes or equivalent of top 10% of year

London SFPs also requires applicants to be able to demonstrate they have the following academic attributes. This will be tested during the interviews.

- An understanding of the principles of ethical medical research
- An understanding of the importance of effective teaching

Specialised Foundation application form

SFP Educational achievements

As part of the standard foundation programme (FP) application form, applicants will now have the option to apply to a maximum of two SUoAs by selecting 'yes' to the first question on the Part 2 of the form. Applicants will be scored on the additional degree, publications, presentations and the first 5 prizes that they list.

Applicants are not expected to upload any supporting evidence to support their SFP application. Applicants may, however, be asked to submit evidence of their further educational achievements as part of the London SFP recruitment process. Submitted evidence must clearly demonstrate what the achievement is, what it was awarded for and from whom it was awarded. Applicants are encouraged to ensure that evidence of achievements is up to date and available for them to supply to London SFP SUoA if requested.

SFP Whitespace questions

It is important that you read this section carefully.

Applicants will be prompted to respond to a series of white space questions (free text answers). London SUoA do not use white space questions to inform the local selection process. Applicants that are applying to London SUoA ONLY, are advised to detail 'n/a' in these fields since it is mandatory to complete this section of the application form.
Applicants applying to multiple SUoAs, should refer to the relevant SUoA local guidance to check whether they require information in the fields to inform their local selection process.

For example, if an applicant is applying to 2 SUoA and one of these SUoA IS using white space questions and the other IS NOT, the applicant MUST complete the fields in response to the questions.

In instances such as these, The SUoA NOT using the information will simply disregard the information. This will not negatively impact on your application.

Preferences (London SuoA SFP)

Applicants may rank the available programmes in order of preference at the time of application. Once applicant submits the application, they have until 14 October 2022, 12:00 Midday (BST) to amend their programme preferences. Applicants are strongly recommended to positively rank all programmes

To rank individual programmes in order of preference, return to the dashboard and navigate to the 'Preferences screen', or access the preferences via 'my applications'. Applicants will see a number of applications – the FP application, the maximum of two SFP applications and FPP application (if applied).

Programme preferencing is completed using a drag and drop process. Applicants will need to drag the relevant programmes into the column entitled ‘preference’. If there are programmes, they are not prepared to accept, they will need to leave them in the ’no preference’ column. However, applicants should consider this carefully since not positively ranking many may affect their chances of being offered an SFP programme. The system saves the preferences when the applicant presses ‘save’.

Applicants are advised not to use their mobile device to rank their preferences. Applicants are also advised not to access their Oriel application across multiple browsers simultaneously, as there have been issues in the past where the preferences have not been saved.

The Specialised Foundation Programmes were extremely popular last year with 85% of programme offers being filled in the first allocation round. Remember that the more programmes preferenced, the more chances applicants have of receiving an offer.

CASE STUDY

If Andrew only positively ranks 10 programmes and all 10 programmes are offered to and accepted by applicants who have ranked higher, Andrew will not receive an offer.

Andrew would only receive an offer in the next allocation round for one of his 10 ranked programmes if one of the higher scoring applicants had declined the programme they had been offered.

Unfortunately for Andrew all his ranked programmes were filled in the first allocation round and Andrew did not receive an offer of a specialised fooundation programme.

Equality

The equal opportunities monitoring information required by the health service to monitor their recruitment practices. This section of Standard Foundation Programme applications asks you to provide your age, gender, ethnic origin, religious beliefs and whether you consider yourself to have a disability under the Equality Act 2010. You may choose to leave the date of birth fields blank. All other fields are mandatory, but you may choose the option “I do not wish to disclose”. The information you provide in this section will only be accessed by authorised individuals involved in the application process to ensure that the process adheres to equality and diversity legislation. Anonymised reports will be produced to analyse recruitment practices.

Declarations

Oriel will prevent applicants from submitting their application until all sections of the application form have been completed.

IMPORTANT: Once an application form has been submitted, it cannot be amended.

London SUoA Shortlist Process

Applications to the London SUoA will be assessed for eligibility using the following two phased shortlist process.

Phase 1 – One of the three Educational Achievement domains (Publications & Presentations) will be assessed against the published scoring criteria. Applications below the threshold score will not be progressed to the next stage of the local recruitment process. Applications above the threshold score are progressed to phase 2 of the local shortlisting process.

Phase 2 – The remaining two of the three Educational Achievement domains (Prizes & Further Degrees) will be assessed, and the previously assessed domain scores added. Applications below the threshold score will not be progressed to the next stage of the local recruitment process. Applications above the threshold score are progressed to the interview stage of the local recruitment process.

Educational Achievements are divided into three domains as detailed in the table below. Each domain will be scored by a panel of two assessors using standardised scoring criteria. The application will be reviewed by 4 assessors in total.

Items	Maximum points achievable for domain
Further degrees	5
Publications & Presentation	10
Prizes	5
Total maximum application (Shortlist) score	**20**

The two assessors will each score the domain independently in the first instance. The two assessors will then discuss the applicant interview and then reach an agreed score. Although all three scores will be recorded, it is the **agreed score** that will be recorded against that domain as the application form shortlist score.

Members of the scoring panel will not have access to the personal details or programme preference sections of applicant's application form.

London SUoA Application Shortlist Score Local Appeal Process

Applicants will receive notification detailing the outcome of the shortlist process, and their application status on 17th October 2022. Applicants will also be provided with information on how they may appeal their interview score and will have 72 hours to complete and submit the relevant form. No other appeal for amendments to your shortlist score will be accepted.

Please note that an appeal should only be submitted where an applicant believes their evidence has been overlooked/misinterpreted. Please note that only information submitted at the time of application may be considered, any additional information/evidence to support your appeal will not be considered.

The appeal will be reviewed by a panel consisting of a minimum of 1 clinician together with Health Education England members of staff, independent of the initial shortlist panel. The independent appeals panel will make their decision based on any investigations they consider reasonable, having regard to your statement within the appeal and any supporting information/evidence provided by you.

You cannot make an appeal simply because you disagree with the principles of the London SUoA recruitment process or the judgements or outcomes that have been made by the application assessors. You may request a review by the London SUoA where processes or procedures have not been followed, or there is evidence of unfairness in how the process has been implemented, and the objectivity of decisions is called into question.

London SUoA Shortlisting Scoring Criteria

Please note the London SFP SUoA (local) scoring criteria is different from that defined by the other Foundation School. If you are applying to two units of application, please ensue you read guidance provided by other Foundation School.

Information detailed on the London SFP application form will be scored by the London SFP SUoA using the following local scoring criteria.

Please ensure that you read details below carefully.

FURTHER DEGREES

Items	**Maximum score achievable for degree type**
Primary medical qualification only	0
2.2 class honours degree	
3rd class honours degree	
Doctoral degree (PhD, DPhil, etc.)	
Unclassified honours degree	
2.1 class honours degree	2
Merit class (NOT distinction or pass) for Postgraduate Master's degree (level 7 only), e.g., MPhil, MSc, MPharm	
1st class honours degree	5
Distinction class (NOT merit or pass) for Postgraduate Master's degree (level 7 only), e.g., MPhil, MSc, MPharm	
Maximum score achievable for domain	**5**

CHANGE TO SCORING CRITERIA FOR FURTHER DEGREES DOMAIN

Additional degrees give medical students an added opportunity to gain publications, presentations and prizes which attract the majority of marks in our shortlisting criteria. However, we recognise that some students may not have had the opportunity to undertake an additional degree for personal or financial reasons, which does not lessen their academic potential. **For this reason, additional degrees will now only score marks if a first, distinction, 2:1 or merit has been achieved.**

IMPORTANT NOTES FOR FURTHER DEGREES DOMAIN

- Honours MA degrees, including those from some Scottish Universities, are undergraduate degrees and therefore classed as honours degrees, not master's degrees. Honours degrees from Oxford and Cambridge can be converted to master's degrees after a period of time, but these do not require a further year of study and are therefore classed as honours degrees and not master's degrees.

- Points for postgraduate master's degrees can only be awarded where the degree represents a further year of study taken in addition to an undergraduate degree (whether as an intercalation or other), and there is a competitive entry requirement of a previous degree or equivalent. If you choose a lesser score as part of the main application, your score will not be upgraded at a later stage following the verification process.

- Typically, masters' degrees are awarded a pass/merit/distinction classification.

- Some international medical schools (e.g., the USA) award an 'MD' or similar as part of their basic medical qualifications. This qualification does not attract any additional points in this section.

- Converting degrees with a Grade Point Average (GPA) score

  For applicants who have undertaken an exchange programme of study as part of a degree course or are a graduate from an overseas university where they provide Grade Point Average (GPA) points, the following procedure must be used. Please note that the GPA is different to weighted average marks.

  Applicants must take the cumulative, i.e., all years, grade point average (GPA) and calculate the equivalent degree level and select the most appropriate. The evidence provided MUST show the cumulative (GPA) and specify on what scale the degree was scored, otherwise zero points will be awarded.

  All applicants converting degrees with a GPA score use the online calculator through http://www.foreigncredits.com/Resources/GPA-Calculator and provide evidence to this effect. Applicants must provide evidence of the calculation from Foreign Credits and not just the final outcome. The Graduate Recruitment Bureau (GRB) also offers some useful resources for applicants who are looking to submit evidence of overseas / GPA degrees with the calculation and evidence to demonstrate equivalence. Further information can be found on their website at: https://www.grb.uk.com/recruiterresearch/international-degree-equivalents

It is the responsibility of each applicant to obtain the necessary evidence of GPA calculations and to demonstrate equivalence with UK standards.

PUBLICATIONS & PRESENTATIONS

Items	Maximum score achievable per publication
Original research paper published in a peer-reviewed journal	2
Oral or poster presentation at a national or international conference	1
Maximum score achievable for domain	**10**

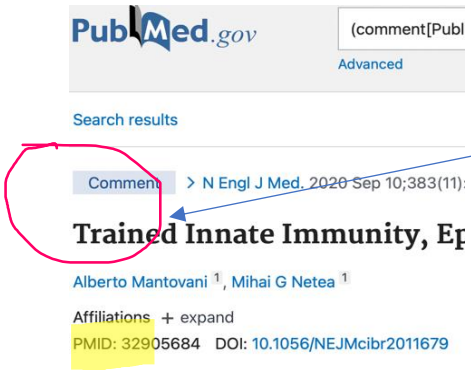
The maximum score awarded in Publications and Presentations is 10, If applicant has listed 5 publications and has scored maximum points and has also listed 10 presentations, no scores will be awarded for presentations as they have already scored maximum points.

IMPORTANT NOTES FOR PUBLICATIONS DOMAIN

- Please do not use acronyms when detailing your educational achievement. Please ensure to provide as much information as possible.
- For publications, the work must have been published regardless of whether it has been accepted or is in press and must have a PubMed ID number (PMID). **If you do not provide a PMID for a publication, no points will be awarded.**
- DOI, ISBN or PMCID numbers are not sufficient and will not count.
- You do not need to be the first named author on the publication, just one of the named authors.
- You are advised to check the database https://pubmed.ncbi.nlm.nih.gov/ to ensure the article presented is available and reflects the information stated on your application. You are advised to double check the PMID, particularly that all the numbers are present, before submitting your application form as amendments cannot be made later. If it is considered that you have falsified the PMID number, the UKFPO will advise your Medical School.
- Please note that collaborators on PubMed do not qualify for points. Applicants must be one of the titled authors on PubMed. The only evidence of publications that is required to be uploaded on to Oriel is the PubMed ID – no further evidence is required (for example, an uploaded document).
- The publication must be peer reviewed.
- Avoid copying and pasting PubMed ID numbers (type them in carefully so they match PubMed exactly.

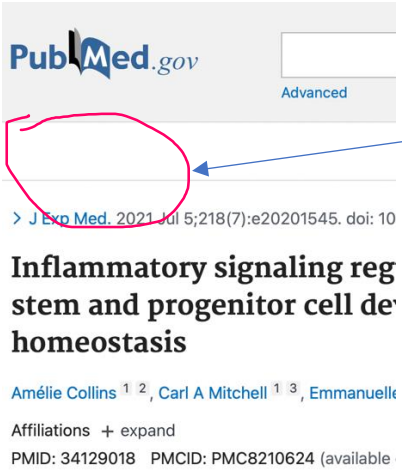
- Book chapters will not score points in this section.
- All categories of publication listed on PUBMED will be accepted EXCEPT for the collaborators and comment category. These do not represent original work.

See example below for 'Comment' Category:



Mantovani et al. is NOT acceptable since it has the word 'COMMENT' (circled in red). The PMID has been highlighted in yellow.

See example below which does not have the word 'Comment'



Collins et al. IS acceptable since it does not have the word 'COMMENT' (circled in red). The PMID has been highlighted in yellow.

See example below listing authors as collaborators:

If applicant's name is listed under Collaborators against any publication, it will not score a point

IMPORTANT NOTES FOR PRESENTATIONS DOMAIN

- Please do not use acronyms when detailing your educational achievement. Please ensure to provide as much information as possible.
- The oral or poster presentation must be given at a national or international conference organised by a recognised medical, professional, or educational body. This must be clearly indicated on the application under the 'Level delivered displayed'.
- Conferences organised by the BMA, students and/or trainees and their organisations such as BAPIO and Inspire will not count.
- National means that the level of organisation is Scotland, England, Wales, Northern Ireland.
- The poster or oral presentation must describe the applicant's academic work.
- The applicant must be a named author on the presentation.
- The presentation must have been accepted or taken place before the close of the application period (12:00 noon (BST) on 20th September 2022.
- Local presentations given as part of the applicant's degree course or as extra-curricular activities do not count.

NB: If an applicant has submitted the same presentation, either oral or poster (i.e., the same piece of work) to more than one conference the presentation shall be awarded only 1 point in total.

CASE STUDY

Vanessa had given a poster presentation to the British Association of Plastic Reconstructive & Aesthetic Surgery Scientific meeting. *1 point was awarded.*

Vanessa had given a poster and had also given an oral presentation entitled "Role of Foundation Doctor in Paediatrics" to the 3rd Annual Children & Young People's Conference and to the Royal College of Paediatrics. *1 point was awarded*

PRIZES

Items	Maximum score achievable per prize
Distinction	**1**
Confirmation of scoring in top 10% of medical school year for an exam subject.	
Scientific/Medical **First Prize** for academic achievement • At undergraduate/medical school (pertaining to applicant's medical education including intercalated BScs, but not degrees undertaken prior to entering medicine) • International Level • National level	
Scholarships awarded for educational achievements	
Nationally awarded funding for research project, or any other funding grant	
Maximum score achievable for domain	**5**

IMPORTANT NOTES FOR PRIZES DOMAIN

- **Please note that only the FIRST FIVE PRIZES detailed on the application form will be considered by the assessors for London SFP application. Applicants are advised to detail the prizes most likely to score first.**

- Please do not use acronyms when detailing your educational achievement. Please ensure to provide as much information as possible.

- The prize must be an undergraduate/medical school, national or international educational prize (pertaining to applicant's medical education) awarded by an organisation that is not student or trainee-led and must be a FIRST PRIZE. Second or third prizes, or honourable mentions, do not qualify for points in this section.

- National means that the level of organisation is Scotland, England, Wales, Northern Ireland.

- A prize is awarded for academic achievement rather than for an activity.

  Applicants must:

  - Indicate type of prize and state name of prize
  - Detail what the prize was awarded for and indicate clearly that the award is for a first prize
  - Detail date the prize was awarded
  - State the official name of the awarding body in full

  The following **are not** eligible for points:

  - Bursaries
  - Elective awards
  - Merit
  - Second-place, runners-up prize etc
  - Prizes not awarded for academic achievement e.g. Bursaries, Elective awards
  - Scholarships not awarded for academic achievement e.g. Music or Sporting scholarships

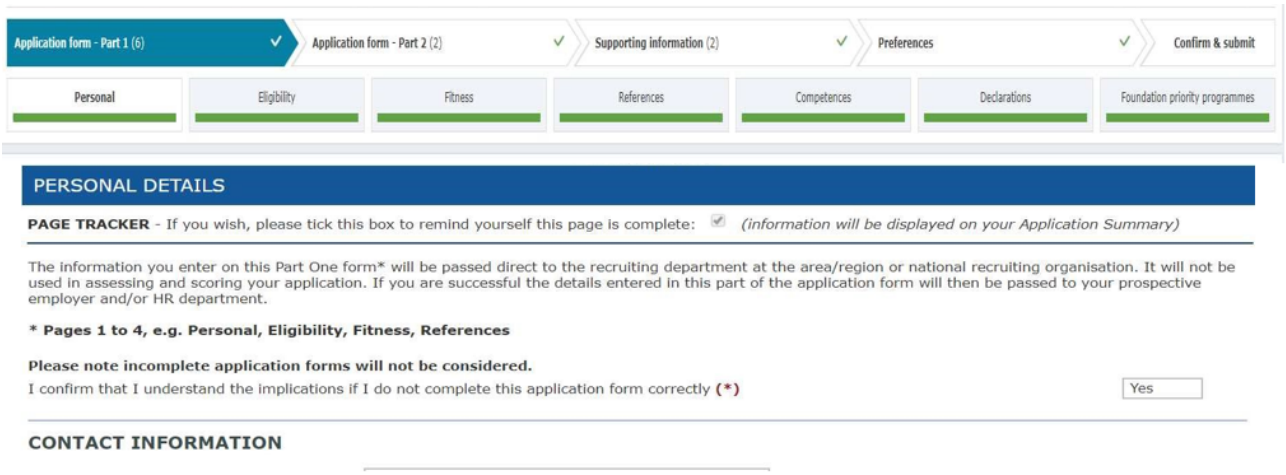
CASE STUDY

Stephanie was awarded a prize for best dissertation in virology. *1 point was awarded.*

Melanie was awarded a certificate of merit for being a student representative. *No points were awarded.*

Please note that the London SUoA administrative team is unable to confirm if a particular Educational Achievement is likely to score points for an application as applications are reviewed by trained assessors. Applicants are advised to detail all the additional achievements they think will score points in line with this guidance.

Example of Standard Foundation Application Form



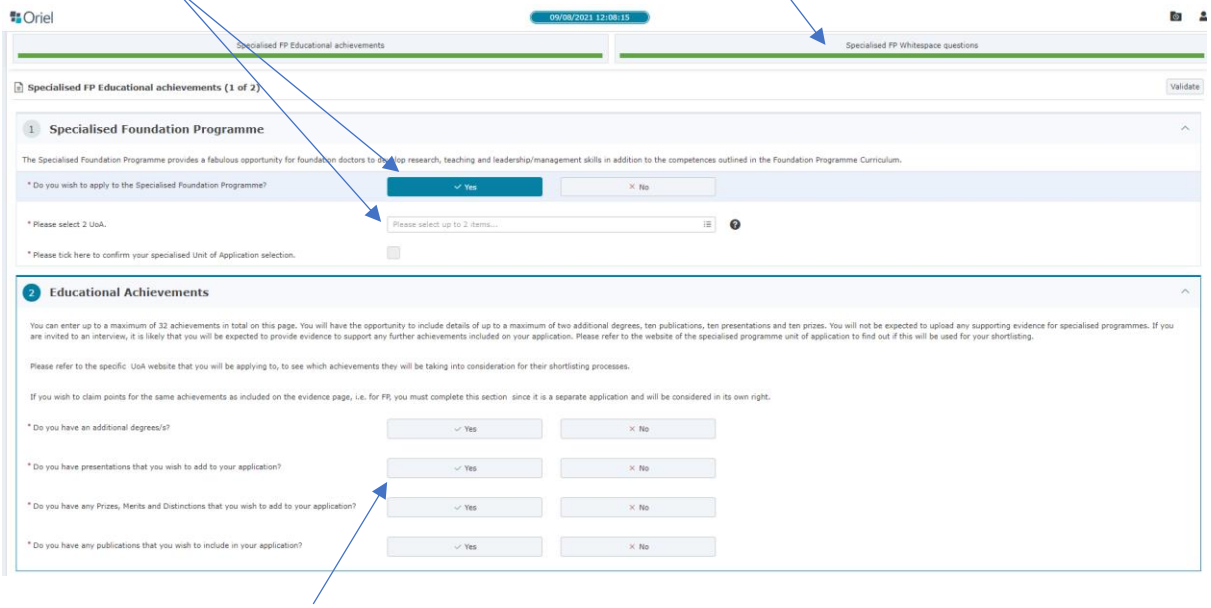
You must complete and submit your application form on Oriel between 09:00 (BST) on 7 September 2022 and 12:00 (midday BST) on 20 September 2022.

Late applications will not be accepted under any circumstances.

Example of Part 2 of Standard Foundation Application Form (Applying for SFP)

Complete Part 2 of the Standard Foundation Programme Application form to apply to Specialised Foundation. You can Select up to 2 SUoA

Complete White Space Questions. Refer to individual SUoA website for the shortlisting requirements



Select the Educational Achievements you wish to declare. It will automatically populate individual fields for you to complete. See example below

Application example of Educational Achievements

Additional Degree

Type of degree	Subject of degree	Degree classification	Educational Institution	Date of qualification
Bachelor of Arts	Natural Sciences	Class 1	University of Cambridge	Insert date

Presentation

Presentation type	Delivered by?	Presentation Title	List of authors/ presenters	Date of meeting/event	Meeting/Event Title	Organising Body	Level delivered/ displayed at?
Oral		Clinical Evaluation of the use of telehealth	J Murray, C Stewart	20/05/2020	The Joint Royal College of Physicians 34th International symposium	The Joint Royal College of Physicians	International
Poster		Common Surgical Emergencies in London	J Bloggs, M John, S Wong	20/05/2019	Association of Surgeons of Great Britain & Ireland Annual Meeting	Association of Surgeons of Great Britain & Ireland	National

Prizes

Were you awarded first prize/distinction/merit?	Prize detail	Date awarded	Awarding body
First prize	Best dissertation in Virology	20/05/2019	University of Life

Publications

Publication title	List of authors	PMID/PMCID/ DOI/in press ID	Year	Journal/book title	Volume/page
How to be successful at SFP Short-listing	Joe Bloggs, Mark John, Sue Wong,	39456899	2020	HEE peer-reviewed Journal of Things	Volume 12, Issue 4, Pages 1056 - 1060
How to be successful at SFP Interviews	Joe Bloggs, Mark John, Sue Wong,	39567910	2019	HEE peer-reviewed Journal of Things	Volume 13, Issue 5, Pages 1 - 3

Please note

Applicants will complete and submit one main application form for all the foundation recruitment streams. Using progressive disclosure applicants will have the option to apply for Specialised Foundation Programmes. Using this one application form, applicants may apply to up to two Specialised Foundation Unit of Applications (SUoA).

Whitespace Questions

Applicants will be prompted to respond to a series of white space questions (free text answers). London SUoA do not use white space questions into inform the local selection process. Applicants that are applying to London SUoA only, are advised to detail 'n/a' in these fields since it is mandatory to complete this section of the application form.

Applicants applying to multiple SUoAs, should refer to the relevant SUoA local guidance to check whether the SUoA requires information in the fields to conform their local selection process.

For example, if an applicant is applying to multiple SUoAs and one of these SUoA IS USING white space questions and the other SUoA IS NOT, the applicant MUST complete the fields. In instances such as these, The SUoA NOT using the information as part of their local recruitment process will simply disregard the information when assessing the application.

This will not negatively impact on your application.

Shortlisting Feedback

Two scoresheets will be released to the applicants with their shortlisting scores. On the scoresheet there will be 3 scores.

- Panelist 1 – Individually scores applicant and enters their scores on the digital scoring
- Panelist 2 – Individually scores applicant and enters their scores on the digital scoring
- Panelist 3 – Panelists 1 and 2 will have further discussion after scoring applicant individually and they will enter the agreed scores against panelist 3. Please note that these scores may be higher or lower than their individual scores. Total score against panelist 3 will form total interview scores.

Interviews

All interviews will be facilitated remotely via an online platform. There will be no face-to-face interviews during this round of SFP recruitment.

London SFP SUoA will be holding four interview episodes in November 2022 in order to provide as much flexibility as possible. The scheduled interview dates are as follows:

Wednesday, 2 November 2022	All Interview episodes will be facilitated remotely via MS Teams.
Wednesday, 16 November 2022	
Wednesday, 23 November 2022	
Tuesday, 29 November 2022	

Interview Ratio: The London SUoA interview ratio is 2:1. For example for 106 programmes declared the SUoA would aim to offer 212 interview places.

Applicants will receive notification detailing the outcome of the shortlist process, and their application status on 17 October 2022. Applicants will receive:

- Shortlist score and feedback and local appeal process information via email
- Notification of Shortlist successful application status
- Notification of Shortlist unsuccessful application status

Once the local London SUoA shortlist score local appeal process has been complete. Applicants will receive invitation to interview via email on 25 October 2022 and interview timeslots will be released from the following day as detailed below.

Interview time slot release and booking

The interview slots will be released in two phases.

Phase 1 – A portion of AM & PM time slots across all four interview episode dates released by 12pm on 26 October 2022.

Phase 2 – The remaining AM & PM time slots across all four interview episode dates released by 12pm 27 October 2022.

The deadline to book an interview time slot is 12pm 28 October 2022 and booking is on a first come first serve basis. It is the applicant's responsibility to ensure that they book their preferred interview date and time. **It will be assumed that applicants who do not schedule their interview by this deadline have declined the offer of an interview and the application will be withdrawn from the London SFP recruitment process.**

Please note that interviewers will not be issued with applicants' programme preferences so your choice of programme in the interview session will not affect your application.

Disability Confident Scheme (Applying for Reasonable Adjustments and Guaranteed Interview Scheme)

If you consider yourself to have a disability, wish to request an adjustment to a recruitment process or apply via the guaranteed interview scheme (GIS) you should submit your request via Reasonable Adjustments Application Form at the time of application.

Requests received outside of the application window will only be considered where the applicant can evidence a change in their circumstance since they submitted their application.

Supporting documentation – validity

You must provide valid documentation that confirms your disability and/or extenuating circumstances. In order to be valid, such documentation must be **issued by a recognised authority and within an appropriate time frame**.

For all disabilities bar learning disabilities, supporting documentation needs to be issued by a doctor on the GMC specialist register (this includes the GP register)

in order to be considered valid.

The supporting documentation must:

1. Confirm your disability

2. Corroborate the rationale supplied for each adjustment requested

For learning disabilities (including dyslexia, dyspraxia, etc) valid supporting documentation consists of a standard report from an educational psychologist or University Disabilities Unit / Enablement Centre confirming investigation and diagnosis of a specific learning disability. No other documentation will be accepted.

Submission deadline

The deadline for requests is the application close time on **20 September 2022**. Requests for adjustments submitted after this date will be considered only if applicants can evidence that their circumstances have changed since the application closing date.

Important to note! If you are applying to multiple SUoA, please refer to their local guidance.

Attending an interview

As part of the on-line interview process, applicants will be required to have available and display:

- One form of photo ID (e.g. driving license, passport, medical student ID badge etc.) in order to confirm their identity.
- **Applicants will NOT have their portfolios reviewed as part of the local London SUoA recruitment process.**

Interview process

The entire interview process, including registration, will last approximately 1 hour 10 minutes (we have allowed 15 minutes transfer time) and will take the following format:

Registration	Registration and identity confirmation	**20 minutes**
Preparation	Review of Academic abstract and Clinical Scenario	**15 minutes**
Interview Station	10-minute Academic Interview and 10 minutes Clinical interview	**20 minutes**

Applicants are advised to join the MSTeams meeting room link (Candidate registration) provided promptly at their scheduled time. Applicants who join after their scheduled time will not be allowed to take part in the interview process unless there are extenuating circumstances, which will be at the discretion of the local Interview lead.

Applicants will be issued with a clinical scenario and an abstract from a major general/specialist journal. See appendix C for an example of each. The clinical scenario will form part of the clinical interview and the abstract will form part of the academic interview. **Applicants are not allowed to look at or refer to magazines, notes, or electronic equipment once documentation has been issued**.

Applicants are permitted to take the notes they have made during preparation into the interview station. Applicants will have a total of 15 minutes to consider both the Academic Abstract and Clinical Scenario before they begin their Interviews. The Academic Abstract and Clinical Scenario will be displayed in the interview.

During their two-year foundation programme, appointed candidates will have to achieve all standard foundation competences in less clinical time, as they will also be undertaking academic activities. This makes it important that they already possess good clinical skills and hence the inclusion of both academic and clinical components within the interview process.

Applicants who receive an exceptionally low score in their clinical interview will not be deemed appointable and will not be offered an academic programme. If a significant patient safety concern is identified during the interview, the concern will be fed back to the applicant's medical school for them to consider whether an applicant may need additional support.

Interview Scores

- Academic part of the interview will consist of 5 questions each question will score applicant maximum of 4 points
- Clinical part of the application will consist of 4 questions each question will score applicant maximum of 5 points
- Maximum total interview score is 40

Matching to Programmes

A combination of application score and interview score will be added to the applicants' decile score to provide an overall London SFP ranking score for each application (see appendix D).

NB: Moderation (using Z scoring methodology) may need to be applied to application/interview scores if deemed necessary by the Academic Lead for SFP recruitment following the quality review of scores.

Applicants will be matched to specific programmes on the basis of their rank and

preferences i.e., applicants with the highest ranks will be matched to their preferences first.

SJT scores will not be included in the calculation of an applicant's London SFP application score, but all London SFP offers will be subject to satisfactory SJT scores. Applicants with an exceptionally low SJT score will be notified by the UKFPO that they have been withdrawn from the national application process.

Application Outcomes

On 11 January 2023 applicants can login to their Oriel account to see the result of their application(s). If an applicant has been offered a programme, they will also receive an e-mail notification via Oriel. The result of the application will be either an offer of a programme, notification that the applicant is on the reserve list or notification that they have not been successful. Applicants who have received an SFP offer must accept or decline the offer on Oriel within **48 hours e.g. if an offer is released at 9:15am**

11 January 2023 - the offer will expire at 9:15am on 13 January 2023. Failure to respond by the deadline will result in the offer being withdrawn.

NB: Successful applicants are recruited to a specific 4-month academic F2 post e.g., academic GUM. 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 healthcare organisation.

If an applicant accepts a London specialised foundation programme as part of the allocation process, it will not be possible to change the allocated academic F2 post.

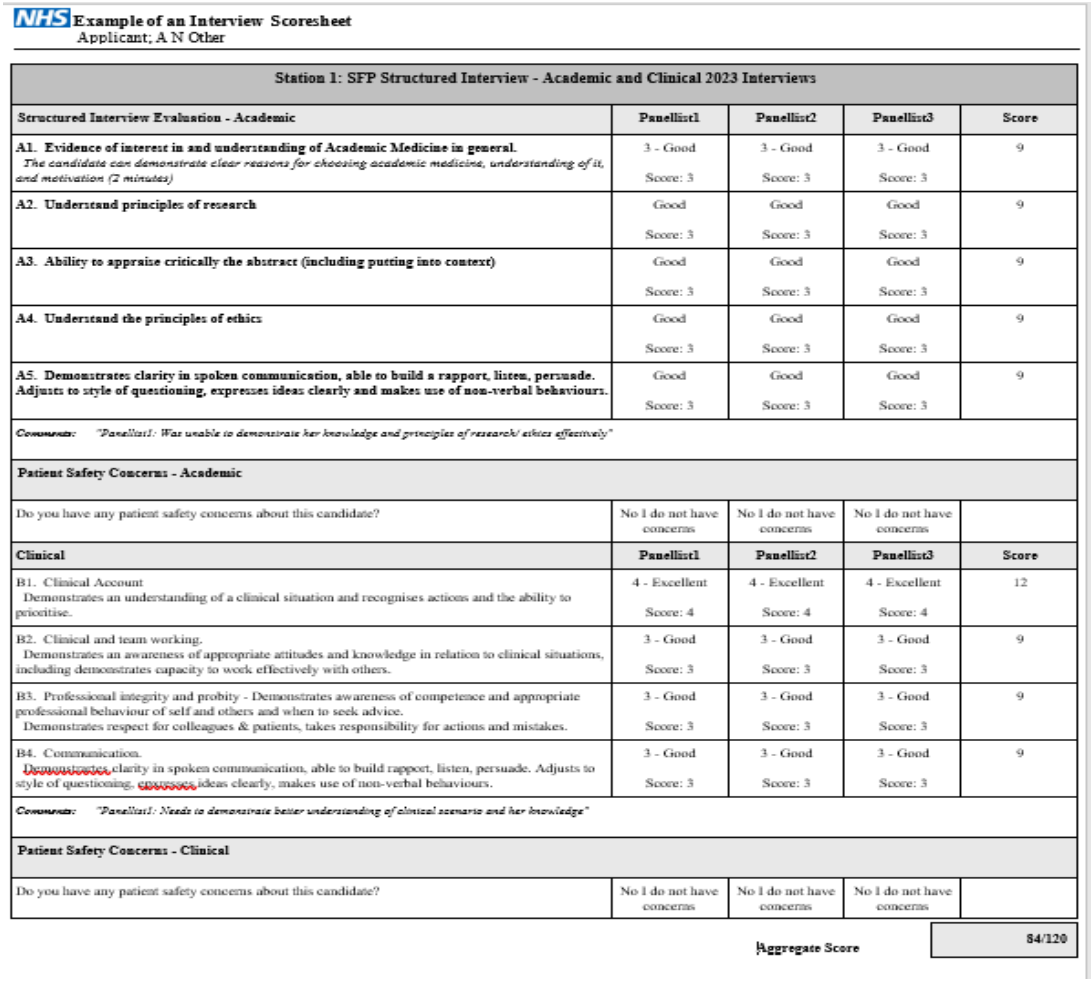
Cascade Process

Following the acceptance period, if places are still available a cascade process will take place, between 18 January 2023 and 3 February 2023, whereby London SFP SUoA will offer unfilled places to the next highest scoring applicant available who has not yet accepted an SFP elsewhere. During the cascade process applicants will be permitted 48 hours to accept or reject the offer of a programme on Oriel. After the third cascade of offers LondonSFP SUoA will have four days (**6 February to 10 February 2023**) to offer any remaining unfilled places to applicants still on the reserve list who have not already accepted an offer elsewhere. Applicants will be contacted by e-mail. Applicants will then have a limited amount of time to accept or decline the offer.

Feedback

Applicants will be sent the copies of their interview feedback in the form of their digital score sheet via email on 5th January 2023. This will be sent to the email address linked to the applicant's Oriel account.

Example of Interview feedback



NHS Example of an Interview Scoresheet
Applicant; A N Other

Station 1: SFP Structured Interview - Academic and Clinical 2023 Interviews				
Structured Interview Evaluation - Academic	**Panellist1**	**Panellist2**	**Panellist3**	**Score**
A1. Evidence of interest in and understanding of Academic Medicine in general. *The candidate can demonstrate clear reasons for choosing academic medicine, understanding of it, and motivation (2 minutes)*	3 - Good Score: 3	3 - Good Score: 3	3 - Good Score: 3	9
A2. Understand principles of research	Good Score: 3	Good Score: 3	Good Score: 3	9
A3. Ability to appraise critically the abstract (including putting into context)	Good Score: 3	Good Score: 3	Good Score: 3	9
A4. Understand the principles of ethics	Good Score: 3	Good Score: 3	Good Score: 3	9
A5. Demonstrates clarity in spoken communication, able to build a rapport, listen, persuade. Adjusts to style of questioning, expresses ideas clearly and makes use of non-verbal behaviours.	Good Score: 3	Good Score: 3	Good Score: 3	9
Comments: "Panellist1: Was unable to demonstrate her knowledge and principles of research/ ethics effectively"				
Patient Safety Concerns - Academic				
Do you have any patient safety concerns about this candidate?	No I do not have concerns	No I do not have concerns	No I do not have concerns	
Clinical	**Panellist1**	**Panellist2**	**Panellist3**	**Score**
B1. Clinical Account Demonstrates an understanding of a clinical situation and recognises actions and the ability to prioritise.	4 - Excellent Score: 4	4 - Excellent Score: 4	4 - Excellent Score: 4	12
B2. Clinical and team working. Demonstrates an awareness of appropriate attitudes and knowledge in relation to clinical situations, including demonstrates capacity to work effectively with others.	3 - Good Score: 3	3 - Good Score: 3	3 - Good Score: 3	9
B3. Professional integrity and probity - Demonstrates awareness of competence and appropriate professional behaviour of self and others and when to seek advice. Demonstrates respect for colleagues & patients, takes responsibility for actions and mistakes.	3 - Good Score: 3	3 - Good Score: 3	3 - Good Score: 3	9
B4. Communication. Demonstrates clarity in spoken communication, able to build rapport, listen, persuade. Adjusts to style of questioning, expresses ideas clearly, makes use of non-verbal behaviours.	3 - Good Score: 3	3 - Good Score: 3	3 - Good Score: 3	9
Comments: "Panellist1: Needs to demonstrate better understanding of clinical scenario and her knowledge"				
Patient Safety Concerns - Clinical				
Do you have any patient safety concerns about this candidate?	No I do not have concerns	No I do not have concerns	No I do not have concerns	
			Aggregate Score	**84/120**

- Applicants will be interviewed by two panel members who will be scoring applicant individually (as panelist 1 and 2) and after the interview, panel members will have further discussions and they will agree on an agreed score which will be entered against panelist 3.

- Agreed score can be higher or lower than individual scores.

- Scores awarded to the applicant against panelist 3, will be added and will form applicant's total interview score out of 40.

- Please ignore the last column on the score sheet and the aggregate score.

- Please note that applicants will not get any individual feedback by the panel members. Panel members may enter any feedback on the scoresheet if they feel they need to highlight an outstanding performance or any development areas.

UKFPO SFP Appeals Process

Please note that applicants may not appeal their interview score. Applicants may only appeal if they can demonstrate that the published processes or procedures pertaining to the recruitment episode have not been followed correctly or the objectivity of decision making is called into question, which has a significant adverse effect on the applicant's

application. There is an opportunity to do this at the conclusion of the process, after applicants are matched to programmes.

The date of the appeal window is currently TBC. Further information on the UKFPO SFP Appeal process will be available on the London website in due course.

Further details will be made available at https://london.hee.nhs.uk/recruitment/medical-foundation/foundation-programme

Offer of Employment

The SFP recruitment process is a matching process only. The offer of employment will be made by the employing healthcare organisation on completion of satisfactory references and pre-employment checks such as DBS etc.

Once the SFP and standard FP recruitment process has been completed and all applicants have been matched to programmes, details of allocations will be forwarded to the employing healthcare organisations. Following this, successful applicants will be contacted directly by their employing healthcare organisation in order to complete all of the necessary pre-employment checks.

Probity in applications

Applicants' portfolios may be requested in order to validate evidence of their educational achievements as part of the LondonSFP recruitment process and/or pre-employment checks by the employing healthcare organisation.

If during the recruitment process further concerns are raised and the probity of an application is questioned, the applicant may be contacted by a senior representative of LondonSFP SUoA to provide an explanation. When a response is received a scrutiny panel may convene and a decision made. If there is no case to answer the applicant will be able to proceed as normal. If the explanation is not satisfactory the application will be withdrawn. The applicant has a right to appeal this decision.

General information

Start Date

F1 programmes are expected to commence during July/August 2023.

Newly appointed F1 doctors are required to attend a period of induction/shadowing (currently 4 days including 2 days shadowing) the F1 doctor they are taking over from **before** the start of the Foundation Programme. Applicants will be contacted either by their allocated foundation school and/or their employer with the details of local arrangements and their required start date. Please note that many employing organisations offer extended periods of induction/shadowing which exceed the national minimum requirements and so applicants should ensure that they are available to join their employing healthcare organisations during week commencing 24th July 2023.

Pay

Junior doctors are paid on national pay scales, determined each year by the Doctors and Dentists Review Body (DDRB) after receiving evidence from the BMA and the Department of Health.

Foundation doctors should assume that all programmes carry basic salary only unless otherwise informed by the employing healthcare organisation on confirmation of appointment.

Details of pay rates can be found at:
www.nhsemployers.org/your-workforce/need-to-know/junior-doctors-contract

Travel & Relocation Expenses

The reimbursement of travel and relocation expenses is administered by the London and Kent, Surrey and Sussex Healthcare Education Team. Successful applicants to a London and Kent, Surrey and Sussex SFP would follow the process available at:
https://london.hee.nhs.uk/recruitment/london-and-kent-surrey-and-sussex-London-recruitment

Academic Career Options

Further information is available on: www.healthcareers.nhs.uk/i-am/working-health/clinical-academic-careers/clinical- academic-medicine

Appendix A – London and Kent, Surrey and Sussex Personal Specification

UK Foundation Programme (UKFP)_August 2023

Person Specification

	Essential Criteria	Demonstrated by
Eligibility	Applicants must meet the requirements set out in the UK Foundation Programme 2023 eligibility criteria.	Eligibility checking
Qualifications	The applicant must have achieved, or expect to achieve, a primary medical qualification as recognised by the General Medical Council (GMC) by the start of the UK Foundation Programme 2023.	Eligibility checking
Clinical Knowledge & Skills	The applicant must be familiar with and be able to demonstrate an understanding of the major principles of the GMC's Outcomes for Graduates 2018 including: • Knowledge, skills, and performance • Safety and quality • Communication, partnership, and teamwork • Maintaining trust The applicant must be familiar with requirements as set out in Promoting excellence: standards for medical education and training (2016) including the relevant core skills.	Application[2]/ pre-employment screening Clinical assessment (where appropriate)
Language & Communication Skills	The applicant must demonstrate skills in listening, reading, writing, and speaking in English language that enable effective communication about medical topics with patients and colleagues, as set out in the GMC's Good Medical Practice (2013)[1].	Application[2]/ pre-employment screening Clinical assessment (where appropriate)

Attributes	The applicant must demonstrate: • an understanding of the importance of the patient as the central focus of care • the ability to prioritise tasks and information and take appropriate decisions. • an understanding of the importance of working effectively with others. • the ability to communicate effectively with both colleagues and patients. • initiative and the ability to deal effectively with pressure and/or challenge. • commitment to learning and continued professional development. • self-awareness and insight into the boundaries of their own abilities • an understanding of the principles of equality and diversity.	Application[2]/pre-employment screening Clinical assessment (where appropriate)
Probity	The applicant must demonstrate appropriate professional behaviour, i.e., integrity, honesty, confidentiality as set out in the GMC's Good Medical Practice (2013)[1]. By the start of the programme, the applicant must demonstrate criminal record and barring clearance at the appropriate level and complete all other preemployment requirements according to current government legislation.	Application[2]/pre-employment screening

[1] Please note that whenever General Medical Council documents are referenced, it is possible that revised versions will be produced after the UKFPO's information has been published. Therefore, applicants should always refer to the most up-to-date version of these publications.

[2] Please note that the application includes the Situational Judgement Test (SJT)

Appendix B – Example of Clinical Scenario and Academic Abstract

Please find below, for information only, examples of the format of a clinical scenario and abstract that will be issued as part of the London and Kent, Surrey and Sussex SFP interview process. The clinical scenario will form part of the clinical interview and the abstract part of the academic interview. Applicants will have a total of 15 minutes to consider the abstract before they begin their interview. The clinical scenario will be provided during the clinical interview.

Clinical Scenario – Example

You are an FY1 in Trauma and Orthopedics. You are clerking in a 28-year-old man who has just been admitted following an assault 16 hour before, in which he sustained broken ribs, a broken wrist and a head injury. He is very upset, and you ask if there is anything else troubling him. He tells you that he was also anally raped by the four assailants and is concerned about his health and his relationship with his girlfriend.

During your conversation you are called by a nurse on the ward, who asks you to see a 19-year-old woman at the other end of the ward urgently. The woman was admitted the day before with a fracture dislocation of her elbow following a fall and has become very short of breath and is finding it difficult to speak. Observations carried out by the nurse show pulse 120/min, blood pressure 110/70, temperature $37.5.^{0}$

A police officer has come onto the ward and wants to ask you about the first patient's injuries. Your consultant is in clinic and your registrar in theatre.

How do you proceed?

Abstract – Example

Abstract title
Patients' expectations about effects of chemotherapy for advanced cancer.

Background:
Chemotherapy for metastatic lung or colorectal cancer can prolong life by weeks or months may provide palliation, but it is not curative.

Methods:
We studied 1193 patients participating in the Cancer Care Outcomes Research and Surveillance (CanCORS) study (a national, prospective, observational cohort study) who were alive 4 months after diagnosis and received chemotherapy for newly diagnosed metastatic (stage IV) lung or colorectal cancer. We sought to characterize the prevalence of the expectation that chemotherapy might be curative and to identify the clinical, sociodemographic, and health-system factors associated with this expectation. Data were obtained from a patient survey by professional interviewers in addition to a comprehensive review of medical records.
Results:
Overall, 69% of patients with lung cancer and 81% of those with colorectal cancer did not report understanding that chemotherapy was not at all likely to cure their cancer. In multivariable logistic regression, the risk of reporting inaccurate beliefs about chemotherapy was higher among patients with colorectal cancer, as compared with those with lung cancer (odds ratio, 1.75; 95% confidence interval [CI], 1.29 to 2.37); among non-white and Hispanic patients, as compared with non-Hispanic white patients (odds ratio for

Hispanic patients, 2.82; 95% CI, 1.51 to 5.27; odds ratio for black patients, 2.93; 95% CI, 1.80 to 4.78); and among patients who rated their communication with their physician very favorably, as compared with less favorably (odds ratio for highest third vs. lowest third, 1.90; 95% CI, 1.33 to 2.72). Educational level, functional status, and the patient's role in decision making were not associated with such inaccurate beliefs about chemotherapy.

Conclusions:
Many patients receiving chemotherapy for incurable cancers may not understand that chemotherapy is unlikely to be curative, which could compromise their ability to make informed treatment decisions that are consonant with their preferences. Physicians may be able to improve patients' understanding, but this may come at the cost of patients' satisfaction with them. (Funded by the National Cancer Institute and others)

Appendix C – Calculation of APPLICANT OVERALL RANKING SCORE

Applicants are matched to programmes based on their overall ranking score and programme preference options. The tables below provide details of the total scores available for each section of the recruitment process:

Application form (Shortlist) score:

Items	Maximum
Further degrees	5
Educational achievements: Publications & Presentations	10
Educational Achievements: Prizes	5
Total application form (Shortlist) score	**20**

Interview scores:

Panel	Maximum
Academic panel	20
Clinical panel	20
Combined interview score	**40**

The London and Kent, Surrey and Sussex (London) Specialised Foundation Programme (SFP) score will be calculated using the following formula:

	Maximum
Total application form (Shortlist) score	20
Combined interview score	40
Total application (shortlist) & Combined interview score = London SFP score	60
London SFP score (weighting x4)	**240**

Total overall ranking score:

	Maximum
London SFP score	240
EPM decile score	50
APPLICANT OVERALL RANKING SCORE	**290**

2-YEAR SPECIALISED FOUNDATION PROGRAMMES AT IMPERIAL COLLEGE MEDICAL SCHOOL & PARTNER TRUSTS (IMP)

1. INTRODUCTION

Imperial College London, Imperial College Healthcare and partners have an international reputation for translating scientific breakthroughs to clinical practice. They host a critical mass of international leaders in clinical medicine, healthcare policy, academia and technology and innovation which is unparalleled in the UK. Imperial has strengths in clinical trials, drug discovery, public health, bioinformatics, artificial intelligence (AI), bioengineering, and 'omic' approaches. Imperial is an NIHR Biomedical Research Centre (BRC) and was the UKs first ever Academic Health Sciences Centre (AHSC). Imperial takes pride in offering the highest quality of academic training for its SFP trainees.

The Imperial Foundation Programme is led by Dr. Channa Jayasena (c.jayasena@imperial.ac.uk) with the support of the Imperial Clinical Research Training Office (CATO). We offer a wide selection of academic programmes covering several major specialities and within these there are possibilities for lab based or clinical research. Imperial specialised Foundation Trainees have access to a state-of-the-art educational programme alongside Academic Clinical Fellows, Research Fellows and Clinical Lecturers. This provides the ideal environment to enable interested trainees to undertake further research training and plan a future a clinical academic career. Our academic trainees routinely succeed in publishing and presenting the work they have undertaken in their academic placement.

Successful applicants are recruited to a specific 4-month academic F2 post 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
2324/IMP/01	Academic Paediatrics	St Mary's Hospital
2324/IMP/02	Academic Paediatrics	St Mary's Hospital
2324/IMP/03	Academic Paediatrics	St Mary's Hospital
2324/IMP/04	Academic Medicine	Hammersmith Hospital
2324/IMP/05	Academic Medicine	Hammersmith Hospital
2324/IMP/06	Academic Medicine	Hammersmith Hospital
2324/IMP/07	Academic Medicine	Hammersmith Hospital
2324/IMP/08	Academic Medicine	Hammersmith Hospital
2324/IMP/09	Academic Medicine	Hammersmith Hospital
2324/IMP/10	Academic Primary Care	Charing Cross Hospital
2324/IMP/11	Academic Primary Care	Charing Cross Hospital
2324/IMP/12	Academic Primary Care	Charing Cross Hospital

2324/IMP/13	Academic: Cardiology, Respiratory & Cardiothoracics	National Heart & Lung Institute / Hammersmith Hospital / Royal Brompton
2324/IMP/14	Academic: Cardiology, Respiratory & Cardiothoracics	National Heart & Lung Institute / Hammersmith Hospital / Royal Brompton
2324/IMP/15	Academic: Cardiology, Respiratory & Cardiothoracics	National Heart & Lung Institute / Hammersmith Hospital / Royal Brompton
2324/IMP/16	Academic Obstetrics & gynaecology	Queen Charlotte's Hospital
2324/IMP/17	Academic Obstetrics & gynaecology	Queen Charlotte's Hospital
2324/IMP/18	Academic Obstetrics & gynaecology	Queen Charlotte's Hospital
2324/IMP/19	Academic Anaesthetics & Critical Care	Chelsea & Westminster Hospital
2324/IMP/20	Academic Anaesthetics & Critical Care	Chelsea & Westminster Hospital
2324/IMP/21	Academic Anaesthetics & Critical Care	Chelsea & Westminster Hospital
2324/IMP/22	Academic Vascular Surgery	Charing Cross Hospital
2324/IMP/23	Academic Vascular Surgery	Charing Cross Hospital
2324/IMP/24	Academic Vascular Surgery	Charing Cross Hospital
2324/IMP/25	Academic Surgery & Innovation	St Mary's Hospital
2324/IMP/26	Academic Surgery & Innovation	St Mary's Hospital
2324/IMP/27	Academic Surgery & Innovation	St Mary's Hospital
2324/IMP/28	Academic Clinical Trials & Translational Medicine	Hammersmith Hospital
2324/IMP/29	Academic Clinical Trials & Translational Medicine	Hammersmith Hospital
2324/IMP/30	Academic Clinical Trials & Translational Medicine	Hammersmith Hospital

Northwest Thames offers 30 jobs in the academic programme. In all cases the F1 year will be a standard F1 programme in order to ensure candidates can establish core clinical medical skills as described in the Foundation curriculum. However, doctors will have the opportunity to attend academic F1 early evening teaching sessions and will be encouraged to involve themselves in formal teaching commitments. All academic F1s are 'buddied' up with the F2 who is following the same programme as them for support and mentoring. We also arrange an evening meeting in January where academic F1s will meet their academic leads and start to plan their F2 academic placement in detail.

The F2 year will be based either at Imperial College Healthcare NHS Trust (Hammersmith, Charing Cross, and St Mary's Hospitals), Northwick Park Hospital, or Chelsea and Westminster Hospital, in partnership with Imperial College London. Academic placements are grouped into the Academic Departments of Medicine, Metabolic Medicine, Surgery, Vascular Surgery, Paediatrics, Obstetrics & Gynaecology, Primary Care, and Anaesthesia. Imperial CATO offers a masterclass programme of teaching for all Clinical Academic Trainees, covering topics such as grant writing, statistics, big data, genomics, and career advice regarding ACF applications.

Common features of the SFP programmes include:

- A named academic educational supervisor/mentor for the whole year. Trainees will be encouraged to meet with their academic supervisor well in advance of commencing their F2 year. At the start of their academic placement, they will agree a personal academic development plan which would include exposure to research techniques, literature analysis, career advice on planning a career in research, grant funding etc.
- Attendance at research meetings within the academic department to which they are attached.
- At least termly whole day specialised foundation programme teach-ins covering all areas of academic medicine, research, and leadership.
- Core lecture programme (example, changes each year)

  - "My academic career" – talks from leading Clinician Scientists working at Imperial
  - Research Governance
  - Leadership workshop
  - Research Ethics
  - Translational Medicine
  - How to present scientific research
  - Guidance for a career as an academic clinician
  - Critical appraisal workshop

- Trainees will be encouraged to write a review article under the guidance of their academic mentor based an area related to their academic attachment, aimed for publication. During this they will learn critical literature analysis techniques.
- They will hopefully generate enough data from the 4 months laboratory or clinical research to contribute to a scientific paper. Clearly 4 months is not sufficient time to finish a project, but the time and work undertaken should have contributed significantly. Trainees are encouraged to submit their work for presentation at national and international symposia.
- They will have the opportunity to present their academic work at the Imperial CATO Symposium in the July, to other SFPs, as well as more senior clinical academic trainees and academic leaders.

Individuals will be working within routine busy clinical units and are expected to develop the same formal clinical F2 competencies as F2 doctors in non-academic programmes within 8 months instead of the standard 12. They will have named clinical supervisors in each placement who will ensure they address clinical skills in addition to the academic activity. All clinical placements have well established appraisal systems and on-going educational support.

3. PLACEMENTS

Programmes 1-3 - Academic Paediatrics - based at Hammersmith & St Mary's Hospitals
Reference: 2324/IMP/01
Reference: 2324/IMP/02
Reference: 2324/IMP/03

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

Type of programme

This is a research post in Paediatrics based at St Mary's Hospital.

Employing trust:	*Academic placement based at:*
Imperial College Healthcare NHS Trust	St Mary's Hospital

Brief outline of department

Academic Paediatrics at Imperial hosts diverse expertise in many specialist areas including infectious diseases, global health, allergy, emergency and intensive care, respiratory medicine, neonatology, child public health, health services research and evaluation of new models of care. This breadth of research in brought together through the Centre for Paediatrics and Child Health https://www.imperial.ac.uk/centre-for-paediatrics-child-health/

To help trainees to find specific projects and supervisors within their specialised Foundation Programme in Paediatrics we have three main themes where we suggest trainees base their time, although we are happy to discuss alternative proposals if there is a strong rationale for working in one of our other areas. The programme is led by Dr Aubrey Cunnington (Paediatric Infectious Disease) and Dr Dougal Hargreaves (Population Health) who can link you up with colleagues as needed.

Paediatric Infectious Disease combines basic, translational and clinical research aimed at understanding susceptibility and severity in childhood infectious diseases and improving methods of diagnosis, prevention and treatment (http://www.imperial.ac.uk/infectious-disease/research/paediatrics/). A particular area of strength is in "Platform Science" – the application of omics technologies and bioinformatics to healthcare problems. Different groups within the Section vary in focus on host, microbes and their interactions. The Section leads major international Consortium projects (*https://www.diamonds2020.eu/; https://www.perform2020.org/*) and has strong global connections in The Gambia, Ghana and South Africa. We have a proven track record of nurturing aspiring clinician scientists at every career stage from SFP and ACF through to clinical lecturers and beyond, leading to a high rate of success in obtaining independent PhD funding and research fellowships.

Paediatric Allergy, Respiratory & Sleep Medicine. ICHT hosts a busy academic Paediatric Allergy team, headed by Professor Adnan Custovic. Current programmes include primary prevention of allergic disease using dietary and non-dietary

approaches, investigation of the mechanisms of anaphylaxis, immunotherapy of allergic disease, temperature-controlled laminar airflow trials, and analysis of birth cohort data to define allergic disease phenotypes and their environmental and genetic determinants. There is also an active paediatric sleep medicine research programme, focussed on the development and validation of new approaches to the diagnosis of sleep-disordered breathing. Paediatric Respiratory Medicine, based National Heart and Lung Institute, combines diverse expertise spanning basic mechanism through to clinical trials in asthma, bronchiectasis, cystic fibrosis and primary ciliary dyskinesia.

Population Health and Health Services Research for Children and Young people. Prof Sonia Saxena, Prof Mitch Blair and Dr Dougal Hargreaves in the School of Public Health lead major local and national collaborations to study and improve the health of children and young people (for example, through the NIHR Applied Research Collaboration NW London and the NIHR School of Public Health). Our team has experience of working with a range of routinely-collected datasets to identify novel patterns and associations, and evaluate the impact of individual or service-level interventions to improve outcomes. We also have close links to the Connecting Care for Children team at St Mary's Hospital (led by Dr Bob Klaber and Dr Mando Watson) and many other local partners. In neonatology, primarily at Chelsea and Westminster campus, additional work with large datasets of routinely collected clinical data is being used to transform understanding of the determinants of outcomes for preterm infants across the life-course and to embed pragmatic clinical trials alongside routine delivery of care.

Additional areas of research interest include neonatal hypoxic ischaemic encephalopathy, intensive care interventions, emergency care triage and risk stratification, adolescent health, medical education and paediatric surgery.

Clinical commitments during academic placement

There are no fixed clinical commitments and no on call duties during the Academic Paediatrics placement.

Departmental academic teaching programme (if applicable)

There are many opportunities here and the post-holder will be introduced to these when they start.

Academic Lead:

Dr Aubrey Cunningham a.cunnington@imperial.ac.uk , Consultant & Reader in Paediatric Infectious Disease

Dr Dougal Hargreaves d.hargreaves@imperial.ac.uk, Consultant & Houston Reader in Paediatrics & Population Health

Programmes 4-9 - Academic Medicine – based at Hammersmith Hospital

Reference: 2324/IMP/04
Reference: 2324/IMP/05
Reference: 2324/IMP/06
Reference: 2324/IMP/07
Reference: 2324/IMP/08
Reference: 2324/IMP/09

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

<table>
<tr><td colspan="2">Type of programme

This a research post where the AF2 will have the opportunity to spend four months doing cutting-edge research within a research group anywhere with the very large Department of Medicine at Imperial College.</td></tr>
<tr><td>Employing trust:

Imperial College Healthcare NHS Trust</td><td>Academic placement based at:

Hammersmith Hospital</td></tr>
<tr><td colspan="2">Brief outline of department

The F2 can choose to be attached to any one of a number of world-class research units within the Faculty of Medicine at Imperial College – explore the website at https://www.imperial.ac.uk/medicine/research-and-impact/ to understand the breadth and quality of opportunities available.

The faculty comprises 7 world class Departments – Brain Sciences, Immunology & Inflammation, MRC Lab of Medical Sciences (LMS), Metabolism, Digestion & Reproduction, National Heart & Lung Institute (NHLI), School of Public Health, And Surgery & Cancer.

The Academic F2 can be attached to groups within any of these and undertake basic laboratory research, more clinical research and projects involving a mix and including innovative imaging and computing. Depending on the AF2's interests there are also possibilities for attachments in more diverse laboratories - e.g. Department of Bioengineering. We aim to facilitate the AF2 in finding the project and department that suits them and will allow them the greatest opportunity to achieve outstanding academic outputs. Many of our previous AF2s have produced first author papers and / or presentations by the end of their programme.</td></tr>
<tr><td colspan="2">The F2 year will consist of 4 months of Acute Medicine and 4 months of Renal medicine based at Hammersmith Hospital, and 4 months of Academic Medicine at any of the Imperial sites. Dr Rohini Sharma oversees the Academic Medicine placements but the Academic F2 will be supervised during their academic placement by the relevant academic lead for the research project undertaken.

Dr Rohini Sharma will help trainees find the right supervisor early on in their F1 year to facilitate planning and familiarity with the group and ensure that they get the most out of their 4-month placement by being fully prepared. Each trainee will identify an academic supervisor within their chosen research group who will meet with them</td></tr>
</table>

regularly, set the academic learning objectives at the beginning of the placement and review progress at the end of the placement.

There is access to wide range of teaching and other learning opportunities within the department, and each doctor will be strongly encouraged to make the most of these to support their personal learning plan. There will also be the opportunity to develop important transferrable skills in the writing of ethics and grant applications, performing statistical analysis, and writing and revising manuscripts. Other learning opportunities, such as development of educational research skills or understanding quality improvement methodologies will be offered in accordance with the needs of the trainee and the project undertaken.

It is envisaged that doctors in this Academic Medicine placement will be successful in achieving journal publications and published abstracts, as well as presenting their work in regional and national meetings. The post will be an outstanding introduction to academic medicine, and high performance in the post will undoubtedly strengthen any potential application for CMT / ACF posts.

Clinical commitments during academic placement

There are no fixed clinical commitments and no-on call duties during the Academic Medicine placement.

Departmental academic teaching programme (if applicable)

specialised Foundation doctors will be expected to attend the weekly Department of Medicine Staff round, and any departmental seminars that they wish to attend. There will be different expectations of attendance at seminars within each research group and the academic supervisor will advise the trainees. They are also expected to attend their home Trust F2 weekly teaching session.

Academic Lead:

Dr Rohini Sharma
Consultant and Reader in Oncology
r.sharma@imperial.ac.uk

Programmes 10-12 - Academic Primary Care – based at St Mary's and Charing Cross Hospitals
Reference: 2324/IMP/10
Reference: 2324/IMP/11
Reference: 2324/IMP/12

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

Type of programme This is a 4 month research and clinical placement in Academic Primary Care.	
Employing trust: Imperial College Healthcare NHS Trust	*Academic placement based at:* Charing Cross Hospital

Brief outline of department

Primary care is a major arm of health service delivery in the UK. This is a role strengthened by the new GP contract and more recent changes that place general practitioners at the forefront of commissioning health services. Academic Primary Care has a vital research role in providing evidence for interventions and a critique on practice, and in equipping undergraduates with skills and knowledge of relevance both to the specialty and to their development as doctors more generally. The academic department at Imperial has strong roots in epidemiological approaches to primary care, and a programme of undergraduate teaching which stretches across the whole curriculum.

The department also organises the Imperial College Master of Public Health (MPH) programme; and hosts the WHO Centre for Public Health Education & Training. These links give opportunities for working on international public health topics. There is also an opportunity to work in other departments and units of the Imperial College School of Public Health, such as the Department of Epidemiology & Biostatistics and the Clinical Trials Unit.
See http://www1.imperial.ac.uk/publichealth/ for further information.

Structure of academic project/what expected

The AF2 year will include four months of A&E at St Mary's Hospital, four months in either O&G at St Mary's or Gastroenterology at Charing Cross, and four months in Academic Primary Care. The academic placement is generally located in the Department of Primary Care & Public Health at Charing Cross Hospital or in one of the other departments or units in the Imperial College School of Public Health.

The AF2 will have active roles in teaching and research within the department: two days a week will be reserved for clinical general practice in a teaching Practice attached to the department. They will be allocated an academic and clinical supervisor at the outset of the attachment who will ensure the aims of the attachment are met and to assist your preparation for Foundation Programme assessments.

The AF2's week is split between 2 days in a local general practice, and 3 days based in the department at Charing Cross Hospital campus.

The academic lead for the programme is Dr Nina Dutta who is supported in this role by other academics in the department. Research projects generally involve either a systematic literature review or an analysis of a data set. Previous F2 doctors have benefited from their experiences; and have presented their work at scientific meetings and published their findings in peer-reviewed journals.

Please see this website for more details of the programme and experiences of recent Academic F2s in Primary Care: *http://www1.imperial.ac.uk/publichealth/departments/pcph/f2/*

Clinical commitments during academic placement

There is a clinical commitment of 2 days a week in an accredited GP teaching practice. The details of the weekly timetable are negotiated between the academic department and GP surgery but depend largely on the practice's clinic times and needs, with Wednesdays generally set aside as a fixed day for academic activities such as departmental meetings and talks.

Departmental academic teaching programme (if applicable)

Weekly departmental meetings and seminars as well as weekly Trust F2 teaching.

Academic Lead:

Dr Nina Dutta
Primary Care Faculty Development Lead
n.dutta@imperial.ac.uk

Programmes 13-15 - Academic: Cardiology, Respiratory & Cardiothoracics –based at National Heart & Lung Institute (NHLI)

Reference: 2324/IMP/13
Reference: 2324/IMP/14
Reference: 2324/IMP/15

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

<table>
<tr><td colspan="2">Type of programme

This is a 4-month research post based at one of the NHLI campuses across NW London.</td></tr>
<tr><td>Employing trust:

Imperial College Healthcare NHS Trust</td><td>Academic placement based at:

NHLI (7 sites across NW London): Royal Brompton, St Mary’s, Charing Cross and Hammersmith Hospitals and South Kensington campus</td></tr>
<tr><td colspan="2">Brief outline of department:

The National Heart and Lung Institute hosts diverse and world-leading expertise (with >130 Principal Investigators) in many specialist areas of cardiology, vascular and respiratory medicine across the lifecourse (https://www.imperial.ac.uk/nhli). It provides an ideal environment in which academic trainees can flourish (https://www.imperial.ac.uk/nhli/about-us/strategic-plan-2024/).

Trainees will spend their four-month academic block on a placement in a research group in Respiratory, Cardiology or Cardiothoracic Surgery. They will be supported by senior academics in exploring the spectrum of opportunities available at NHLI – which include both wet and dry lab work - and be able to choose the speciality and research project which most appeals to them. A small number of exemplar PIs are described below; there are many more and trainees will be encouraged to explore all that NHLI has to offer.

Professors Miriam Moffatt and Bill Cookson lead the Asmarley Centre for Genomic Medicine where state of the art genomic technology and expertise is used to study lung diseases including large-scale studies of asthma, atopic dermatitis, psoriasis, lung and pleural cancer, and sequence-based studies of the lung microbiome.

Professor Sejal Saglani runs a translational research programme focussed on investigating the mechanisms underpinning the onset of severe preschool wheeze, factors predicting progression to school-age asthma and identification of novel therapies for preschool wheeze and childhood severe asthma.

Dr Mo Shamji leads a research group in Immunomodulation and Tolerance and conducts research into respiratory allergies. His particular focus is on the role of disease-modifying treatments (such as allergen immunotherapy and novel biologics and immunomodulators), how they affect immunologic responses, and induction of immune tolerance.</td></tr>
</table>

Professor Ajit Lalvani is Director of the NIHR Health Protection Research Unit in Respiratory Infections. He carries out translational research into severe respiratory infections: TB, pandemic influenza and COVID-19. This has including development of the IGRA diagnostic test for TB and insights into the action of TB, malaria and flu vaccines.

Dr Matthew Shun-Shin and Dr Graham Cole's group lead the UK UNITY collaborative that are working to develop artificial intelligence methods for echocardiography. Trainees joining this group will gain software programming skills and experience in machine learning and clinical cardiac imaging.

Dr Rasha Al-Lamee and Professor Darrel Francis lead the coronary artery physiology research theme, which studies all aspects of ischaemic heart disease (from acute to chronic, and from intracoronary pressures and flows to indices of ischaemia) and ultimately matches findings to patients' symptoms. They lead the ORBITA-2 multicentre RCT of coronary stenting for angina including studies of patient-facing symptom tracking methodologies and blinded physiological testing before and after intervention.

Dr Zach Whinnett, Professor Prapa Kanagaratnam and Professor Nick Peters lead the electrophysiology and devices clinical research, including running the HOPE-HF, C19-ACS, and other multi-centre randomised controlled trials. Their work studies new approaches using electrical stimuli to improve heart function outcomes (both short-term and longer-term) and the origin and mechanism of atrial fibrillation.

Prof Sian Harding and Prof Prakash Punjabi lead research into myocardial regeneration as a therapeutic and research tool. Clinically related initiatives include pharmacological release of bone marrow stem cell subsets and increased homing to the heart from external shockwave stimulation. In development are the use of large, engineered heart tissue constructs from human pluripotent stem cell derived cardiomyocytes, as well as exosome delivery of regenerative factors.

Brief outline of department:

Trainees will spend their four-month academic block in the AF2 year within a research department at one of the NHLI sites. Trainees will be under the overall supervision of Dr Johanna Feary (Academic Clinical Lead for SFP; Genomic and Environmental Medicine section) and Prof Darrel Francis (Cardiology; section head of Cardiovascular Trials and Epidemiology), Prof Seb Johnston (Respiratory; section head of Airways Disease and Director of the Asthma UK Centre in Allergic Mechanisms of Asthma) or Prof Prakash Punjabi (Cardiothoracic Surgery; Cardiac Function section), depending on the trainee's preference of research area. Supervision will be in the form of weekly meetings with day-to-day support from the wider team.

During the placement, there will also be the opportunity to develop invaluable and transferable research skills such as writing conference abstracts and ethics and grant applications, contributing to manuscripts, and performing statistical analyses.

It is envisaged that doctors in this Academic NHLI placement will be successful in achieving journal publications and published abstracts, as well as presenting their work in regional and national meetings. NHLI has a proven track record of nurturing aspiring clinical scientists, and the post will be an outstanding introduction to academia in cardiorespiratory medicine/surgery. High performance in the post will

undoubtedly strengthen any application for further clinical training posts and research fellowships.
Clinical commitments during academic placement There are no clinical commitments and no on call duties during this placement.
Departmental academic teaching programme (if applicable) There are many learning opportunities; these will be discussed at the start of the post.
Academic Lead: Dr Johanna Feary Senior Clinical Fellow (NHLI) Consultant Respiratory Physician (Royal Brompton Hospital) j.feary@imperial.ac.uk

Programme 16-18 – Academic Obstetrics & Gynaecology – based at Queen Charlotte's Hospital
Reference: 2324/IMP/16
Reference: 2324/IMP/17
Reference: 2324/IMP/18

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

<table>
<tr><td colspan="2">Type of programme

This is a 4 month research placement in Obstetrics & Gynaecology</td></tr>
<tr><td>Employing trust:

The North West London Hospitals NHS Trust</td><td>Academic placement based at:

Queen Charlotte's Hospital</td></tr>
<tr><td colspan="2">Brief outline of department

Academic Clinical Obstetrics and Gynaecology at Imperial is closely linked to Imperial Academic Health Sciences Centre and NIHR Biomedical Research Centre, and the Institute of Reproductive & Developmental Biology (IRDB), one of the largest stand-alone research facilities in O&G in Europe.

There is academic expertise in a range of clinical areas linked to Obstetrics and Gynaecology.

Gynecological oncology (Dr Mara Kyrgiou and Dr Sadaf Maghami)
Effect of treatment of cancer on reproductive performance (Dr Mara Kyrgiou)
Miscarriage and early pregnancy (Prof Tom Bourne, Prof Lesley Regan, Prof Phillip Bennett).
Ovarian Function and Polycystic Ovary Syndrome (Prof Steven Franks)
Cardiovascular adaptation, placentation, fetal growth and pre-eclampsia (Dr Christoph Lees)
Prematurity and Parturition (Prof Phillip Bennett, Dr Vasso Terzidou, Dr David Macintyre)

In addition, there are more basic science-oriented programs including:

Stem Cell Biology (Dr Veronique Azura, Dr Wei Cui)
G-protein and Tyrosine Kinase Coupled Receptor Biology (Dr Aylin Hanyaloglu, Dr Nick Dibb)
Systems Medicine, Microbiome and Metabolome (Dr David MacIntyre, Prof Phillip Bennett)

Recent major new initiatives include the role of the microbiome in reproductive health, and integration of large-scale biological data such as transcriptomics, genomics, metabonomics and miromics with clinical at metadata. We became both a Global Alliance Against Stillbirth and Prematurity (GAPPS) Research Centre and a 'Tommys' National Miscarriage Research Centre in 2016.</td></tr>
</table>

Recent O&G research success include criteria for miscarriage diagnosis, (NEJM 2013, BMJ 2015 Bourne), improved surveillance for IUGR (Lancet 2015 Lees), a paradigm shift in understanding miscarriage (Nat Med 2013 Brosens, Regan), miRNA markers to predict preterm birth (2015 Terzidou Bennett), a link between vaginal microbiome, preterm birth and cervical cerclage (Sci Trans Med 2016, MacIntyre Bennett), all leading to international changes to practice.

Structure of academic project/what expected

The AF2 year will contain a 4 month research block in Academic Obstetrics and Gynaecology based at Queen Charlottes Hospital and the Institute of Reproductive & Developmental Biology, Hammersmith Campus, Imperial College Healthcare NHS Trust. Trainees will be under the overall supervision of Professor Phillip Bennett, Director of IRDB. The AF2 will have the opportunity to be part of a highly dynamic and supportive team of doctors and other health professionals working together in academic, service improvement and educational aspects of Obstetrics and Gynaecology.

The Academic F2 may select a project from any of the areas of research activity listed above. Depending upon the nature of the project there will be close 'clinic-side 'or 'bench-side' supervision from an appropriate clinical research fellow or scientist together with weekly meetings with the Principal Investigator. If desired, the Academic F2 can be allocated to an Academic Clinical Lecturer, Fellow, or Specialist Registrar mentor during their academic placement.

There is access to a wide range of teaching and other learning opportunities within the department. There will also be the opportunity to develop important transferrable skills in the writing of ethics and grant applications, performing statistical analysis, and writing and revising manuscripts. Doctors in this academic placement should be successful in achieving journal publications and published abstracts, and present work in regional and national meetings. The post will be an outstanding introduction and steppingstone into academic Obstetrics and Gynaecology,

Clinical commitments during academic placement

There are no fixed clinical commitments and no on call duties during the placement.

Departmental academic teaching programme (if applicable)

The department has a comprehensive program of teaching and seminars which the post holder will be encouraged to take part in.

Academic Lead:

Dr. Aylin Hanyaloglu
Senior Lecturer
a.hanyaloglu@imperial.ac.uk

Programmes 19-21 - Academic Critical Care and Anaesthetics – based at Charing Cross/St Mary's/Hammersmith or Chelsea and Westminster Hospitals
Reference: 2324/IMP/19
Reference: 2324/IMP/20
Reference: 2324/IMP/21

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

Type of programme

This is a 4 month research placement in Academic Critical Care and Anaesthetics.

Employing trust:	*Academic placement based at:*
Chelsea and Westminster Hospital NHS Foundation Trust	Charing Cross, St Mary's, Hammersmith or Chelsea and Westminster Hospital

Brief outline of department

The Division of Anaesthesia, Pain Medicine and Intensive Care is an academic division sitting within the Faculty of Medicine of Imperial College London. Academic activities occur at both Imperial College Healthcare NHS Trust and Chelsea and Westminster Hospital NHS Foundation Trust. Across the two Trusts there is a wide spectrum of Critical care and Anaesthetic activity, for example trauma, burns, neuro-critical care, and cardiac and obstetric anaesthesia. As such a wide range of projects are offered.

The Division is led by Professor Masao Takata and is the home to many well-respected academics from the fields of Critical Care, Anaesthesia and Pain. The research activities of the Division cover a variety of subjects from biological profiling of critically ill patients using cutting edge techniques such a metabolic or transcriptomic profiling to machine learning in healthcare and improving the understanding of inflammation.

Website: https://www.imperial.ac.uk/department-surgery-cancer/research/apmic/

Structure of academic project/what expected

The AF2 year will include four months of Emergency Medicine at Chelsea & Westminster Hospital, four months in Intensive Care at the Royal Marsden Hospital and four months of academic activity at one of the associated hospitals, depending on the project. The academic placement can cover projects in anaesthesia, critical care, outreach, post-operative recovery and pain relief research, based on the AF2's skills and preferences. The posts are well suited for those wishing to gain a basic grounding in peri-operative medical research and have been highly valued by previous AF2s. Work done by previous AF2s on this program has been presented internationally and published.

Education is a key objective for the academic department with medical student (including BSc) and postgraduate training. The AF2 would be expected to contribute to education in all areas of anaesthesia and pain management.

Clinical commitments during academic placement There is no fixed clinical commitment during the academic placement. However, there is the opportunity to develop clinical skills if desired.
Departmental academic teaching programme (if applicable) There are weekly academic meetings as well as weekly Trust F2 teaching. The AF2 would also be welcome to attend clinical departmental teaching whist on the academic placement.
Academic Lead: Dr. David Antcliffe Clinical Senior Lecturer in Critical Care Medicine d.antcliffe@imperial.ac.uk

Programme 22-24 - Academic Vascular Surgery – based at Charing Cross Hospital
Reference: 2324/IMP/22
Reference: 2324/IMP/23
Reference: 2324/IMP/24

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

Type of programme This is a research post in Vascular Surgery at Charing Cross Hospital.	
Employing trust: Imperial College Healthcare NHS Trust	*Academic placement based at:* Charing Cross Hospital
Brief outline of department The research methods employed within the group include clinical projects, including clinical trials, molecular and cellular biology, material science, ultrasound and contrast enhanced ultrasound imaging, health economics, biostatistics, systematic reviews, metabonomics and fluid dynamics. For more information, please visit the Academic Section of Vascular Surgery website: http://www.imperial.ac.uk/AP/faces/pages/read/Home.jsp?person=a.h.davies&_adf.ctrl-state=usx90ksw9_3&_afrRedirect=2815034464756649	
Structure of academic project/what expected The AF2 year will be based at Charing Cross hospital and will consist of four months of Vascular Surgery and four months of A&E at St Mary's, and four months Academic Vascular Surgery at Charing Cross. The Academic Surgery placement will be based in the Academic Section of Vascular Surgery at Charing Cross under the supervision of Professor Alun Davies.	

During the four months the AF2 will have the opportunity to be part of a dynamic and productive research team investigating carotid atherosclerosis, chronic venous insufficiency, and varicose veins. The combination of clinical pathology and research techniques will be tailored to accommodate the interests of the AF2 as far as possible, selecting from a number of research projects which are running in parallel.

Supervision from Professor Davies will take the form of weekly meetings, with day-to-day support coming from a team of clinical research fellows, one of whom will be the lead research fellow on the assigned project.

There is access to a number of surgical clinics for the undertaking of clinical research projects and for postgraduate exam preparation as required. There is the opportunity to develop important transferrable skills in the writing of ethics and grant applications, performing statistical analysis, and writing and revising manuscripts.

The previous Academic F2s who have completed this placement have been successful in achieving first name author publications, including journal publications, book chapters, letters, and published abstracts, as well as presenting their work in national meetings and winning local and national prizes. Furthermore, they have been supported in applying for core training and academic training jobs and have been successful in securing posts in their chosen specialties.

Clinical commitments during academic placement

There are no fixed clinical commitments and no on call duties during the Academic Surgery placement.

Departmental academic teaching programme (if applicable)

In addition to the Foundation Programme teaching, there are weekly research meetings. Courses will be offered in accordance with the needs of the trainee and the project undertaken. Many of the clinical research fellows teach relevant skills such as statistical analysis, critical appraisal and how to prepare a manuscript at a regional level.

Academic Lead:

Prof Alun H Davies
Professor of Vascular Surgery
a.h.davies@imperial.ac.uk

Programmes 25-27 - Academic Surgery & Innovation – based at St Mary's Hospital
Reference: 2324/IMP/25
Reference: 2324/IMP/26
Reference: 2324/IMP/27

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

Type of programme This is an Academic surgical research programme based at St Mary's Hospital.	
Employing trust: Imperial College Healthcare NHS Trust	*Academic placement based at:* St Mary's Hospital

Department Overview

The Department of Surgery is an internationally leading centre which is highly multi-disciplinary and includes multiple internationally renowned academic and clinical foci including surgical technology development, discovery biochemistry, cancer biology and medicine, reproductive medicine, critical care and pain management.

Their goals are to harmonise and develop existing research themes across the Department, and also to capitalise on world leading molecular phenotyping and metabolic profiling research capabilities to create a new healthcare paradigm based on a molecules-to-medicine approach. In particular, we will channel exciting new technology developments into clinical practice with particular emphasis on development of personalised healthcare and patient and patient stratification strategies across all our clinical delivery programmes.

Overview of Cross-Cutting Research Themes and Research Facilities
Cross cutting research themes of the Division of Surgery include:

- Surgical Technology
- Robotics
- Clinical Trials
- Cancer Prevention and Early Diagnosis
- Surgical Education
- Metabonomics
- Clinical Safety and Quality
- Health Policy
- Design for Healthcare

The research facilities and infrastructure available are world-class, in terms of space, technology and teaching faculty. The department has strong collaborative links with many centres that have a successful track record in accommodating ambitious blue-sky research projects with proven track-record of successful supervision of ACFs/ACLs. Fellows and lecturers participate in research that intersects many disciplines and departments at Imperial supported by world leading researchers, laboratories, centres and environments, including:

Imperial Phenome Centre (NPC) (Takats) - delivers access to world-class capabilities in metabolic phenotyping, with a range of services from profiling,

untargeted assays to targeted assays.

Hamlyn Centre for Robotic Surgery (Rodriguez Y Baena, Darzi) – is at the forefront of imaging, sensing and robotics research and hosts the EPSRC Micro-Engineering Facility for Medical Robotics and UK Robotics and Autonomous Systems Network.

HELIX Design and Innovation Studio (Darzi) – collaboration between ICL and the Royal College of Art (www.helixcentre.com), which brings together clinicians, designers, and behavioural scientists to harmonise digital health and design to support patients and clinicians e.g. “Hark” - an innovative clinical task management platform (acquired by Google DeepMind, 2016).

EPSRC Centre for Mathematics in Healthcare (Darzi, Barahona) - brings together mathematicians with researchers in computing, engineering and medicine to capitalise on healthcare data and turn it into useful information for clinical decision-making.

NIHR-London In Vitro Diagnostic Co-operative (Hanna) – a collaboration between clinicians, scientists, and industry for evidence generation on diagnostics including laboratory validation and clinical studies, human factors, cost-effectiveness and mitigating barriers to adoption in clinical practice.

ICTU-Surgery (Hanna, jointly with the ICTU hub) – provides opportunities for training and grant applications in clinical trials and surgical quality assurance methods in different disciplines of surgery, minimal access interventions and cancer.

Description of the Research Component and Themes

Overview of Research Opportunities

Academic training will be based on a structured individualised post-graduate training programme. The research opportunities will include as follows:

- ***Robotics and Biosensing –*** body sensor networks, low power/ power scavenging, biocompatible and implantable sensors, micro-robotic design and fabrication, clinical trial (e.g. Micro-IGES, Cyclops), computer navigation systems and image-guided intervention(s).
- ***Health Policy and Safety*** - development, uptake and diffusion of innovative, evidence-based health policy in the UK and around the world; behavioural insights; health economics; patient safety; mHealth; design.
- ***Metabonomics and systems biology -*** lipidomics, metabolic pathway analysis, volatile organic compound analysis using mass spectrometry techniques such as GC-MS, PTR-TOF-MS, SIFT-MS, and ambient ionisation techniques include REIMS and DESI, MALDI and SINS, tandem mass spectrometry, NMR spectroscopy, big data analysis, bioinformatics, and statistical modelling.
- ***Microbiome research*** – 16S rRNA and shotgun metagenomic sequencing, culture, organoid, and synthetic gut models (robo gut and gut on a chip). Animal model validation.

- ***Technical Skills Assessment*** - the use of novel technologies including simulation in medical education, technical skills training, team performance assessment(s) including theatre and emergency medical teams, objective assessment strategies and the translation of educational research into educational practice within diverse healthcare environments.
- ***Clinical Trials*** – the Division of Surgery has a bespoke unit for surgical trials and established arrangement with ICTU to support fellowships in clinical trials and clinical scientists applications. ICTU provides methodology and statistical expertise for clinical trials. Surgical quality of international high profile RCTs such as NeoAGIS, COLOR III, ADDICT.

Structure of academic project/what expected

This AF2 year is based at St Mary's hospital and consists of four months General Surgery, four months A&E, and four months in Academic Surgery which will be based in the Division of Surgery at St Mary's Hospital. The post holder will be responsible to the Head of Division of Surgery, Professor George Hanna, Professor Lord Ara Darzi and Daniel Leff, Reader in Breast Surgery.

The purpose of this post is to provide a protected period of time and support to achieve competencies in different fields of academia as outlined in the Specialised Foundation portfolio. The post is particularly focused on enabling Academic F2 doctors to gain experience in research and build a research profile from which they can apply for ACF posts and apply for research fellowships towards a higher degree.

They will be assisted to develop their teaching and managerial/leadership skills and to contribute to undergraduate teaching. The F2 will have access to clinical and non-clinical academics who can guide them in the development of their academic and research programmes.

F2s will be introduced to the research themes of the department and potential projects from the Division of Surgery that would be suitable for the period of research. They will be free to choose the supervisor and project that most appeals to them provided it is likely to enable the trainee to meet the aims of this programme.

Clinical commitments during academic placement

During the academic surgical placement, the F2 will participate in a low intensity on-call rota at SHO level, but will be free of routine elective clinical work.

Departmental academic teaching programme (if applicable)

There is weekly departmental teaching as well as weekly Trust F2 teaching.

Academic Lead: Dr Daniel Leff
Reader in Surgery
Consultant Surgeon
Daniel.leff@nhs.net

Programmes 28-29 - Academic Clinical Trials & Translational Medicine – based at Hammersmith Hospital
Reference: 2324/IMP/28
Reference: 2324/IMP/29
Reference: 2324/IMP/30

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

Type of programme

This is an Academic research programme based at the NIHR Imperial Clinical Research Facility (NIHR ICRF) at Hammersmith Hospital.

Employing trust:	*Academic placement based at:*
Imperial College Healthcare NHS Trust	Hammersmith Hospital

Brief outline of department

The COVID pandemic highlighted the importance of having dedicated Clinical Research Facilities to conduct high quality research that cannot be done elsewhere in the NHS.

The NIHR Imperial Clinical Research Facility (ICRF) at Hammersmith Hospital is one of 28 NIHR funded Clinical Research Facilities in the UK. It is a state-of-the-art environment that enables medical staff and scientists to work together to investigate disease, and trial the latest scientific ideas for improving diagnosis and treatment. Its aim is to capitalise on the ground-breaking science conducted daily by Imperial College biologists, chemists, engineers, mathematicians and medical staff as well as external partners, including the pharmaceutical industry and start-up companies. As a result it has a track record of hosting cutting edge studies investigating new vaccines, gene therapies, small molecule drugs, diets and devices in a wide range of diseases that include cancer, cardiovascular, metabolic medicine, infectious disease and neuroscience. ICRF research is published in high impact scientific journals and has appeared in a wide range of popular science and news programmes. Equally important, the ICRF provides an environment for the next generation of academic healthcare professionals to learn how to bring new science into the clinic.

4 months at the ICRF is an excellent opportunity for clinicians aspiring to a research career in any speciality to gain experience of clinical research in a leading research organisation.

Structure of academic project/what expected

This post differs from other AF2 placements in day structure.

50% of each day will be spent conducting trial study visits for a small number of clinical trials (typically 2-4 studies of any specialty) which are running and need support at the time of your placement. This will provide you hands-on training in conducting high-quality clinical research e.g. research consent, governance, monitoring, study documentation, determining eligibility, and assessing adverse events.

The remaining 50% of each day will be spent focus on working with one of the research teams running the trials you are supporting. This may involve working with a PhD fellow to analyse data, and gain experience in academic writing and publishing. We will work with you to choose the most suitable trial to focus on.

This placement is ideal for candidates who want get experience running and providing an important contribution to big, ambitious clinical trials. It is not suitable for those who want to lead a small project.

Clinical commitments during academic placement

There are no NHS duties.

Departmental academic teaching programme (if applicable)

The AF2 will benefit from access to Clinical Research teaching seminars, as well as Trust F2 teaching.

Academic Lead:

Dr David Owen

Clinical Pharmacologist

d.owen@imperial.ac.uk

4. THE MEDICAL SCHOOL AND PARTNER TRUSTS

Imperial College London

Imperial College London is one of the world's leading universities. The quality of the college's research has been judged consistently to be of the highest international standard and the proportion of income from research grants and contracts is one of the highest of any UK university. The concentration and strength of research in science, engineering and medicine gives the college a unique and internationally distinctive research presence.

The college operates on a number of central London campuses: The South Kensington campus along with Charing Cross, Chelsea & Westminster, the Hammersmith, the Royal Brompton, St Mary's, Northwick Park and Central Middlesex hospitals.

Academic Health Science Centre

Imperial College Healthcare NHS Trust was created on 1 October 2007, by merging Hammersmith Hospitals NHS Trust and St Mary's NHS Trust. The Trust is the largest NHS Trust in the country, providing general and specialist care for patients nationwide as well as serving a large local community in west London. The new Trust and Imperial College London formed a unique partnership and together they became the UK's first Academic Health Science Centre (AHSC). On 9 March 2009, they received official recognition as an AHSC from the UK government.

The AHSC is a new approach to healthcare in the UK, bringing a university and the NHS together and running them hand in hand to provide the best healthcare in the world, free at the point of delivery. It represents a concentration of doctors, nurses, scientists and managers all dedicated to providing the best quality healthcare and finding new ways to treat diseases and conditions that affect your health.

The vision for Imperial's academic health science centre is that the quality of life of patients and local populations will be vastly improved by taking the discoveries that are made and translating them into medical advances - new therapies and techniques - and by promoting their application in the NHS and around the world, in as fast a timeframe as is possible.

The AHSC mission is to become one of the top five AHSCs in the world within the next ten years, channelling excellence in research to provide world-class healthcare for patients. Achieving this challenging mission will significantly improve the quality of healthcare for the local community, London and the UK as a whole, and enhance the UK's position as a global leader in biomedical research and healthcare.

Royal Brompton Hospital

Royal Brompton & Harefield NHS Foundation Trust is the largest specialist heart and lung centre in the United Kingdom. Clinical teams at Royal Brompton and Harefield hospitals care for patients with a wide range of complex cardiac conditions, including congenital (present at birth), inherited, and acquired. Their hospitals are world leaders in the diagnosis, management, and treatment of lung disease. Children's services provide care from before a child is born, throughout childhood and into adolescence, before managing a smooth transition to our adult teams.

Chelsea & Westminster Hospital

Chelsea and Westminster Hospital NHS Foundation Trust is an undergraduate teaching hospital that is part of Imperial College School of Medicine and provides a wide range of specialist hospital services within an environment of academic specialization as well as general local services for people living locally. The hospital is a modern purpose designed and built facility which opened in May 1993. Most services are based at the Chelsea and Westminster Hospital site, but the Trust also runs a highly successful network of HIV and sexual health centres. There are five Clinical Directorates: Anaesthetics & Imaging, Medicine, Surgery, Women & Children, and HIV & Sexual Health.

The hospital has developed increasing academic strength and taken on significant new research and development commitments. For example they were successful in securing more than £1 million in funding for the Eagle Simulator, a virtual operating theatre located at Chelsea and Westminster for training in anaesthesia and critical care. The Simulation Centre forms part of a Good Clinical Practice Centre, which incorporates a Clinical Skills Laboratory, Manual Handling training and Resuscitation training. The Centre is at the forefront of multi-disciplinary education and training.

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
2324/KCL/01	Paediatrics	King's College Hospital
2324/KCL/02	Diabetes	King's College Hospital
2324/KCL/03	Hepatology	King's College Hospital
2324/KCL/04	Cardiovascular	King's College Hospital
2324/KCL/05	Haematology	King's College Hospital
2324/KCL/06	Clinical Neuroscience	King's College Hospital
2324/KCL/07	Imaging	Guy's & St Thomas' Hospitals
2324/KCL/08	Rheumatology	Guy's & St Thomas' Hospitals
2324/KCL/09	Obstetrics	Guy's & St Thomas' Hospitals
2324/KCL/10	Allergy & Respiratory Medicine	Guy's & St Thomas' Hospitals
2324/KCL/11	Clinical Genetics	Guy's & St Thomas' Hospitals
2324/KCL/12	Medical Education	Guy's & St Thomas' Hospitals
2324/KCL/13	Infectious Diseases	Guy's & St Thomas' Hospitals
2324/KCL/14	Oncology	Guy's & St Thomas' Hospitals
2324/KCL/15	Surgery	Guy's & St Thomas' Hospitals
2324/KCL/16	Cardiovascular Medicine	Guy's & St Thomas' Hospitals
2324/KCL/17	Nephrology	Guy's & St Thomas' Hospitals
2324/KCL/18	Psychological Medicine and Psychiatry	King's College Hospital/ Guy's & St Thomas' Hospital/SLaM
2324/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.

3. PLACEMENTS

Programme 1 – Paediatrics – based at King's College Hospital
Reference: 2324/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: 2324/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. The combined academic and clinical services have an international reputation for the management of type 1 diabetes and its complications; obesity and diabetic foot disease, with particular interests in diabetes education, diabetes and mental health, use of technology in insulin delivery and monitoring, and metabolic surgery. Basic science research includes investigations into beta cell function and survival.

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 clinical diabetes research group at Denmark Hill, developing complex interventions for diabetes and mental health comorbidity (Prof Ismail, Dr Stadler) and type 1 diabetes with complex hypoglycaemia (Prof Amiel, Dr Stadler), the experimental medicine research group at Denmark Hill exploring human metabolism with questions around the the central control of metabolism in hypoglycaemia in insulin therapy (Professor Amiel, Dr Choudhary), the use of new technologies in insulin delivery and glucose sensing in the improvement of diabetes control 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 and novel treatments for type 2 diabetes (Professors Jones and Persaud, Drs Hussain and Huang), investigation of the mechanisms by which bariatric surgery improves metabolic control (Professor Rubino, Dr Hopkins); and research into the prevention and management of diabetes in pregnancy (Dr Hunt, Professor Forbes). Our clinical colleagues are highly active in researching diabetic foot disease (Dr Vas, Dr Manu), inpatient diabetes care and artificial intelligence (Dr Mustafa), diabetes education and equality issues in health care delivery (Dr Harris). We use laboratory research, insulin clamping, cognitive testing, neuroimaging, and clinical trials in these investigations.

Structure of academic project/what expected

We offer options in clinically based or laboratory-based projects for ACFs and Academic F2 trainees, 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; systematic review on metabolic syndrome and type 1 diabetes; quality improvement project with closed loop glucose management around liver transplantation.
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. The year concludes with four months in A and E at KCH. Supervision and training are provided throughout, and all our recent trainees have had the opportunity to present research findings at national and international meetings.

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 (experimental medicine, Monday pm) 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 Marietta.stadler@kcl.ac.uk NIHR Clinician Scientist, Hon Diabetes consultant Clinical educational lead: Dr Omar Mustafa Omar.mustafa@nhs.net

Programme 3 – Hepatology – based at King's College Hospital
Reference: 2324/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 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
Brief outline of department The 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 Liver Sciences and the Dept. of Inflammation Biology, 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

Programme 4 – Cardiovascular – based at King's College Hospital
Reference: 2324/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: 2324/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 (Head of Department – Professor G Mufti). It will provide exposure to a broad spectrum of the different sub-specialities; red cell and paediatric haematology, including sickle cell disease and other haemoglobinopathies, and genetic counselling of these disorders (Professor David Rees, Drs Moji Awogbade, Sara Stuart-Smith, Subarna Chakravorty and Sue Height); haemato-oncology and bone marrow failure (Professors G Mufti, Judith Marsh, Tony Pagliuca,); thrombosis and haemostasis (Professor Roopen Arya and Dr Raj Patel), and blood transfusion (Dr Alek Mijovic).

It is envisaged that the trainee spends one month in each of the four sub-specialities, during which s/he 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 to be 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.

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 departments

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: 2324/KCL/06

<table>
<tr><td colspan="2">Type of programme

Research</td></tr>
<tr><td>Employing trust:

King's College Hospital NHS Foundation Trust</td><td>Academic placement based at:

King's College Hospital</td></tr>
<tr><td colspan="2">Brief outline of department

The Department of Basic and Clinical Neuroscience at the Maurice Wohl Clinical Neuroscience Institute, King's College London, includes internationally recognised clinician scientist leaders in epilepsy, movement disorders, brain injury, demyelinating disease and neurodegeneration, including Alzheimer's disease and motor neuron disease (amyotrophic lateral sclerosis). Past projects include next generation sequencing projects in motor neuron disease, an RNA expression study in Alzheimer's disease, a study of pain in neurodegenerative diseases, neurophysiological studies of nerve transmission in models of epilepsy, and follow-up genetic studies of a genome-wide association study in Parkinson's Plus Syndromes.</td></tr>
<tr><td colspan="2">Structure of academic project/what expected

During the research attachment, trainees will be able to choose a supervisor from principal investigators (PIs) in the Maurice Wohl Clinical Neuroscience Institute. Areas of activity include Mendelian and complex genetics, molecular cell biology, cellular electrophysiology, neuroimaging, protein chemistry and proteomics, and bioinformatics in relation to neurodegenerative disorders (dementia, Parkinson's disease, motor neuron disorders). During the academic rotation, trainees are encouraged to attend research seminars and other activities organised by the Centre for Neurodegeneration Research, 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.</td></tr>
<tr><td colspan="2">Clinical commitments during academic placement
The trainee is expected to attend the Neurology Grand Round, and to present a weekly seminar to the Clinical Neurosciences MSc students. Teaching on the MSc is an important component of the post.</td></tr>
</table>

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 in Neuroscience, MSc in Clinical Neuroscience, and MSc in Neuroimaging.
Academic Lead: Dr Gerald Finnerty Senior Lecturer & Honorary Consultant Neurologist gerald.finnerty@kcl.ac.uk gfinnerty@nhs.net

Programme 7 – Imaging – based at St Thomas' Hospital
Reference: 2324/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: 2324/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: 2324/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, led by Professor Catherine Williamson, 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, through clinical trials through to 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 Department of Women and Children's Health is a theme in the KCL/Guy's and St Thomas' NHS Trust NIHR Biomedical Research Centre. 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 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 varying from discovery science laboratory projects through to translational clinical research can be undertaken. 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 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.	

The trainee will be offered the opportunity to attend one of the research clinics relevant to their project (e.g., maternal hypertension, preterm birth 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: 2324/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: 2324/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: 2324/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: 2324/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: 2324/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: 2324/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: 2324/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 and Rene Botnar

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 M Marber
Professor of Cardiology, KCL
Mike.marber@kcl.ac.uk

Programme 17 – Nephrology – based at Guy's and St Thomas' Hospitals
Reference: 2324/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: 2324/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: 2324/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:	*Academic placement based at:*
King's College Hospital NHS Foundation Trust	King's College Hospital

Brief outline of department including reference to department web site

The Department of Basic and Clinical Neuroscience at the Maurice Wohl Clinical Neuroscience Institute, King's College London, includes internationally recognised clinician scientist leaders in epilepsy, movement disorders, brain injury, demyelinating disease and neurodegeneration, including Alzheimer's disease and motor neuron disease (amyotrophic lateral sclerosis). Past projects include next generation sequencing projects in motor neuron disease, an RNA expression study in Alzheimer's disease, a study of pain in neurodegenerative diseases, neurophysiological studies of nerve transmission in models of epilepsy, and follow-up genetic studies of a genome-wide association study in Parkinson's Plus Syndromes.

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 Maurice Wohl Clinical Neuroscience Institute. Areas of activity include Mendelian and complex genetics, molecular cell biology, cellular electrophysiology, neuroimaging, protein chemistry and proteomics, and bioinformatics in relation to neurodegenerative disorders (dementia, Parkinson's disease, motor neuron disorders). During the academic rotation, trainees are encouraged to attend research seminars and other activities organised by the Centre for Neurodegeneration Research, 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 Clinical Neuroscience. 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 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, 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 in Neuroscience, MSc in Clinical Neuroscience, and MSc in Neuroimaging.
Academic Lead: Gerald Finnerty Senior 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.

2-YEAR SPECIALISED FOUNDATION PROGRAMMES AT QUEEN MARY UNIVERSITY OF LONDON (BARTS AND THE LONDON SCHOOL OF MEDICINE AND DENTISTRY)

1. INTRODUCTION

There are 8 different speciality-based Specialised Foundation Programmes on offer at Queen Mary University of London (Barts and The London School of Medicine and Dentistry), for which there are 24 places in total.

Successful applicants are recruited to a specific 4-month academic F2 post i.e. academic GUM. 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
2324/QMUL/01	Academic Public Health	Barts and the Royal London Hospitals
2324/QMUL/02	Academic Public Health	Barts and the Royal London Hospitals
2324/QMUL/03	Academic Public Health	Barts and the Royal London Hospitals
2324/QMUL/04	Academic Research (Academic Clinical Pharmacology / Academic Critical Care)	Barts and the Royal London Hospitals
2324/QMUL/05	Academic Research (Academic Clinical Pharmacology / Academic Critical Care)	Barts and the Royal London Hospitals
2324/QMUL/06	Academic Research (Academic Clinical Pharmacology / Academic Critical Care)	Barts and the Royal London Hospitals
2324/QMUL/07	Academic Endocrinology / Diabetes	Barts and the Royal London Hospitals
2324/QMUL/08	Academic Endocrinology / Diabetes	Barts and the Royal London Hospitals
2324/QMUL/09	Academic Endocrinology / Diabetes	Barts and the Royal London Hospitals
2324/QMUL/10	Academic Hepatology	Barts and the Royal London Hospitals
2324/QMUL/11	Academic Hepatology	Barts and the Royal London Hospitals
2324/QMUL/12	Academic Hepatology	Barts and the Royal London Hospitals

2324/QMUL/13	Academic Medical Oncology (with Nuclear Medicine)	Barts and the Royal London Hospitals
2324/QMUL/14	Academic Medical Oncology (with Nuclear Medicine)	Barts and the Royal London Hospitals
2324/QMUL/15	Academic Medical Oncology (with Nuclear Medicine)	Barts and the Royal London Hospitals
2324/QMUL/16	Academic Neurology	Barts and the Royal London Hospitals
2324/QMUL/17	Academic Neurology	Barts and the Royal London Hospitals
2324/QMUL/18	Academic Neurology	Barts and the Royal London Hospitals
2324/QMUL/19	Academic Orthopaedics	Barts and the Royal London Hospitals
2324/QMUL/20	Academic Orthopaedics	Barts and the Royal London Hospitals
2324/QMUL/21	Academic Orthopaedics	Barts and the Royal London Hospitals
2324/QMUL/22	Academic General Practice	Barts and the Royal London Hospitals
2324/QMUL/23	Academic General Practice	Barts and the Royal London Hospitals
2324/QMUL/24	Academic General Practice	Barts and the Royal London Hospitals

The specialised Foundation Programmes are based at Barts Health NHS Trust (Newham and Whipps Cross Hospitals), Barking Havering and Redbridge University Hospitals NHS Trust (Queens Hospital), or Homerton University Hospital NHS Foundation Trust for the F1 year, where you will learn basic medical and surgical skills in a busy hospital, and acquire the necessary clinical competences. The second year (F2) offers 9 posts with an academic link. These comprise 8 posts at Barts and The Royal London site, each containing an opportunity to complete a formal research project, and 1 post at the Whipps Cross site offering training in medical education.

3.PLACEMENTS

Successful applicants are recruited to a specific 4-month academic F2 post i.e. academic GUM. 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.

- **Programme 1 – Academic Public Health**
- Reference: 2324/QMUL/01
- Reference: 2324/QMUL/02
- Reference: 2324/QMUL/03

Individual Placement Descriptor (IPD) for the 4-month academic placement
Separate IPDs for clinical placements are available on foundation school website

Type of programme Academic Public Health	
Employing trust: Barts Health NHS Trust	*Academic placement based at:* Whitechapel Campus
Brief outline of department Trainees will work within the recently established Wolfson Institute of Population Health's Centre for Public Health & Policy (interim lead Prof Trevor Sheldon). The Institute is a world-class grouping of scientists and educators in applied health sciences, including public and global health, health services and primary care research, clinical trials, health policy and economics, health data science, behavioural and social sciences, epidemiology, biostatistics, translational and implementation science.	
Structure of academic project/what expected Trainees will learn about the theoretical and practical aspects of public health such as disease outbreak management, reducing health risk and the role of public health within the community. Direct experience will be provided in one or more of the following areas: • An assessment of an aspect of preventable mortality, and recommendations for clinical and cost-effective interventions to reduce this. • An evaluation of a local screening programme, e.g. cancer screening, antenatal screening, or screening for risk of diabetes, heart disease. • The management of an outbreak of communicable disease, e.g. meningitis, food poisoning, or drug resistant TB • The development of clinical governance including clinical audit, clinical effectiveness, and the management of serious untoward incidents. • An equality audit - an evaluation of the extent to which a set of local services focus on those with greatest needs.	

Trainees will also be taught management skills including presenting data and evidence, handling meetings, and persuading and motivating colleagues.

A choice of research project will be provided. This will comprise evidence collection, data analysis and presentation, and networking with local stakeholders. It is expected that a written report will be produced with a view to subsequent publication.

There will be an opportunity to study and research in Medical Informatics and Medical Statistics

Clinical commitments during academic placement

Working Day Monday – Friday 9am – 5pm

The attachment will comprise practical aspects of public health such as disease outbreak management, reducing health risk and the role of public health within the community. The doctor will be responsible for other specific clinical duties as allocated by consultants including performing other duties in occasional emergencies and unforeseen circumstances.

Departmental academic teaching programme

Trainees are expected to attend the academic meetings and clinical teaching programmes provided by the department and the F2 generic teaching programme. They will have the opportunity to present their research findings internally and, if suitable, externally as well.

In addition to training in the relevant clinical medicine speciality, fellows will have the opportunity to gain training in research ethics, good research practice, scientific writing including grant applications and career development.

Academic Lead

Prof Fiona Walter - Director of the Wolfson Institute of Population Health, and Professor of Primary Care Cancer Research
fiona.walter@qmul.ac.uk

Programme 2 – Academic Research (Academic Clinical Pharmacology / Academic Critical Care)

Reference: 2324/QMUL/04
Reference: 2324/QMUL/05
Reference: 2324/QMUL/06

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

Type of programme

Successful applicants will be able to choose between the following two Academic specialties depending on their interests and following discussions with Academic Programme Leads:

- Academic Clinical Pharmacology OR
- Academic Critical Care

Employing Trust:	*Academic placement based at:*
Barts Health NHS Trust	Barts and the Royal London Hospitals

Brief outline of department

Academic Clinical Pharmacology
This post is based at the Department of Clinical Pharmacology at Barts and The London, Charterhouse Square campus, London EC1M

Academic Critical Care
The 44-bed critical care unit at the Royal London currently comprises 20 consultants and incorporates significant surge capacity for COVID-19 ICU to 150 beds. With the ICU the Critical Care & Perioperative Medicine Research Group https://www.qmul.ac.uk/ccpmg/ is led by two professors and 3 Senior Lecturers/ Within our team we have a wide range of research expertise allowing us to tackle research questions through a variety of research methods from laboratory experiments to large clinical trials, epidemiological studies, and qualitative research. Our research is carried out at our hospitals: the Royal London, St Bartholomew's, Newham, Whipps Cross and in the laboratory facilities at the William Harvey Research Institute. Research domains and methodologies include perioperative medicine clinical trials, acute kidney injury, implementation science, genomics, and host response, acquired functional disability, data science, global health and translation research.

Structure of academic project/what expected

Academic Clinical Pharmacology
This academic F2 post provides research, teaching and clinical experience, the balance depending on the individual needs and aspirations of the trainee and on opportunities available when the trainee is on attachment. There are multiple project opportunities in clinical trials and in pharmacoepidemiology / drug utilisation. The trainee is encouraged to plan ahead in collaboration with the academic lead so that necessary approvals are in place in good time for commencing the project.

Academic Critical Care
This academic F2 post provides a mixture of research and clinical experience, the balance depending on the individual needs and aspirations of the trainee, but will provide the trainee with the knowledge, skills, and attitudes to reach the expected level of competency for an F2.

Academic Clinical Pharmacology
The trainee will attend the weekly Hypertension clinic at St Bartholomew's Hospital. This is a tertiary referral service and provides an excellent opportunity to develop experience in the investigation and management of complex essential and secondary hypertension.

Academic Critical Care
This academic F2 post provides a mixture of research and clinical experience, the balance depending on the individual needs and aspirations of the trainee, but will provide the trainee with the knowledge, skills and attitudes to reach the expected level of competency for an F2.

Clinical commitments during academic placement

Academic Clinical Pharmacology
The trainee will attend the weekly Hypertension clinic at St Bartholomew's Hospital. This is a tertiary referral service and provides an excellent opportunity to develop experience in the investigation and management of complex essential and secondary hypertension.

Academic Critical Care
The placement is primarily based on the critical care unit at the Royal London. Arrangements are flexible and will be agreed between trainee and supervisor to give the trainee the best choice of clinical and research experience whilst facilitating their chosen research project.

Departmental academic teaching programme

Academic Clinical Pharmacology
Trainees are expected to attend the structured teaching programmes provided by the department and the F2 generic teaching programme (1 day per month) as well as presenting research at academic F2 evenings (2 per year March and June).

The Department has major input to the MBBS programme. The trainee will participate in Problem Based Learning with Year 1 or Year 2 students, Clinical Pharmacology and Therapeutics (CPT) teaching during Years 3-5, on-line supervision of CPT student training modules, exam question writing, and student examinations. The activities provide valuable contributions to the F2 e-portfolio as well as audit/evaluation opportunities for trainees interested in Medical Education. The trainee is encouraged to complete the QMUL Certificate in Teaching and Learning (CILT).

Academic Critical Care Trainees are expected to attend the academic meetings and clinical teaching programmes provided by the department and the F2 generic teaching programme. They will have the opportunity to present their research findings internally and, if suitable, externally as well. In addition to training in the relevant clinical medicine speciality, fellows will have the opportunity to gain training in research ethics, good research practice, scientific writing including grant applications and career development.
Academic Leads Academic Clinical Pharmacology Dr Ajay Gupta – Consultant Clinical Pharmacology Ajay.gupta@qmul.ac.uk Academic Critical Care Dr Matthew Mak - Consultant in Intensive Care Medicine matthew.mak@nhs.net Dr Arjun Ghosh – Academic Supervisor arjun.ghosh1@nhs.net

Programme 3 – Academic Endocrinology or Diabetes

Reference: 2324/QMUL/07
Reference: 2324/QMUL/08
Reference: 2324/QMUL/09

Individual Placement Descriptor (IPD) for the 4-month academic placement
Separate IPDs for clinical placements are available on foundation school website
Type of programme

Successful applicants will be able to choose between the following two Academic specialties (or a combination of both) depending on their interests and following discussions with Academic Programme Leads:

- Academic Endocrinology AND/OR
- Academic Diabetes

Employing trust: Barts Health NHS Trust	*Academic placement based at:* Barts and the Royal London Hospitals
Brief outline of department Endocrinology	

The William Harvey Research Institute (WHRI) is an internationally acknowledged centre of excellence in cardiovascular, endocrine and inflammation research with 520 clinicians and scientists focused on therapeutic innovation. In the 2021 Research Excellence Framework 90% of research in the WHRI was rated as world-leading or internationally excellent. The two main areas in which academic foundation year trainees may pursue a project are in adrenal disease and pituitary/peri-pituitary tumours, including craniopharyngioma. These areas of research complement the clinical interests of the endocrine department at St Bartholomew's, which was recently awarded 5* Centre of Excellence status by the European Network for the Study of Adrenal Tumours (ENSAT) and the Pheo Para Alliance. Principle investigators within the WHRI include Professors Morris Brown and William Drake (primary aldosteronism); Professor Paul Chapple and Dr Scott Akker (phaeochromoctyoma and paraganglioma); Dr Leo Guasti (adrenal cancer); Professor Márta Korbonits (pituitary tumorigenesis) and Dr Carles Gaston-Massuet (craniopharyngioma).

Diabetes

The Wolfson Institute of Population Health is a new interdisciplinary institute within Barts and The London School of Medicine and Dentistry, Queen Mary University of London. This new institute was formed in 2021, bringing together the former Institute for Population Health Sciences and the Wolfson Institute for Preventive Medicine. We deliver world class research and education to drive health system change to improve the health of local, national and global populations. Our Institute provides a friendly, stimulating, interdisciplinary research environment with an excellent track record in research income and high-impact publications, as well as academic training. The Institute is home to Dr Sarah Finer's interdisciplinary research group working on diabetes and multimorbidity, which attracts funding from NIHR and MRC. Dr Finer is also deputy lead of the world-class Genes & Health programme, an internationally renowned community-based research programme of health in British Bangladeshis and Pakistanis, which hosts many academic trainees and supports projects in translational genomics and health data science.

Structure of academic project/what expected

The placement will give the F2 doctor the opportunity to work alongside an experienced researcher/research team on a well-defined research project that will be developed according to their interests and the available expertise. This may be a distinct piece of research such as a systematic review, or analysis of a dataset, or it may be a specific contribution to a larger piece of research already in progress. There will also be an opportunity to gain training and experience in undergraduate teaching.

Examples of projects undertaken/joined by recent academic trainees include: (a) using genetic risk scores to estimate the misclassification of type 1 and type 2 diabetes in British south Asians, (b) studying ultra-rare loss-of-function gene variants to elucidate new biological mechanisms of metabolic health and disease, (c) characterising multimorbidity clusters of cardiometabolic conditions using routine health data, (d) refining the selection of patients for adrenal vein sampling in primary aldosteronism (e) defining the diagnostic accuracy and safety of saline infusion and captopril testing in the investigation of primary aldosteronism (f) investigation simple ways to detect primary aldosteronism in pregnancy (g) analysing quality of life data in

a large prospective dataset of patients with primary aldosteronism undergoing adrenalectomy.
Clinical commitments during academic placement The primary aim of this placement is to undertake an intensive period of research. However, the academic Foundation Year doctor will be offered bespoke clinical training opportunities according to their individual interests and training needs to ensure that they achieve the necessary competencies at the end of their F2 year. For example, the doctor may wish to undertake a 2 week 'taster' in diabetes and endocrinology or have regular outpatient experience in the speciality.
Departmental academic teaching programme The department has an Endocrine Club Seminar, Clinical Journal Club or Clinical Audit and Research meeting as well as weekly Research updates. Trainees are expected to attend the academic meetings and clinical teaching programmes provided by the department and the F2 generic teaching programme. They will have the opportunity to present their research findings internally and, if suitable, externally as well. In addition to training in the relevant clinical medicine speciality, fellows will have the opportunity to gain training in research ethics, good research practice, scientific writing including grant applications and career development.
Academic Lead Professor Will Drake - Consultant Endocrinologist w.m.drake@qmul.ac.uk Dr Sarah Finer - Consultant Physician s.finer@qmul.ac.uk

Programme 4 – Academic Hepatology

Reference: 2324/QMUL/10
Reference: 2324/QMUL/11
Reference: 2324/QMUL/12

Individual Placement Descriptor (IPD) for the 4-month academic placement
Separate IPDs for clinical placements are available on foundation school website

Type of programme Academic Hepatology	
Employing trust: Barts Health NHS Trust	*Academic placement based at:* The Royal London Hospitals

Brief outline of department

Barts Liver Centre is part of the QMUL's Blizard Institute and consists of over 40 basic and clinical scientists, doctors and nurses. Group leaders, Professors Alazawi and Kennedy We have teams with interests in all aspects of liver disease with world-leading programs of research examining immunology, metabolism, and inflammation in the context of fat-induced liver injury and viral hepatitis.

Barts Liver Centre has an excellent track record of top-level funding and fellowships from the Medical Research Council, Academy of Medical Sciences, National Institute of Health Research and Wellcome Trust and publications in leading journals: Nature Medicine, PNAS, Gastroenterology, Journal of Hepatology and BMC Medicine and the BMJ.

We have made significant scientific advances in our understanding of liver disease mechanisms in basic science and translational settings. Our work has advanced our understanding of the epidemiology of liver disease worldwide and we have worked closely with our local Bangladeshi community to widen our understanding of ethnicity in liver disease. We are a major clinical trials site with particular expertise in Hepatitis B trials (many of which we lead) and non-alcoholic steatohepatitis.

The Centre collaborates with clinical departments of Diabetes and Obesity, Bariatric Surgery, Paediatrics and Virology and has links to other liver centres in London, including an active transplantation program with The Royal Free Hospital. We have a long-standing interest in working in the global community and we run active clinical programmes in Zambia and in Pakistan.

This programme of study has led to impactful changes to the design of international clinical trials and the care of patients with liver disease in updated guidance and clinical pathways.

Structure of academic project/what expected

The post holder will join one of the clinical/academic groups and will be supported to choose an appropriate programme based on current interests. They will develop a research project under the supervision of one of the senior academics and work alongside the team towards their objectives.

Clinical commitments during academic placement

The placement is primarily for research but there will be opportunities to work with the clinical team and assist in the management of patients with conditions relevant to the on-going research project.

Departmental academic teaching programme

Trainees are expected to attend the academic meetings and clinical teaching programmes provided by the department and the F2 generic teaching programme. They will have the opportunity to present their research findings internally and, if suitable, externally as well.

In addition to training in the relevant clinical medicine speciality, fellows will have the opportunity to gain training in research ethics, good research practice, scientific writing including grant applications and career development.

Academic Lead

Professor William Alazawi w.alazawi@qmul.ac.uk

Programme 5 – Academic Medical Oncology (with Nuclear Medicine)

Reference: 2324/QMUL/13
Reference: 2324/QMUL/14
Reference: 2324/QMUL/15

Individual Placement Descriptor (IPD) for the 4-month academic placement
Separate IPDs for clinical placements are available on foundation school website

Type of programme	
Academic Medical Oncology (with Nuclear Medicine)	
Employing trust: Barts Health NHS Trust	*Academic placement based at:* Barts and the Royal London Hospitals

Brief outline of department

Medical Oncology
St Bartholomew's Hospital (Ward 5B) and the Centre for Molecular Oncology in Barts Cancer Institute at Charterhouse Square (www.bci.qmul.ac.uk)

The Department comprises of 20 consultants, all with academic appointments, providing care for various malignancies including bone marrow transplantation.

In Oncology, particular emphasis is placed upon good symptom control in patients with advanced disease, especially pain control. Additionally, trainees will learn about the management of oncological emergencies, such as spinal cord compression and hypercalcaemia, and how to recognise and manage of the complications of cancer treatment, such as mucositis and neutropaenic fever.

Nuclear Medicine
The Nuclear Medicine Department at Barts Health is providing diagnostic, and therapy services across three site St Bartholomew's, Royal London and Whipps Cross Hospital. The SFP fellow will be based at the PET Imaging Centre, St. Bartholomew's Hospital. The Department is working closely with clinicians in the framework of clinical indications and research but also with Queen Mary University. There are in total 5 SPECT-CT cameras and two PET-CT scanners across sites. Our multidisciplinary team includes medical scientists, doctors, technologists, radiographers, radiopharmacists and nurses. The Clinical Lead is Dr Ewa Nowosinska and the Head of the Department is Mrs Busola Ade-Ojo. We have teams with interests in oncology, cardiology, and endocrinology.
We have made advances in radionuclide therapies in the framework of international several research projects with Lu-177PSMA (Vision Trial), two more in progress) This programme has led to significant changes in the design of clinical pathway for patients with metastatic prostate cancer in UK. We are actively working on implementation of Selective Internal Radiation Therapy (SIRT) in various clinical indications (HCC, metastatic colorectal cancer) and research projects for metastatic neuroendocrine tumours (ARTISAN trial).
Our previous Specialised Foundation Programme fellows had successful presentations at the national and international conferences and publications in national and international medical journals (BNMS, EANM, SNM).

Structure of academic project/what expected

In conjunction with the attachment to Nuclear Medicine, trainees will be encouraged to participate in ongoing research projects, specifically related to PET/CT imaging will be strongly encouraged. The PET Centre is exploring novel molecular imaging strategies from the preclinical development to the clinical evaluation specifically related to novel treatments such as gene therapy. Trainees will be involved in data collection and analysis within these trials.

Clinical commitments during academic placement

Working Day Monday – Friday 9am – 5pm

The post will embrace inpatient care of patients with a wide range of solid malignancies as well as exposure to translational research in Medical Oncology. Multidisciplinary team working is of particular importance in Medical Oncology and trainees will be expected to appreciate the need for advice from other specialities, especially Palliative Care, Radiotherapy and Surgery. Expert knowledge of and prescribing of chemotherapy is not expected at F2 level.

Training in Nuclear Medicine Department would include understanding the clinical, physiological, pathophysiological aspects of the speciality with particular focus on oncology imaging and the therapy. The candidate will gain understanding of manufacturing of radiopharmaceuticals, along with exposure to the planar, SPECTCT and PET/CT imaging. There will be a great opportunity to acquire experience in physiological and pathological appearances in PET/CT and scintigraphy imaging relevant to the oncology project and beyond. The candidate will be exposed to various PET tracers used in oncology and their normal and abnormal pattern of distribution, in both functional and anatomical imaging and its relevant pitfalls as well as normal variants. In addition, there will be an opportunity to report available scans under supervision and participate in radionuclide therapy.

Departmental academic teaching programme

Trainees are expected to attend the academic meetings and clinical teaching programmes provided by the department and the F2 generic teaching programme. They will have the opportunity to present their research findings internally and, if suitable, externally as well.

In addition to training in the relevant clinical medicine speciality, fellows will have the opportunity to gain training in research ethics, good research practice, scientific writing including grant applications and career development.

Academic Leads	
Prof John Gribben Consultant Medical Oncology j.gribben@qmul.ac.uk	Dr Ewa Nowosinska Consultant Nuclear Medicine e.nowosinska@nhs.net

Programme 6 – Academic Neurology

Reference: 2324/QMUL/16
Reference: 2324/QMUL/17
Reference: 2324/QMUL/18

Individual Placement Descriptor (IPD) for the 4-month academic placement
Separate IPDs for clinical placements are available on foundation school website

<table>
<tr><td colspan="2">Type of programme

Academic Neurology</td></tr>
<tr><td>Employing trust:

Barts Health NHS Trust</td><td>Academic placement based at:

The Royal London Hospitals</td></tr>
<tr><td colspan="2">Brief outline of department

There are 16 consultant neurologists of which 3 are based primarily at Whipps Cross Hospital and 1 at Newham.

There are 10-15 dedicated neurology beds on the new neuroscience unit and 3 video-EEG telemetry beds. The adult intensive care unit deals with many neuro-emergency cases per year and there are dedicated operating theatres as part of the main theatre suite. There is also a 12 bedded hyperacute stroke unit plus a 14-bedded stroke unit situated on the third floor.

Sub-specialisation within the department includes epilepsy, stroke, movement disorders, headache, multiple sclerosis, neuro-rehabilitation and neuro-muscular/peripheral nerve/MND.</td></tr>
<tr><td colspan="2">Structure of academic project/what expected

Headed by Professor Gavin Giovannoni, the internationally recognised Centre for Neuroscience and Trauma has approximately 85 research active staff and PhD students. The Centre’s strategic research is focused on five broad themes:

• trauma sciences,
• neurotrauma and neurodegenerative disorders,
• neuroimmunology,
• stem cells, regeneration and cancer and
• genomics and cancer.

The Centre’s themes have been mapped onto clinical academic units within Barts Health NHS Trust with many of its staff actively involved in clinical research, including phase 2 and 3 clinical trials. The research themes have been created with the specific aim of creating partnerships between basic scientists and clinicians to encourage translational research.</td></tr>
</table>

Clinical commitments during academic placement Typical work pattern will depend on the Departmental timetable and will need to be flexible for training purposes; for example on a Thursday the trainee will be expected to attend the neuro-radiology round that starts at 8am.
Departmental academic teaching programme Trainees are expected to attend the academic meetings and clinical teaching programmes provided by the department and the F2 generic teaching programme. They will have the opportunity to present their research findings internally and, if suitable, externally as well. In addition to training in the relevant clinical medicine speciality, fellows will have the opportunity to gain training in research ethics, good research practice, scientific writing including grant applications and career development.
Academic Lead Professor Gavin Giovannoni - Academic Lead g.giovannoni@qmul.ac.uk Dr Afraim Salek-Haddadi - Service Lead a.salek-haddadi@nhs.net

Programme 7 – Academic Orthopaedics

Reference: 2324/QMUL/19
Reference: 2324/QMUL/20
Reference: 2324/QMUL/21

Individual Placement Descriptor (IPD) for the 4-month academic placement

Separate IPDs for clinical placements are available on foundation school website

Type of programme Academic Orthopaedics	
Employing trust: Barts Health NHS Trust	*Academic placement based at:* The Royal London Hospital

Brief outline of department

Barts Bone & Joint Health is a new entity, led by Professor Xavier Griffin, part of QMUL's Blizard Institute and Barts Health NHS Trust. Our mission is to improve the health and wellbeing of people with bone & joint disorders and injuries. Orthopaedics benefits from a collaborative relationship with the trauma research group and is part of the Centre of Trauma and Neurosciences within the Blizard Institute. This is in combination with a wider collaboration to compliment the work of Prof Knowles in Surgery and Prof Pearse in Peri-operative Care. We work closely with the Pragmatic Clinical Trials Unit which has widespread expertise in the conduct of pragmatic trials testing clinical effectiveness. The associated NHS hospitals of Barts Health are the busiest major trauma and emergency centres in the UK.

Orthopaedics and wider musculoskeletal health are key priorities for the NIHR. Our research is cross cutting and spans classical randomised clinical trials, systematic reviews, data enabled randomised controlled trials and health data informatics and device epidemiology.

Whilst our unit is new we are well positioned to deliver outstanding academic training. The University has widespread expertise in the conduct of trials of complex interventions, using complex designs such as cluster and step-wedge. The group has specific expertise in conducting hip fracture platform trials, now including 42 hospitals and 28,000 participants. Coupled with this we have local expertise in perioperative multimodal interventions and their testing within the NHS.

We work closely with the local population through established relationships with local charities, local health organisations and through established University infrastructure. This forms a key component of our work in increasing the representation of underserved populations in research design and delivery.

We collaborate with other groups within QMUL including rheumatology, the clinical effectiveness group and the new formed digital environment research institute. In addition we collaborate with units nationwide and across Europe.

All of our research is centred delivering tangible benefits to patient care. Work previously undertaken has led to changes in the way hip fracture is managed, how devices are monitored and bridging the gap between clinical and research data.

Professor Xavier Griffin has an excellent track record of top-level funding and fellowships from the National Institute of Health Research in addition to being a mentor for the NIHR and Royal College of Surgeons of England Associate Principal Investigator and Associate Surgical Specialty Lead schemes. Both these opportunities provide career development and mentorship for aspiring surgeon scientists.

Structure of academic project/what expected

The post holder will be supported to choose an appropriate programme based on current interests. They will develop a research project under the supervision of one of the senior academics and work alongside the team towards their objectives.

Clinical commitments during academic placement

The placement is primarily for research but there will be opportunities to work with the clinical team and assist in the management of patients with conditions relevant to the on-going research project.

Departmental academic teaching programme

Trainees will be expected to attend a structured teaching programme led by Prof Xavier Griffin for all specialised foundation doctors. The comprehensive teaching programme will involve structured classroom and practical training in research design, delivery, ethics public engagement, manuscript preparation and dissemination. The programme will encourage peer learning with opportunity for discussion and appraisal of research ideas in addition to skills development such as presentation, critical appraisal, academic rigour, and wider methodologies. Our goal is to equip trainees with a solid foundation to build upon their clinical academic career.

Each trainee joining the group will have individualised training and mentoring. Weekly team meetings will provide opportunity to present and refine research ideas.

Academic Lead

Professor Xavier Griffin – Chair of Bone and Joint Health

X.Griffin@qmul.ac.uk

Programme 8 – Academic General Practice

Reference: 2324/QMUL/22
Reference: 2324/QMUL/23
Reference: 2324/QMUL/24

Individual Placement Descriptor (IPD) for the 4-month academic placement
Separate IPDs for clinical placements are available on foundation school website

Type of programme	
Academic General Practice	
Employing trust: Barts Health NHS Trust	*Academic placement based at:* Wolfson Institute of Population Health

Brief outline of department

The Wolfson Institute of Population Health is a new interdisciplinary institute within Barts and The London School of Medicine and Dentistry, Queen Mary University of London. We deliver world-class research and education to drive health system change to improve the health of local, national and global populations.

Our Institute provides a friendly, stimulating, interdisciplinary research environment with an excellent track record in research income and high-impact publications. Our Institute has recently joined the prestigious NIHR School for Primary Care Research, is host to the Translational Research Unit of the MRC Asthma UK Centre in Allergic Mechanisms of Asthma, and hosts a WHO Collaborating Centre for Social and Community Psychiatry. Research within the Institute spans a broad range of clinical areas and academic disciplines, including asthma, COPD, cancer, TB, HIV, type 2 diabetes, mental health, multimorbidity, public and global health, women's health, personalised medicine, polypharmacy, multimorbidity, translational genomics, and health data science.

We have particular strengths in community-based research and engagement, focused on the health needs of our diverse local population who are from groups traditionally underrepresented in research. For example, we co-host Genes & Health, an internationally renowned community-based research programme of health in British Bangladeshis and Pakistanis.

Our Institute proactively supports Equality, Diversity and Inclusion and has a wide range of initiatives supporting a positive research culture.

Structure of academic project/what expected

The placement will give the F2 doctor the opportunity to work one of our well-established research groups, according to their interests and the expertise of our researchers (see above and relevant links). The F2 doctor will work alongside an experienced researcher/research team on a well-defined research project that will be

developed according to their interests and the available expertise. This may be a distinct piece of research such as a systematic review, or analysis of a dataset, or it may be a specific contribution to a larger piece of research already in progress. There will also be an opportunity to gain training and experience in undergraduate teaching.

Examples of projects undertaken/joined by recent postholders include: (a) using genetic risk scores to estimate the misclassification of type 1 and type 2 diabetes in British south Asians, (b) a realist review to evaluate the implementation of social prescribing in primary care, (c) a qualitative study to understand barriers to accessing primary healthcare by migrants and asylum seekers. We expect the majority of postholders to contribute to, or to lead, a research publication from their placement.

As a member of the NIHR School of Primary Care Research, our Institute is part of a prestigious national network of academic institutions, bringing with it research expertise and training opportunities. Each academic Foundation Year doctor will be offered individualised support and mentorship from the Academic Lead to support their future career path into clinical academia. The Institute has a thriving and successful NIHR Integrated Academic Training programme, and the F2 doctor will be offered opportunities to meet with our Academic Clinical Fellows and Clinical Lecturers, as well as senior academics, for mentorship and informal networking.

Clinical commitments during academic placement

The primary aim of this placement is to undertake an intensive period of research. However, the academic Foundation Year doctor will be offered bespoke clinical training opportunities according to their individual interests and training needs to ensure that they achieve the necessary competencies at the end of their F2 year. For example, the doctor may wish to undertake a 2 week 'taster' in general practice, and this can be arranged with a local training practice in Tower Hamlets CCG. The opportunity to undertake alternative 'taster' placements in other specialities can also be discussed with the academic programme lead.

Departmental academic teaching programme

Trainees are expected to attend the academic meetings and clinical teaching programmes provided by the department and the F2 generic teaching programme. They will have the opportunity to present their research findings internally and, if suitable, externally as well.

In addition to training in the relevant clinical medicine speciality, fellows will have the opportunity to gain training in research ethics, good research practice, scientific writing including grant applications and career development.

Academic Lead

Dr Sarah Finer, Academic lead for the NIHR IAT primary care programme

s.finer@qmul.ac.uk

THE MEDICAL SCHOOL AND PARTNER TRUSTS

Barts and the London School of Medicine and Dentistry
Barts and The London offers international levels of excellence in research and teaching while serving a population of unrivalled diversity.

Through partnership with our linked trusts - Barts Health NHS Trust, and our associated University Hospital Trusts (Homerton and Queen's) the School's research and teaching is informed by an exceptionally wide ranging and stimulating clinical environment.

At the heart of the School's mission lies world class research, the result of a focused programme of recruitment of leading research groups from the UK and abroad and a £100 million investment in state-of-the-art facilities within Queen Mary University.

Research is focused on translational research, cancer, cardiac, dentistry, inflammation, endocrinology/ metabolism, immunology and infectious diseases, genomics, neuroscience, gastroenterology, epidemiology and primary care.

The School is nationally and internationally recognised for research in these areas, reflected in the £40 million it attracts annually in research income. Its fundamental mission, with its partner NHS Trusts, and other partner organisations, such as CR-UK, is to ensure that that the best possible clinical service is underpinned by the very latest developments in scientific and clinical teaching, training and research.

The school is organised into the following Institutes:

- Barts Cancer Institute
- Blizard Institute of Cell and Molecular Science
- Institute of Health Sciences Education
- Institute of Dentistry
- William Harvey Research Institute
- Wolfson Institute of Preventive Medicine

The School is also home to the first Cancer Research UK Clinical Centre to be established which takes an innovative 'molecules to patient' approach to research.

Barts Health NHS Trust
Barts Health NHS Trust was created on 1 April 2012 following the approved merger of Barts and The London NHS Trust, Newham University Hospital NHS Trust and Whipps Cross University Hospital NHS Trust. It is one of the biggest and busiest NHS Trusts in the UK with unique opportunities available at its sites:

Whipps Cross University Hospital provides 760 beds on a single site within the London Borough of Waltham Forest.

The Newham University Hospital site in Plaistow has seen substantial investment over the past few years with new buildings and many environmental improvements. The site is caring for one of the youngest, fastest growing and most diverse populations in the country.

Parts of Barts Health are undergoing the largest and most complex hospital redevelopment project in the world. The £1 billion programme is replacing many of the

hospitals' ageing buildings with state-of-the-art healthcare facilities to rival the best in Europe.

The Royal London Hospital and St Bartholomew's Hospital alone:

- Admit over 84 000 patients a year
- Undertake over 93 000 operations a year
- Treat over 103 000 patients a year in the Accident and Emergency Department
- See over 467 000 outpatients a year
- Employ some 6000 staff

The Royal London is Britain's biggest new hospital, providing general and specialist services to the population of east London and beyond. The historic buildings of St. Bartholomew's, Britain's oldest hospital, are being refurbished, alongside a major new building, creating the Cancer and Cardiac Centre of Excellence.

Bart's Health has six Clinical Academic Groups (CAGs) which include hundreds of clinicians from each of the hospitals. The CAGs listed below include a wide range of medical, surgical and emergency specialties, many of which are recognised as being at the leading edge of progress. The quantity of acute medical cases is substantial.

- Cancer
- Cardiovascular
- Clinical support services
- Emergency Care and Acute Medicine
- Surgery
- Women's and Children's Health

Barts Health has continued to develop as a major centre of educational and clinical excellence. Working closely with the School of Medicine and Dentistry, the Trust provides high quality teaching to undergraduate medical and dental students during their local placements as well as providing postgraduate training. There is an extremely close working relationship between the Trust and the School of Medicine.

More information can be found at http://www.bartshealth.nhs.uk/

Barking, Havering and Redbridge University Hospitals NHS Trust
Barking, Havering and Redbridge University Hospitals NHS Trust serves a population of around 700,000, from a wide range of social and ethnic groups, making it one of the largest acute hospital trusts in England.

The trust has two main hospitals. Queen's Hospital in Romford which opened in 2006 and King George Hospital, built in 1993. It also serves clinics across outer north east London and runs some services from Barking Hospital.

It operates two Emergency Departments at King George and Queen's hospitals, and a full range of local hospital services. In addition, Queen's offers a cancer centre, regional neuroscience centre and Hyper Acute Stroke Unit to provide specialist care.

More information can be found at http://www.bhrhospitals.nhs.uk/

Homerton University Hospital NHS Foundation Trust
Homerton provides hospital and community services to the people of Hackney, the City of London and beyond.

It also provides specialist care in obstetrics, neonatology, foetal medicine, fertility, laparoscopic surgery, obesity surgery, asthma and allergy treatments, HIV and neuro-rehabilitation.

It provides a wide range of adult and children's community health services across Hackney and the City, with staff working out of 75 different sites.

The hospital has over 450 inpatient beds, an Emergency department, an intensive care unit, state-of-the-art imaging and x-ray facilities, a modern sexual health treatment centre, diabetes centre and eye screening service. Over 120,000 people attend the Emergency Department every year and it is expected that 6,000 babies are born at the hospital.

More information can be found at http://www.homerton.nhs.uk/

2-YEAR SPECIALISED FOUNDATION PROGRAMMES AT ST GEORGE'S UNIVERSITY OF LONDON (SGUL)

1. INTRODUCTION

There are 4 programme themes (Renal 1, Vascular Surgery 1, GP 2) with each theme offering places for 3 trainees. A total of 12 programmes are available.

Successful applicants are recruited to a specific 4-month academic F2 post e.g., academic vascular surgery. This post sits within a generic 2-year foundation programme with 5 other clinical placements, balanced to enable acquisition of foundation competencies. 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

Programme Reference	Programme Theme	Based at
2324/SGUL/01	Renal Medicine	St George's Hospital
2324/SGUL/02	Renal Medicine	St George's Hospital
2324/SGUL/03	Renal Medicine	St George's Hospital
2324/SGUL/04	Vascular Surgery	St George's Hospital
2324/SGUL/05	Vascular Surgery	St George's Hospital
2324/SGUL/06	Vascular Surgery	St George's Hospital
2324/SGUL/07	GP	St George's Hospital
2324/SGUL/08	GP	St George's Hospital
2324/SGUL/09	GP	St George's Hospital
2324/SGUL/10	GP	St George's Hospital
2324/SGUL/11	GP	St George's Hospital
2324/SGUL/12	GP	St George's Hospital

3. PLACEMENTS

Each of the 12 speciality-based programmes offer core clinical and generic academic training. The programmes are based at St. George's Hospital. The F2 year at St. George's comprises a 4-month speciality-based clinical placement with a leading clinical academic firm, a 4-month high-quality dedicated academic placement, 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.

Programmes 1-3 – Renal Medicine – based at St George's Hospital
Reference: 2324/SGUL/01
Reference: 2324/SGUL/02
Reference: 2324/SGUL/03

Type of programme Research and/or teaching	
Employing trust: St George's Healthcare NHS Trust	*Academic placement based at:* St. George's Hospital
Brief outline of department The Renal Service at St. George's is provided by 7 Nephrologists, and 5 Renal Transplant Surgeons. This is a tertiary service including 157 new renal transplants annually. There are two clinical academics in Renal Medicine: Dr Debasish Banerjee leads research projects on cardiovascular disease in renal patients. Prof David Oliveira has a major interest in medical education.	
Structure of academic project/what expected The Academic F2 trainee in Renal Medicine will spend 4 months working with Dr Debasish Banerjee on a project based on "cardiovascular complications of chronic kidney disease". The project will involve patients, using ultrasound techniques in the vascular laboratory including brachial artery flow mediated dilatation, carotid intima-media thickness and carotid-femoral pulse wave velocity, ECG monitoring and laboratory assessments. Training and experience in the regulatory aspects and conduct of clinical research will be provided. Over the last 6 years Academic F2s have generated (as first author) 4 peer-reviewed original papers, 3 invited reviews, 2 oral presentations at international conferences and 6 poster presentations (2 international and 3 national conferences). There will be opportunities to undertake a descriptive clinical project/audit. Involvement in teaching is encouraged and there is the opportunity to register for the St. George's, University of London Postgraduate Certificate in Healthcare and Biomedical Education.	
Clinical commitments during academic placement No routine service commitment but there may be involvement in patient recruitment to clinical studies.	
Departmental academic teaching programme (if applicable) Weekly lab meeting Weekly Academic Meeting with opportunity to present research data	
Academic Lead: Dr Debasish Banerjee dbanerje@sgul.ac.uk	

Programmes 4-6 – Vascular Surgery – based at St George's Hospital
Reference: 2324/SGUL/04
Reference: 2324/SGUL/05
Reference: 2324/SGUL/06

Type of programme Research	
Employing trust: St George's University Hospitals NHS Foundation Trust	*Academic placement based at:* St George's, University of London
Brief outline of department The St Georges Vascular Institute (SGVI) is a large tertiary vascular institution that integrates clinical service, research and training is an integrated Unit. SGVI has 3 senior academic appointments, 2 clinical lecturers and one academic clinical fellow. The academic appointments are complemented by 5 NHS consultants. The Unit has an international reputation for the treatment of vascular disease with particular emphasis on endovascular and open surgery of the aorta, carotid disease, and diabetic lower limb salvage. The SGVI has a large research output, and the clinical service is underpinned by academic activity.	
Structure of academic project/what expected Trainees will spend 4 months on a project related to vascular surgery. They will also spend 4 months on the clinical vascular unit. The project and field of research will depend on previous experience and aspirations of the trainee. The broad subject fields offered for research includes clinical outcomes & health services research, novel endovascular procedures, the epidemiology of lower limb arterial disease and the application of audit. All trainees will be expected to complete at least one project that would result in a publication and/or presentation. The majority of academic F2's will achieve several peer reviewed publications and will have submitted abstracts for national presentation. The academic F2 programme fits within the SGVI academic training structure that includes Academic Clinical Fellows and Academic Clinical Lecturers. The F2 will receive formal research supervision within SGVI.	
Clinical commitments during academic placement The academic F2's will perform clinical duties according to competency requirements and interest in line with the service commitments required. Duties will include ward work, out-patient clinics (in a training capacity) and opportunity to attend the operating sessions. All academic F2s will be expected to complete the same competencies as non-academic F2s to achieve F2 competencies to be signed off. The structure of the placement will be 4 months in research and 4 months on clinical vascular duties. There will be a degree of flexibility in these arrangements according to personal achievement and preference. The research time is generally protected for	

academic activities but at a maximum 1 day of clinical activity may be required to cover clinics and ward work. .
Departmental academic teaching programme (if applicable) The Department runs a series of academic activities that the F2 will participate in. There is a weekly research meeting (Tues 12.30-1.30) that acts as a forum for presentation of research ideas and formulation of projects. In addition, there is a monthly journal club that the F2 will be expected to prepare and present. Clinically there are a series of weekly MDT meetings that serve as an educational forum.
Academic Lead: Professor Peter Holt Professor of Vascular Surgery Peter.Holt2@stgeorges.nhs.uk

Programmes 7-12 – Academic GP – based at St George's University Hospital
Reference: 2324/SGUL/07
Reference: 2324/SGUL/08
Reference: 2324/SGUL/09
Reference: 2324/SGUL/10
Reference: 2324/SGUL/11
Reference: 2324/SGUL/12

Type of programme Academic Primary Care: Education and Research	
Employing trust: St George's University Hospitals NHS Foundation Trust	*Academic placement based at:* Population Health Research Institute (PHRI) or Institute of Medical and Biomedical Education (IMBE), St. George's, University of London
Brief outline of department The academic attachment will be in the Population Health Research Institute (PHRI), which is a highly rated research institute with two Professors of Primary Care Research and their associated research teams; or the Institute of Medical and Biomedical Education (IMBE), where educational research can be performed with the Academic Primary Care Education Group. PHRI has interests in general practice database research; physical activity; sexual health and hypertension in pregnancy. There are monthly combined education and research meetings with primary care academics from both PHRI & IMBE. There are also weekly research seminars in PHRI. You will also be a member of George's Academic Training faculty where you will network with senior postgraduates, of all specialties, undertaking academic training. See https://www.sgul.ac.uk/research/academic-training	

The Academic GP F2 rotation combines an attachment to a GP practice for 2 days and three days in either of the Institutes. The aim is to gain a greater understanding of the process of Academic Medicine, contribute to an existing research project under supervision and gain some teaching experience with undergraduate medical students. We hope the F2 will get an opportunity to present their work at the regional Academic GP conference in January (Madingley Hall, Cambridge) or the National Society of Academic Primary Care conference in July, or other relevant conference, and contribute to a publication.

Examples of recent F2 research experience

Academic F2s (highlighted below) may design and complete small pilot studies, contribute to fieldwork on existing trials or analyse data previously collected (3). As four months is often too a short period to complete a project, on occasion, this may be continued by subsequent F2s and published jointly. The main aim is to learn research skills, acquire educational skills, present at a conference, and/or produce a publication.

1. **Isted, A.,** Williams, R., & Oakeshott, P. (2018). Secondary prevention following myocardial infarction: a clinical update. *Br J Gen Pract*, *68*(668), 151-152. doi:10.3399/bjgp18X695261
2. **Williamson, J**., Fleming, C., Kerry Barnard, S., Monahan, I., Planche, T., Oakeshott, P., Hay, P. E. (2017). Sexually active students' acceptability of providing saline oral samples for future human papillomavirus testing. *Int J STD AIDS*, *28*(14), 1464-1465. doi:10.1177/0956462417736432
3. Tucker, K. L., **Bowen, L**., Crawford, C., Mallon, P., Hinton, L., Lee, M. -M., . . . McManus, R. J. (2017). The feasibility and acceptability of self-testing for proteinuria during pregnancy: A mixed methods approach. *Pregnancy Hypertens*. doi:10.1016/j.preghy.2017.11.009

Structure of academic project/what expected

The exact details of the project may change depending on current research themes and the life cycle of the research. Some F2 doctors have, in addition, continued existing research work, and this is acceptable as long as it does not detract from the departmental work.

Teaching

The department contributes to wide ranging MBBS undergraduate activities and there are multiple opportunities to acquire educational skills and experience.
The SGUL Centre for Innovation and Development in Education runs a Postgraduate Diploma in Healthcare and Biomedical Education. There are annual (Autumn) SGUL 'Education' Conferences and 'Research' Conferences. F2's will be allocated to a GP practice in the locality.

Clinical commitments during academic placement

GP surgery with clinical sessions exposed to common and complex general practice problems, under the supervision of a clinical supervisor, with weekly tutorials.

Departmental academic teaching programme (if applicable)

PHRI weekly seminars, monthly academic GP (education and research) seminars, PGCert

Academic Lead: Dr Imran Rafi
irafi@sgul.ac.uk

4.THE MEDICAL SCHOOL AND PARTNER TRUSTS

St George's University Hospitals NHS Foundation Trust

St George's University Hospitals NHS Foundation Trust is one of the country's leading teaching hospitals with an international reputation for education and research. The Trust provides general, specialist and tertiary services both locally and nationally. Located in South-West London, St George's is within easy reach of Central London and all the attractions that it has to offer.

About St George's University Hospitals NHS Foundation Trust and St George's, University of London

With nearly 8,000 dedicated staff caring for patients around the clock, St George's Healthcare is the largest healthcare provider in southwest London.

Our main site, St George's Hospital in Tooting – one of the country's principal teaching hospitals – is shared with St George's, University of London, which trains medical students and carries out advanced medical research. St George's Hospital also hosts the St George's, University of London and Kingston University Faculty of Health and Social Care Sciences, which is responsible for training a wide range of healthcare professionals from across the region.

As well as acute hospital services, we provide a wide variety of specialist care and a full range of community services to patients of all ages. These services are provided from Queen Mary's Hospital, Roehampton, 11 health centres and clinics, schools and nurseries, patients' homes, and Wandsworth Prison.

St George's Hospital serves a population of 1.3 million across southwest London. Many services, such as cardiothoracic medicine and surgery, neurosciences and renal transplantation, also cover significant populations from Surrey and Sussex, totalling around 3.5 million people. The trust also provides care for patients from a larger catchment area in southeast England, for specialties such as complex pelvic trauma. Other services treat patients from all over the country, such as family HIV care and bone marrow transplantation for non-cancer diseases. The trust also provides a nationwide state-of-the-art endoscopy training centre.

A number of our services are members of established clinical networks and bring together doctors, nurses and other clinicians from a range of healthcare providers working to improve the quality of services for patients. These include the South London Cardiac and Stroke Network and the South West London and Surrey Trauma Network, for which St George's Hospital is the designated heart attack centre, hyper-acute stroke unit and major trauma centre.

The National Institute for Health Research (NIHR) Collaboration for Applied Health Research and Care (CLAHRC) South London pools the clinical and research expertise of both the NHS and universities in south London. It brings together King's Health Partners (a partnership between King's College London and Guy's and St Thomas,' King's College Hospital and South London and Maudsley NHS Foundation Trusts), with St George's Healthcare NHS Trust and St George's, University of London as joint leaders of the CLAHRC. The CLAHRC will work to make sure that patients benefit from innovative new treatments and techniques that could revolutionise future health care. Researchers will work together to investigate new methods to prevent and treat chronic diseases such as stroke and tackle public health issues including reducing alcohol-related harm. In south London up to 30 per cent of acute medical admissions and 50 per cent of mental health admissions are alcohol related. The CLAHRC will also establish education programmes,

and a new Centre for Implementation Science will be set up as a central resource to support research and test innovations in these nine areas: alcohol; diabetes; infection; palliative and end of life care; psychosis; public health; stroke; women's health; and patient and public involvement.

About St George's, University of London
St George's, University of London, is distinctive as the UK's only independently governed medical and health sciences higher education institution. A college of the University of London, we have been providing medical and healthcare training for over 250 years.

With approximately 6,000 students and 850 members of staff, our Mission is to advance, promote and share knowledge of health through excellence in teaching, clinical practice and research into the prevention and treatment of illness.

The school is organised into the following Institutes:

- **Molecular and Clinical Sciences**
- **Infection and Immunity**
- **Population Health**
- **Institute of Medical and Biomedical Education (IMBE)**

In research, we are innovative and driven by high standards of excellence to advance healthcare. Our Centres undertake research in areas focused on infection and immunity, cardiology, stroke, epidemiology and cell signalling.

Our courses range from medicine, biomedical sciences, nursing, midwifery, paramedic science, social work, physiotherapy, to therapeutic and diagnostic radiography as well as postgraduate and continuing professional development courses. A number of these courses are taught through our Faculty of Health and Social Care Sciences, which is jointly run with Kingston University.

St George's prides itself on providing the highest standard of learning through the latest in teaching and learning resources, exceptional research, innovative course development, enterprise and innovation, and strategic partnerships.

We were the first to introduce a four-year medical degree open to graduates from all disciplines and, more recently, became one of only four universities in the country to pioneer training for physician's assistants – a new breed of healthcare professionals brought over from the United States.

St George's success has been aided by our strategic partnerships with other institutions. Our life-long partnership and shared site with St George's Hospital has created a unique learning and research environment. Our partnership with Kingston University and internationally the University of Nicosia, has enabled us to expand our portfolio of courses and to introduce more initiatives.

In recent years, we have also established an Enterprise and Innovation Centre to encourage the transfer of knowledge and skills to business and the wider community.

All Foundation Year trainees are offered the Postgraduate Certificate in Research Skills and Methods or Education at a discounted rate during their academic training with us.

B6. 2-YEAR SPECIALISED FOUNDATION PROGRAMMES AT UNIVERSITY COLLEGE LONDON MEDICAL SCHOOL (UCL)

1. INTRODUCTION

The North London Foundation School is a foundation school linked to **UCL Medical School**. North London/UCL offers **21** specialised Foundation Programme (SFP) posts comprising different speciality-based academic placements. The two-year programmes will deliver the full range of competences required of the Foundation Programme Curriculum. The F2 posts will each include a placement in a centre of academic and research excellence.

The F1 posts are based at Barnet Hospital (Royal Free London NHS Foundation Trust) or North Middlesex University Hospital NHS Trust. The F2 posts are based in central London, either at University College London Hospitals NHS Foundation Trust, the Royal Free Hospital (Royal Free London NHS Foundation Trust), or the Whittington Health.

All trainees accepted for the two-year specialised Foundation Programme will have:

- A four-month academic placement as one element of their 12-month F2 post
- A mentor throughout the F2 year (Academic Supervisor)
- Teaching sessions aimed at developing academic skills
- Visitor status within the appropriate Division to enable access to UCL online library facilities

2. DETAILS OF TRAINING PROGRAMMES

Programme Reference	Programme Theme	Based at
2324/UCL/01	Medical Virology (1)	Royal Free London NHS Foundation Trust (Royal Free Hospital)
2324/UCL/02	Surgery	Royal Free London NHS Foundation Trust (Royal Free Hospital)
2324/UCL/03	Surgery	Royal Free London NHS Foundation Trust (Royal Free Hospital)
2324/UCL/04	Rheumatology	University College London Hospitals NHS Foundation Trust
2324/UCL/05	Neurology and Neuroscience (1)	Royal Free London NHS Foundation Trust (Royal Free Hospital)
2324/UCL/06	Neurology and Neuroscience (2)	Royal Free London NHS Foundation Trust (Royal Free Hospital)
2324/UCL/07	Cellular Pathology (1)	Royal Free London NHS Foundation Trust (Royal Free Hospital)
2324/UCL/08	Medical Education	Royal Free London NHS Foundation Trust (Royal Free Hospital)

2324/UCL/09	Cellular Pathology (2)	Royal Free London NHS Foundation Trust (Royal Free Hospital)
2324/UCL/10	Nuclear Medicine (1)	Royal Free London NHS Foundation Trust (Royal Free Hospital)
2324/UCL/11	Nuclear Medicine (2)	Royal Free London NHS Foundation Trust (Royal Free Hospital)
2324/UCL/12	Radiology	Royal Free London NHS Foundation Trust (Royal Free Hospital)
2324/UCL/13	Primary Care and Population Health (1)	Whittington Health
2324/UCL/14	Primary Care and Population Health (2)	Whittington Health
2324/UCL/15	Primary Care and Population Health (3)	Whittington Health
2324/UCL/16	Hepatology	Royal Free London NHS Foundation Trust (Royal Free Hospital)
2324/UCL/17	Paediatrics	University College London Hospitals NHS Foundation Trust and Great Ormond Street Institute of Child Health
2021 /UCL/18	Psychiatry	Camden and Islington Foundation Trust (linked to University College London Hospitals NHS Foundation Trust)
2324/UCL/19	Women's Health	University College London Hospitals NHS Foundation Trust
2324/UCL/20	Clinical Pharmacology/ Cardiovascular Medicine	University College London Hospitals NHS Foundation Trust
2324/UCL/21	Anaesthetics	University College London Hospitals NHS Foundation Trust

3. POSTS

Information regarding specific programmes is provisional and may be subject to change. Precise details of rotations are subject to service delivery requirements of the NHS and subsequent confirmation by employing Trusts.

Programmes 1 – Medical Virology – based at Royal Free London NHS Foundation Trust (Royal Free Hospital)

Reference: 2324/UCL/01

Type of programme

Research/audit/clinical liaison

Employing trust:	*Academic placement based at:*
Royal Free London NHS Foundation Trust (Royal Free Hospital)	Royal Free London NHS Foundation Trust (Royal Free Hospital)

Brief outline of department

Virology is an exciting and rapidly moving subject which integrates laboratory work with clinical needs. Trained specialists need both a good working knowledge of applied molecular biology and a clear understanding of viral pathogenesis.

Virologists reach out from their laboratory base to interact with clinical colleagues in a wide variety of areas (e.g. organ transplantation, stem cell transplantation, HIV, hepatology, antenatal, infectious diseases, sexually transmitted diseases, occupational health). Randomised controlled clinical trials of antiviral drugs provide the evidence base for or against recommending treatment of a particular infection. The measurement of viral load directly in-patient samples provides an objective assessment of response to treatment. Direct sequencing of viral genomes identifies the mechanisms of developing resistance to these antiviral drugs.

Recent publications from Academic F2s:

Lumley S, Patel M, Griffiths PD. The combination of specific IgM antibodies and IgG antibodies of low avidity does not always indicate primary infection with cytomegalovirus. J Med Virol 2014 May;86(5):834-7.

Hyams C, Mabayoje DA, Copping R, Maranao D, Patel M, Labbett W, et al. Serological cross reactivity to CMV and EBV causes problems in the diagnosis of acute hepatitis E virus infection. J Med Virol 2014 Mar;86(3):478-83.

Panagou E, Zakout G, Keshani J, Smith C, Irish D, Mackinnon S, Kottaridis P, Fielding A, Griffiths PD. Cytomegalovirus pre-emptive therapy after hematopoietic stem cell transplantation in the era of real-time quantitative PCR; comparison with recipients of solid organ transplants. Transpl Infect Dis. (2016).

Green CB, O'Riordan A, Griffiths P, Haque T. A deletion at CMV UL54 codon 524 without co-existing resistance-associated mutation at UL97 confers resistance to ganciclovir: A case report. J Clin Virol. (2016).

Structure of academic project/what expected

Trainees will see how viral sequencing can monitor the evolution of resistant strains and will gain experience of recruiting patients into ongoing randomised controlled trials.

Clinical commitments during academic placement The trainee will assist the specialist registrar in providing clinical liaison to the major "customers" served by the diagnostic laboratory. This will provide excellent experience of how to get the most out of a laboratory which will stand the trainee in good stead when he/she returns to the wards.
Departmental academic teaching programme (if applicable) Topical clinical cases are presented every afternoon to the consultant virologist. One of these cases will be selected and worked up for the trainee to present at Medical Grand Rounds.
Academic Lead: Dr Tanzina Haque Clinical lead consultant virologist Based at: Royal Free London NHS Foundation Trust (Royal Free Hospital) E-mail address: thaque@nhs.net

Programme 2 – HPB and Liver Transplant Surgery – based at Royal Free London NHS Foundation Trust (Royal Free Hospital)

Reference:
2324/UCL/02
2324/UCL/03

Type of programme

Research

Employing trust:	*Academic placement based at:*
Royal Free London NHS Foundation Trust (Royal Free Hospital)	Royal Free London NHS Foundation Trust (Royal Free Hospital)

Brief outline of department

HPB and Liver Transplant surgery is one of the lead clinical services at RFHL providing a regional HPB service and a supra-regional service in Liver Transplant Surgery.

The HPB and Liver Transplant research group is based in the University Dept of Surgery, Hampstead Campus, UCL and have major research programmes involving:

- evidence based healthcare,
- new technologies and image guidance in liver and pancreas disease.
- optimisation of peri-operative care
- liver tissue engineering
- organ preservation and treatment of ischaemia-reperfusion injury in liver transplantation.

Structure of academic project/what expected Trainees will be allocated an academic and clinical supervisor at the outset of the attachment who will ensure the aims of the attachment and of the Foundation Programme are met. The trainee will be allocated a research supervisor within the academic HPB and Liver Transplant research group who will discuss the ongoing research projects and identify a specific task and objectives for the research attachment based on the trainee's interests and research background.
Clinical commitments during academic placement The trainee will have no specific clinical commitments but will attend the clinical meetings and depending on their interests can be involved in clinical assessment and post-operative management of patients undergoing major HPB and Liver Transplant Surgery or can assist with selected major surgical procedures.
Departmental academic teaching programme (if applicable) The University Department of Surgery has very active postgraduate research programmes and the trainee will have an opportunity to attend basic research training sessions and a weekly programme of invited guest lecturers.
Academic Lead: Prof Brian Davidson Consultant HPB and Liver Transplant Surgeon Lead for HPB and Liver Transplant Surgery Research, Royal Free Campus, UCL Based at: Royal Free London NHS Foundation Trust E-mail address: b.davidson@ucl.ac.uk

Programme 4 – Rheumatology – based at Royal Free London NHS Foundation Trust (Royal Free Hospital)

Reference: 2324/UCL/04

Type of programme

Introduction to Rheumatology research

Employing trust:	*Academic placement based at:*
Royal Free London NHS Foundation Trust (Royal Free Hospital)	University College London Hospitals NHS Foundation Trust
Brief outline of department Rheumatology involves the management of the huge array of musculoskeletal disorders ranging from painful, but essentially degenerative, conditions such as osteoarthritis, to those such as rheumatoid arthritis and vasculitis which cause serious, long term major inflammation and disability. Its importance is emphasized	

by the fact that 20% of all GP consultations are for musculoskeletal complaints and the UK pays £30,000,000 per week in disability benefits to patients with these problems. UCL Medical School has a strong tradition of emphasising the importance of rheumatology. Several dynamic 'musculoskeletal' firms cover the topic comprehensively stressing the importance of clinical observation and capturing the current excitement about the introduction of biological agents designed to block individual key molecules known to be intimately involved in the development of inflammatory arthritis. The Rheumatology units are very interested in pastoral care ensuring that their trainees are given the best chance to develop a wide range of management and research skills. It is noteworthy that the current (Professor Jane Dacre) as well as a past (Professor Dame Carol Black) President of The Royal College, both from our own medical school; the Government Chief Scientific Advisor and former Head of the Wellcome Trust, Professor Mark Walport; a former winner of Doctor of the Year, Dr John Halsey, and the knighted, co-developer of TNF alpha blockade, Professor 'Tiny' Maini are all rheumatologists.
Structure of academic project/what expected Options exist to undertake either a laboratory-based project examining mechanisms of disease and/or response to therapy or clinical data review project.
Clinical commitments during academic placement At UCLH there will be the opportunity to attend specialist rheumatology clinics once a week.
Departmental academic teaching programme (if applicable)
Academic Lead: Dr Richard Stratton Centre for Rheumatology Based at: Royal Free London NHS Foundation Trust (Royal Free Hospital) E-mail address: r.stratton@ucl.ac.uk

Programmes 5 & 6 – Neurology and Neuroscience – based at Royal Free London NHS Foundation Trust (Royal Free Hospital)

Reference: 2324/UCL/05
Reference: 2324/UCL/06

Type of programme

Clinical and research training in neurology/neuroscience

Employing trust:	*Academic placement based at:*
Royal Free London NHS Foundation Trust (Royal Free Hospital)	Royal Free London NHS Foundation Trust (Royal Free Hospital)

Brief outline of department

The trainee is primarily based in the Department of Clinical and Movement Neurosciences at the Royal Free Hospital, based at the clinical Neurology department, which acts as a tertiary centre for several different hospitals with over 20 consultant neurologists, and the academic department, which is part of the UCL Institute of Neurology (http://www.ucl.ac.uk/ion/departments/clinical). There is a very active research programme, focusing mostly on Parkinson's disease.

Structure of academic project/what expected

The trainees will work in a large regional referral centre for neurological disease and will gain experience in a broad spectrum of acute and chronic neurological conditions. They will be exposed to particular sub-speciality aspects of neurology, including Parkinson's disease, neuromuscular disease, and epilepsy, and the combined clinical and laboratory investigations of neurological diseases. This placement is ideally suited to provide a solid clinical and academic foundation to those considering a career in neurology, but the experience will also be invaluable for other specialties. The department has a very active research programme, with Parkinson's disease a particular strength, including clinical and epidemiological research and clinical trials of new pharmacological approaches as well as basic molecular and genetic investigation of the underlying aetiology and biomarker research of disease. The trainees will be expected to participate in a clinical or lab-based research project within the department, and, if no suitable project is identified, appropriate projects across the entire UCL Institute of Neurology can be considered.

Clinical commitments during academic placement

2.5 days per week spent in the clinical neurology team, including a supervised outpatient clinic which provides an excellent early introduction to general neurology outpatient care.

Departmental academic teaching programme (if applicable)

Minimum of one-hour consultant teaching for neurology trainees per week. Weekly neurology clinical grand round with live case presentation and discussion, followed by lecture by internal or external speaker on various aspects of neurology and neuroscience. Weekly laboratory research meeting / journal club.

Academic Lead:

Prof Anette Schrag PhD FRCP
Professor of Clinical Neurosciences
Based at: Royal Free London NHS Foundation Trust (Royal Free Hospital)
E-mail address: a.schrag@ucl.ac.uk

Programmes 7 and 9 – Cellular Pathology – based at Royal Free London NHS Foundation Trust (Royal Free Hospital)

Reference: 2324/UCL/07
Reference: 2324/UCL/09

Type of programme

Research

Employing trust:	*Academic placement based at:*
Royal Free London NHS Foundation Trust (Royal Free Hospital)	Royal Free London NHS Foundation Trust (Royal Free Hospital)

Brief outline of department

Cellular Pathology is the basis of most medical theory, research and practice. This specialty comprises histopathology, which gives the diagnosis and other relevant information on biopsies and surgical resections; cytopathology, which gives the diagnosis on aspirated and other specimens of lesions; and autopsy pathology, which is still of importance in modern medicine. Many specialties rely on pathologists both in everyday practice and in research. These include gastroenterology and gastrointestinal surgery; hepatology, hepatobiliary surgery, and liver transplantation; nephrology and renal transplantation; urology; neurology and neurosurgery; dermatology and plastic surgery; breast surgery; gynaecology and obstetrics; and haematological oncology.

Structure of academic project/what expected

This rotation gives the opportunity for development of a wide range of skills practised in Cellular Pathology, for participation in the many tutorials given to pathologists in training, for helping to teach medical students, and for attendance at various clinicopathological meetings, which emphasise the role of the specialty in clinical management. There are also facilities for research on the great variety of material that is available, in collaboration with pathologists and others, and research will be encouraged and supported.

Clinical commitments during academic placement

None

Departmental academic teaching programme (if applicable)

Academic Lead:

Prof Alberto Quaglia
Professor of Hepatopathology
Based at: Royal Free London NHS Foundation Trust (Royal Free Hospital)
E-mail address: alberto.quaglia@nhs.net

Programme 8 – Medical Education – based at Royal Free London NHS Foundation Trust (Royal Free Hospital)

Reference: 2324/UCL/08

Type of programme

FY2 Medical Education post

Employing trust:	*Academic placement based at:*
Royal Free London NHS Foundation Trust (Royal Free Hospital)	Royal Free London NHS Foundation Trust (Royal Free Hospital)

Brief outline of department

The PME department at RFH is well established and has an excellent track record. There are 630 trainees and 130 clinical fellows. The department is supported by a strong administrative team. The structure of the senior faculty and the governance of education and training are clear and strong. There is a vibrant Simulation department presenting a huge range of additional opportunities. The department has hosted two foundation education FY2s in the past and also has the benefit of several part-time education fellows. There are strong links with the undergraduate medical school and also with trust non-medical training. There is a tradition of multi-disciplinary learning.

Structure of academic project/what expected

The FY2 trainee would be expected to participate in the life of the PME department. There would be twice weekly operation meetings with senior faculty. They would be expected to choose two to three specific education projects (from a large menu of possible projects or choose one of their own design) to develop, pilot, evaluate and present or publish during their time in the department. They will be mentored in Sim training and participate in several varied simulation activities. They will learn to use simulation equipment (Sim man, sim baby etc). They will be tutored and gain experience in feedback/de-brief and after-action reviews. They will participate in a monthly education journal club and be expected to present on more than one occasion. Their teaching sessions will be observed by a senior faculty member. Each teaching session will be evaluated by participants. The trainee will gain experience of multi-disciplinary teaching and will assist with the organization of the generic aspects of the FY1 mandatory teaching.

Clinical commitments during academic placement

The trainee will either gain some OPD experience in the institute of immunology and/or some evening/night A&E or MAU experience.

Departmental academic teaching programme (if applicable)

Journal club (once per month)
FY1 didactic and generic programme
FY2 didactic and introduction to healthcare leadership (multi-disciplinary)

Academic Lead:

Prof Aine Burns
Consultant nephrologist and Director of Post-Graduate Medical Education
Based at: Royal Free London NHS Foundation Trust (Royal Free Hospital)
E-mail address: aine.burns@nhs.net

Programmes 10 and 11 – Nuclear Medicine – based at Royal Free London NHS Foundation Trust (Royal Free Hospital)

Reference: 2324/UCL/10
Reference: 2324/UCL/11

Type of programme

Research

Employing trust:	*Academic placement based at:*
Royal Free London NHS Foundation Trust (Royal Free Hospital)	Royal Free London NHS Foundation Trust (Royal Free Hospital)

Brief outline of department

The department of nuclear medicine at the Royal Free hospital has the full range of diagnostic and therapeutic nuclear medicine facilities including radionuclide therapy and PET/CT.

Previous academic projects are varied but include research into imaging and therapy of neuroendocrine tumours, musculoskeletal hybrid imaging, nuclear cardiology, and lung scanning. Nearly all FY2 projects are accepted as presentations at academic conferences or as original articles in international peer-reviewed journals.

Structure of academic project/what expected

The Academic programme in Nuclear Medicine concentrates on functional imaging in the context of investigation of patients, and on research related to the techniques used and the evidence of clinical effectiveness. There will be particular links to endocrinology, oncology, and the Neuroendocrine Tumour Unit at the Royal Free Campus.

The trainee will thus gain an understanding of the requirements of research in Molecular Imaging. A wide range of diagnostic and therapeutic procedures (including radiological) are available. There will be access to specific teaching on the principles and practice of functional imaging and image analysis, and their application both in individual clinical cases and in research studies. The trainee will be expected to research issues of utility and selection of nuclear imaging techniques.

The goal is to give trainees the opportunity to experience and develop research techniques using the time and facilities in Nuclear Medicine, and to encourage consideration of a career in this field. Where possible, the individual interests of the trainee will be accommodated.

Clinical commitments during academic placement Varied, however, approximately 30% of the time. Most clinical commitments relate to cardiac stressing done as part of myocardial perfusion studies.
Departmental academic teaching programme (if applicable) Monthly departmental teaching plus regular audit meetings.
Academic Lead: Dr Thomas Wagner Consultant nuclear medicine physician Based at: Royal Free London NHS Foundation Trust (Royal Free Hospital) E-mail address: thomas.wagner@nhs.net

Programme 12 – Radiology – Royal Free London NHS Foundation Trust (Royal Free Hospital)

Reference: 2324/UCL/12

Type of programme

Research/audit/clinical liaison and Simulation lab

Employing trust:	*Academic placement based at:*
Royal Free London NHS Foundation Trust (Royal Free Hospital)	Royal Free London NHS Foundation Trust (Royal Free Hospital)

Brief outline of department

Radiology is a rapidly expanding specialty with Interventional Radiology a subspecialty in its own right. It incorporates all areas of applied medicine and demands intimate knowledge of anatomy. Trained interventional specialists require a detailed knowledge of pre- and post-operative disease and an excellent understanding of anatomy and pathological processes and their imaging findings. Radiologists interact with all sub specialities, but the Interventional Radiologists at the Royal Free site specialise in Vascular and Hepatobiliary (HPB) intervention. The Royal Free Hospital is now the largest adult HPB centre in the UK and the regional hub for Vascular surgery.
All trainees are encouraged and supported in entering abstracts for national and international meetings.

Recent areas of research from our Interventional Radiology Department include:

Review of the use of Avitene collagen flour paste in embolisation of percutaneous access site in hepatobiliary and renal intervention

Use of transabdominal ultrasound-guided transjugular portal vein puncture on radiation dose in transjugular intrahepatic portosystemic shunt

Structure of academic project/what expected The F2 doctor will be involved in the multicentre randomised trial NIHR Health Technology Assessment of resection vs ablation for high-risk patients with CRC liver metastases. Trial due to start Jan 2016. We would expect this to include the writing up and publication of the research. We would also hope to involve the trainee in continuing the research database.
Clinical commitments during academic placement The trainee with assist the Radiology Specialist Registrars and gain insights into the whole of the Radiology Department. They will be expected to attend MDTs and all departmental teaching and be involved in the simulation lab.
Departmental academic teaching programme (if applicable) Daily morning teaching and monthly departmental teaching meetings.
Academic Lead: Dr Mohamed Khalifa Consultant Interventional Radiologist & Endovascular Surgeon Based at: Royal Free London NHS Foundation Trust (Royal Free Hospital) E-mail address: mkhalifa@nhs.net

Programmes 13, 14 & 15 – Primary Care and Population Health – based at Whittington Health

Reference: 2324/UCL/13
Reference: 2324/UCL/14
Reference: 2324/UCL/15

Type of programme

Research

Employing trust:	*Academic placement based at:*
Whittington Health	UCL Department of Primary Care & Population Health, Royal Free Campus
Brief outline of department Three Academic F2 posts are hosted each year by UCL Department of Primary Care & Population Health (PCPH) working closely with other departments within the Institute of Epidemiology & Health Care. Our research focuses on health issues which are top priorities for patients and for health services. We research the entire life cycle of complex interventions, starting with understanding health problems from patients' perspectives, and using a range of	

research approaches (including qualitative, quantitative, modelling and health economic methods) to develop, evaluate and implement interventions within the following priority areas:

- Ageing
- eHealth
- Mental Health
- Sexual Health and Infection
- Medical Education

Our research teams involve many different disciplines, including doctors, nurses, physiotherapists, pharmacists, dentists, psychologists, epidemiologists, statisticians, sociologists, health economists, and patient and public representatives (Experts through Experience)

The department also has a major programme of undergraduate teaching, delivering 15% of teaching across all 6 years of the UCL undergraduate medical curriculum, as well as active postgraduate taught and research degree programmes. The department has a successful history of hosting academic training integrated with clinical roles.

Structure of academic project/what expected

During the PCPH Specialised Foundation attachment each trainee will be linked to an established research unit, according to interest and availability. They will participate as a member of the research group, attending project meetings and undertaking research related tasks, either on currently funded projects, or on projects under development. Trainees will be exposed to a variety of research methods and have the opportunity for individualised training related to the project. Training in research methods is also available in face-to-face short course or online module format. Opportunities for training are available in medical statistics, quantitative and qualitative research methods. Trainees will also be encouraged to take a broader view of their clinical work, consistent with their academic perspective with opportunities to participate in the wide range of educational programmes delivered by this flagship multidisciplinary department. Trainees will also be able to participate in a range of short teaching courses and will have opportunities to teach medical students.

Academic options
Two academic options are offered in this rotation:

(1) Primary care
(2) Clinical Epidemiology

(1) Primary care
The trainee will be based in PCPH attached to one of the Department's primary care research groups

(2) Clinical Epidemiology
The Institute of Epidemiology and Health Care hosts research teams across a broad range of interests including cardiovascular and genetic epidemiology, life course epidemiology, health services research and psychobiology.

Aims of the post

The aim of the specialised foundation curriculum is to combine clinical training with opportunities for trainees to develop skills and knowledge in research to equip them for future training for an academic career. Trainees will be expected to acquire all the core competencies of foundation training, but in addition will be offered a range of opportunities to gain knowledge and skills related to both research and teaching.

Intended learning outcomes

The precise academic knowledge and skills gained will vary to some extent depending on the interests of the individual trainee. However, it is intended that this attachment will enable all PCPH F2 trainees:

- To gain an overview of the scope of clinical, epidemiological and health services research
- To learn about research methods and their appropriate application
- To learn about sources of knowledge and knowledge management
- To learn how to form research questions
- To learn how to critically appraise research
- To undertake a systematic search, evaluation and synthesis of previous research related to a chosen question
- To understand basic statistics and their application to research
- To understand the sources of funding for research and financial management of research
- To understand the ethics of research, consent and confidentiality
- To understand how research is regulated and governed
- To write a research protocol
- To plan and if possible, undertake a pilot study
- To demonstrate ability to plan, deliver and evaluate a teaching session/academic presentation.

Clinical commitments during academic placement

There is no formal requirement for clinical activity in this post, but individuals will have the opportunity to undertake short shadowing attachments by arrangement in general practice or other clinical specialties of their choice.

Departmental academic teaching programme (if applicable)

In addition to the Foundation Programme's own academic seminars UCL offers a variety of research and teaching courses suitable for those pursuing academic careers. Specialised Foundation trainees will have the opportunity to attend these and should review, at the start of the rotation, with their academic mentor those that will be especially relevant.

Academic Lead:

Professor Joe Rosenthal
Clinical Professor of Primary Care Education
Based at: Department of Primary Care & Population Health, UCL Royal Free
E-mail address: j.rosenthal@ucl.ac.uk

Programme 16 – Hepatology – based at Royal Free London NHS Foundation Trust (Royal Free Hospital)

Reference: 2324/UCL/16

Type of programme

Research

Employing trust:	*Academic placement based at:*
University College London Hospitals NHS Foundation Trust	Royal Free London NHS Foundation Trust (Royal Free Hospital)

Brief outline of department

Hepatology is a major clinical speciality, and UCL has one of the largest academic departments of Hepatology in the UK and in Europe. The clinical practice is the investigation and treatment of all types of liver disease, from the investigation of abnormal liver function tests to liver transplantation. The associated clinical and laboratory science includes subjects as varied as chronic viral disease, hepatic fibrogenesis, liver regeneration and tissue bioengineering, the immunology of liver disease including transplant rejection, the pathophysiology of liver failure, cellular and molecular biology, hepatocyte transplantation, gene therapy, primary liver cancers, interventional radiology and biliary endoscopy.

Structure of academic project/what expected

The academic attachment will include an attachment to a specific clinical scientist/investigator for training, with a defined achievable project intended to lead to a publication or presentation. Clinically orientated laboratories using physiological, biochemical, immunological and cellular and molecular biotechnologies are in current use in well-equipped laboratories. Clinical projects might involve biliary endoscopy, alcoholic liver disease, non-alcoholic fatty liver disease, immune-mediated liver disease, cirrhosis and complications of portal hypertension and clinical trials such as the use of anti-viral agents for chronic hepatitis, new approaches to immunosuppression, and improvements in the management of acute and acute on chronic liver failure.

Trainees may also have some clinical training relevant to the understanding of and treatment of severely ill patients, applicable to many other specialities such as intensive care, nephrology and cardiology, and direct involvement will provide important training in the F2 competencies. Trainees will be allocated an academic and clinical supervisor who will ensure that the aims of the attachment and of the Foundation Programme are met.

Clinical commitments during academic placement

None

Departmental academic teaching programme (if applicable) Journal club, regular research seminars/guest lectures, clinical meetings (weekly updates in Hepatology, radiological and histopathological conferences)
Academic Lead: Prof. Massimo Pinzani, Sheila Sherlock Chair of Hepatology, UCL Institute for Liver and Digestive Health Based at: Royal Free London NHS Foundation Trust (Royal Free Hospital) E-mail address: m.pinzani@ucl.ac.uk

Programme 17 – Paediatrics – based at University College London Hospitals NHS Foundation Trust

Reference: 2324/UCL/17

Type of programme

Research

Employing trust:	*Academic placement based at:*
University College London Hospitals NHS Foundation Trust	University College London Hospitals NHS Foundation Trust and Great Ormond Street Institute of Child Health

Brief outline of department

Paediatrics is a challenging and rewarding specialty with major innovations ongoing driven in part by clinician scientists under the auspices of the NIHR child health network and other funding bodies. Academic Paediatrics encompasses a vast area ranging from the genetics and molecular biology of congenital diseases, through improved understanding and management of prematurity and chronic childhood conditions to environmental, social and educational influences on the developing child. Our programme will integrate clinical training in Neonates and General Paediatrics at University College London Hospital with formal research training sessions at the Institute of Child Health and Great Ormond Street; opportunities for short projects will also be offered at these sites, which have an international reputation for excellence in clinical and basic academic research.

Structure of academic project/what expected

Our programme aims to nurture future Academic Paediatricians. Trainees will be fully integrated into our teaching and research programmes, with core training in basic Paediatrics suitable for the foundation stage and exposure to diverse research areas that will enable them to make an informed decision on their future academic direction. At least one day per week will be spent on basic research training, with dedicated foundation programme sessions and a choice of additional 'taster' modules from higher degree courses. Each trainee will have an academic and clinical supervisor, and regular meetings will be arranged to optimise their experience of Academic Paediatrics within the framework of the general Foundation Programme requirements. Almost all of the talented individuals appointed to this post get in touch in advance (once formally appointed) and get opportunities before

joining the placement. Almost all have moved on to ACF's and all have published during their placement. UCL GOS ICH is the second-best research cluster in the world for child health research and if you start with us, it will set you on a path to a successful career in Academic Paediatrics.
Clinical commitments during academic placement Clinical commitments are small, this is in essence a research placement with exposure to branches of paediatrics arranged by the academic lead, in agreement with the appointee according to his/her interests.
Departmental academic teaching programme (if applicable) Institute for Child Health has a huge postgraduate programme and is particularly strong in statistical courses.
Academic Lead: Professor A G Sutcliffe MD PhD FRCPCH Professor of General Paediatrics ICH, UCL, Honorary Consultant Paediatrician at GOSH Based at: UCL GOS Institute of Child Health E-mail address: a.sutcliffe@ucl.ac.uk

Programme 18 – Psychiatry – based at Camden and Islington Foundation Trust (linked to University College London Hospitals NHS Foundation Trust)

Reference: 2324/UCL/18

Type of programme

Research

Employing trust:	*Academic placement based at:*
University College London Hospitals NHS Foundation Trust	UCL Division of Psychiatry/ Camden and Islington Foundation Trust
Brief outline of department UCL is the top-ranked university in the UK for research power in Psychology, Psychiatry and Neuroscience (UK's Research Excellence Framework 2021). The UCL Division of Psychiatry comprises the Epidemiology and Applied Clinical Research Department, the Marie Curie Palliative Care Research Department, Mental Health Neuroscience Department and Mental Health of Older People Department. Researchers in the division conducts internationally recognised research in psychiatric epidemiology, molecular genetics, dementia, psychosis, depression, palliative care, health services research and randomised trials of complex treatments in primary and mental health care. The Head of the Division is Professor Glyn Lewis.	

Structure of academic project/what expected The academic FY2 post will provide a mixture of research and clinical experience depending on individual needs of the trainee. The goal is to give trainees the opportunity to experience and develop research techniques and gain an understanding of the requirement of research They will learn skills such as formulating a research question, critically appraising a paper, undertaking a systematic literature review, undertaking a research project, and writing up for publication/presentation. There may be involvement in undergraduate teaching.
Clinical commitments during academic placement Where appropriate, the trainee will learn how to take a history, mental state examination, produce a psychiatric formulation and initial management plan and undertake risk assessments.
Departmental academic teaching programme (if applicable) There will be opportunities to participate in a range of educational programmes in the academic department and mental health trust.
Academic Lead: Dr Sergi Costafreda Gonzalez Associate Professor, Dementia research and Consultant Based at: UCL and Camden and Islington Foundation Trust E-mail address: s.costafreda@ucl.ac.uk

Programme 19 – Women's Health – based at University College London Hospitals NHS Foundation Trust

Reference: 2324/UCL/19

Type of programme

This programme aims to provide the post holder with experience of research in a leading research group within Women's Health. Training will be provided in relevant methodologies. The immediate goal will be to provide an opportunity to acquire novel research data for presentation/publication.

Employing trust: University College London Hospitals NHS Foundation Trust	*Academic placement based at:* Institute for Women's Health, University College London
Brief outline of department Obstetrics & Gynaecology (O&G) is the core of Women's Health. It provides a unique combination of medical and surgical skills and the care of healthy people	

(e.g. normal pregnancy or for contraception) and ill patients (e.g. pregnancy complications, gynaecological cancers). It plays a major part in the prevention of disease (e.g. cancers, birth defects) and in promoting the health of future generations.

The Institute for Women's Health (http://www.ucl.ac.uk/womens-health) links 4 internationally recognised research Departments in
Maternal Fetal Medicine, Women's Cancer, Reproductive Health and Neonatology, with corresponding clinical departments within UCLH. This unique pairing of clinical and research skills provides a fantastic setting for a junior clinical academic trainee to learn appropriate research skills. The Institute has hosted a regular throughput of academic trainees on the Integrated academic pathway since the scheme was started. As an example, past holders of academic FY2 posts have been involved in projects addressing the mechanism contributing to preterm labour, gene therapy for foetal growth restriction, the role of epigenetic regulation in determining fetal size at birth as well as a study into the global use of contraception.

Structure of academic project/what expected

The goal is to give trainees the opportunity to gain an understanding of research methodology, exposure to research techniques and undertake a research project. They will acquire skills such as formulating a research question, critically appraising a paper, undertaking a systematic literature review/project and writing it up for publication/presentation.
Trainees will meet and discuss potential projects with the senior investigators in all research departments in FY1, prior to finalising a research project of their choice which they will undertake during their academic block in FY2. They are encouraged to liaise with their project leads and where possible complete GCP, Data Protection and other basic research courses prior to start of the project. They will be expected to participate in the research activities of the department.

Clinical commitments during academic placement

Owing to the relatively short period of time available in the academic block, research activity is the predominant component. The post holder will undertake limited clinical activity where it is relevant to the research being undertaken e.g. working in a specialist clinic and helping recruit patients.

Departmental academic teaching programme (if applicable)

Applicants will engage in the regular teaching programme available within the Institute as well as the NHS Trust.

Academic Lead:

Professor Dimitrios Siassakos
Professor in Obstetrics and Gynaecology
Based at: University College London Hospitals NHS Foundation Trust
Institute for Women's Health, University College London
E-mail address: d.siasakos@ucl.ac.uk

Programme 20 – Clinical Pharmacology/Cardiovascular Medicine – based at University College London Hospitals NHS Foundation Trust

Reference: 2324/UCL/20

Type of programme

Research-based attachment in basic or clinical laboratories

Employing trust:	*Academic placement based at:*
University College London Hospitals NHS Foundation Trust	University College London Hospitals NHS Foundation Trust

Brief outline of department

The attachment offers high-quality experience and training in clinical academic medicine in a unit with strengths in the delivery of evidence-based clinical care, as well as biomedical and translational research. The clinical firm cares for patients presenting to University College Hospitals (UCLH) with a broad range of general medical, multisystem and cardiovascular disorders, and there are close links with the specialist services Cardiology, Heart Failure, Renal and Endocrine services. Consultants and trainees are involved in evaluating new medicines for inclusion in the hospital formulary and in the development of drug policy and use a rigorous evidence-based approach. Research activity is located in close proximity to the hospital at the Centres for Clinical Pharmacology and Cardiovascular Medicine, UCL Institute of Cardiovascular Science and the Farr Institute of Health Informatics Research at UCL, where research groups are engaged in genomic medicine, understanding the fundamental basis of cardiovascular disease, and key underlying processes including inflammation and atherogenesis supported by the British Heart Foundation, MRC, and Wellcome Trust.

There are well-equipped BHF-funded laboratories with core facilities for cell culture, patch-clamping, FACS analysis, genomics, organ bath pharmacology and clinical investigation. Interests range from the molecular electrophysiology of cardiac and vascular cells, through the regulation of endothelial function and the basic biology of endothelial mediators in health and disease, to genetic epidemiology, health informatics and systematic reviews of healthcare interventions.

Structure of academic project/what expected

Mentors will support trainees in their clinical and academic development during this attachment, preparing them for a career as academic physicians.

Clinical commitments during academic placement

None

Departmental academic teaching programme (if applicable)

Weekly Grand Round. Weekly seminar series. Weekly post clinic teaching meeting. Monthly firm meetings with invited speakers Regular research in progress meetings and departmental seminars.

Academic Lead:

Professor Aroon Hingorani
Professor of Genetic Epidemiology, Chair of Genetic Epidemiology
Based at: University College London Hospitals NHS Foundation Trust
E-mail address: a.hingorani@ucl.ac.uk

Programme 21 – Anaesthetics – based at University College London Hospitals NHS Foundation Trust

Reference: 2324/UCL/21

Type of programme

Quality improvement/research/audit/clinical liaison

Employing trust:	*Academic placement based at:*
University College London Hospitals NHS Foundation Trust	University College London Hospitals NHS Foundation Trust

Brief outline of department

Anaesthesia and Perioperative Medicine clinicians interact with almost all acute medical and surgical specialities across the spectrum of acute illness. Alongside our clinical care we are an exciting, dynamic and welcoming group engaged in moving forward the care of patients having surgery.

Our department of Anaesthesia and Perioperative Medicine has experts in perioperative medicine, clinical trials, quality improvement, preoperative risk assessment and exercise physiology. We run an innovative MSc in Perioperative Medicine and teach on many other of UCL's programmes such as cardiovascular and respiratory physiology. We teach MBBS students in years 1, 4 and 6.

Structure of academic project/what expected

Trainees will be directly involved in quality improvement, educational and perioperative medicine projects in a very supportive atmosphere. For current details please consult www.ucl.ac.uk/anaesthesia and/or contact Dr Robert Stephens (see below).

Clinical commitments during academic placement

Trainees will have some time in theatre, preoperative assessment, exercise testing and the post anaesthesia care unit all with dedicated teaching doctors. This is so the trainees understand the processes involved. Trainees can also do our unique online learning module in Perioperative Medicine.

Departmental academic teaching programme (if applicable) Weekly QI Tuesday meeting- Dr Ramani Moonesinghe's Group. A rolling dynamic programme of external and internal presentations on quality improvement
Academic Lead: Dr Robert CM Stephens Associate Professor in Anaesthesia & Perioperative Medicine Based at: University College London Hospitals NHS Foundation Trust E-mail address: robcmstephens@gmail.com

4. THE MEDICAL SCHOOL AND PARTNER TRUSTS

UCL Medical School
UCL Medical School is committed to excellence in education and has a strong reputation for teaching informed by cutting-edge research. The school has a distinguished cadre of academic staff who are at the forefront of international research in medical sciences and clinical medicine.

Staff research activities, directed towards patient-centred outcomes, are supported by partnerships with NHS trusts. Several world famous clinical and research institutions are closely associated with the Medical School. The school is one of the largest in the country and is situated in the heart of London at three main campuses; the Bloomsbury campus, the Royal Free campus, and the Whittington campus; all with clinical facilities, teaching laboratories, lecture theatres and libraries.

UCL Medical School has a distinguished history; it emerged from the amalgamation of Middlesex Hospital, University College Hospital and the Royal Free Hospital. These organisations combine a rich past in the history of science and medicine with advanced clinical practice. Among past and present staff are Nobel Prize winners (Huxley, Hill and Katz) and numerous Fellows of the Royal Society and the Academy of Medical Sciences.

The North Central Foundation School has academic training programmes in the following Trusts:

Royal Free Hospital (Royal Free London NHS Foundation Trust)
The Royal Free Hospital has around 900 beds and sees about 700,000 patients a year from all over the world. The Trust employs around 4,600 people and has a turnover of about £450m. The services include a major accident and emergency service, all branches of surgery and medicine, a renal service serving the whole of north London, paediatrics, maternity services, care of elderly people, an adolescent psychiatric service and one of two high security infectious diseases units in the country.

Royal Free is renowned for their specialist services including liver, kidney and bone marrow transplantation, renal, AIDS/HIV, infectious diseases, plastic surgery, immunology, paediatric gastroenterology, ENT surgery and audiological medicine, amyloidosis and scleroderma. The Trust is a leading cancer centre with a range of specialist diagnostic and treatment services in oncology and haematology and a major neuroscience base with a network extending throughout north London and into the Home

Counties. There are associated internationally recognised research and training programmes.

The hospitals and associated medical school conduct medical research, much of which is of international status, and constitute a leading site for the training of doctors, nurses, midwives, and professions allied to medicine.

The Whittington Heath

The Whittington Health is an acute general teaching hospital situated in Archway, in the north of Islington. The Trust primarily serves the communities of north Islington and west Haringey, a population of approximately 250,000 people. The hospital also treats a significant number of patients from Camden, Barnet and Hackney. There are 467 beds and over 2,000 staff. The Whittington is one of the teaching hospitals of the University of London. The Trust provides clinical placements for undergraduates and has a large post-graduate training centre. In addition, it provides training for a wide range of other health professionals including nurses, midwives, radiographers and dieticians.

University College London Hospitals NHS Foundation Trust

University College London Hospitals NHS Foundation Trust (UCLH), situated in the heart of London, is one of the most complex NHS Trusts in the United Kingdom, serving a large and diverse population. UCLH provides academically led acute and specialist services, both locally and to patients from throughout the United Kingdom and abroad. UCLH balances the provision of highly rated specialist services with providing acute services to the local populations of Camden, Islington, Westminster and the City of London.

The Trust has a turnover of £632 million and contracts with more than 150 Primary Care Trusts to provide services. They treat over 500,000 outpatients' appointments and admit 100,000 patients each year. UCLH employs 6,000 staff and is a major teaching centre offering training for nurses, doctors and other health care professionals.

The Trust has an international reputation and a tradition of innovation. Their excellence in research and development was recognised in December 2006 when in partnership with University College London they became one of the country's five comprehensive biomedical research centres. Operational from September 2008, UCL Partners was created, bringing together five of Britain's world-renowned medical research centres and hospitals: UCL (University College London); Great Ormond Street Hospital for Children NHS Trust (GOSH): Moorfields Eye Hospital NHS Foundation Trust; the Royal Free London NHS Foundation Trust; and University College London Hospitals NHS Foundation Trust.