UNIVERSITY OF CAMBRIDGE

NHS

Health Education East of England

Academic Foundation Programme (UoA: Cambridge)

To commence
August 2019

INFORMATION FOR APPLICANTS

Contents

INTRODUCTION

The Cambridge Academic Foundation Programme (AFP) is part of Health Education East of England's East Anglian Foundation School. It is a well-established and successful programme which, between 2009 and 2018, has seen 180 trainees join the Programme. The majority of trainees who complete their AFP at Cambridge continue on an academic pathway. Of those with a known destination, just under half went on to an ACF programme and in total over half (67%) took an academic route. For more information on the East of England Foundation Schools and the University of Cambridge, please see Appendices 1 & 2 which includes website links.

The East Anglian Foundation School, University of Cambridge and Cambridge University Hospitals Trust all work together to offer Academic Foundation Programme trainees clinical and academic rotations that meet their clinical and academic needs. The Programme is well supported in departments and being based on Cambridge Biomedical Campus for their Year 2, trainees have access to outstanding researchers and leading clinicians in their field.

The programme expanded in 2017 with a new partnership following the creation of the Essex, Bedfordshire, and Hertfordshire Foundation School and with the benefit of funding from the NIHR BRC. There are now a total of 24 posts in the Cambridge Academic Foundation Programme. More information on the Essex, Bedfordshire, and Hertfordshire Foundation School can be found on Health Education East of England's website.

All involved in the development, recruitment, and administration of the Programme are proud of what we offer and the trainees who join us.

We are keen to encourage applications from talented candidates with academic potential who would like the opportunity to work in an academic environment or who are already committed to an academic career path. These posts will deliver the core competencies of Foundation Training and will be enhanced by an academic curriculum.

This Pack contains information that will help you complete your application. In addition to the information you find here, please follow the links included throughout the document for further information.

The East of England Foundation School manages the **application process** locally. Any queries related to application requirements, eligibility, Oriel, shortlisting or interview notifications, offers and similar should be directed to them. Email: recruitment.eoe@hee.nhs.uk

The Academic Foundation Programme Director in Cambridge is Professor Andrew McCaskie. Queries related to the academic options or the overall programme can be directed to the Clinical Academic Training Office (CATO) office. Email: cato@medschl.cam.ac.uk

Academic Foundation Programme, Cambridge – August 2019 start

Background

A place on the Academic Foundation Programme offers the opportunity to spend protected time on academic research. At Cambridge, this will be one four-month rotation during FY2. The remaining five rotations will be clinical attachments, during which clinical competencies must be met.

In Foundation Year 1, trainees are based at District General Hospitals in Bedford, Bury St Edmunds, King's Lynn, Peterborough, Stevenage or Harlow. Foundation Year 2 brings them back to Cambridge, to complete two further clinical rotations and their academic rotation at Cambridge University Hospitals Trust, Addenbrooke's. Website links to Addenbrooke's Hospital and the District General Hospitals can be found at Appendix 2.

During their academic block, Foundation Year doctors have no clinical commitments but will be required to keep up with their training portfolios. This may include attendance at a clinic or a documented case discussion and will be outlined by your Department when you join it.

There are 24 posts available to start in August 2019. We will recruit 3 trainees to each of the following academic options: Medicine, Neuro-Critical Care & Pain, Neurosciences, Surgery and Choice A, B and C and D.

The 'Choice' options reflect the support for the Academic Foundation Programme within the academic departments and gives trainees the opportunity to select their academic rotation from one of the following: Clinical Radiology, Experimental Medicine & Immunotherapeutics, Haematology, Medical Microbiology, Oncology, Paediatrics, Psychiatry and Transplant and Regeneration.

On the following pages, you will find detailed information on each of the academic options available. The link to the 2019 rotations for Cambridge is here. This is for information only and correct at the time of publication – please make sure you use the post references as per Oriel when making your application.

Trainees that are offered a Choice D post will be contacted periodically by Clinical Academic Training Office (CATO) as part of the NIHR BRC funding process and reporting procedure.

ACADEMIC ROTATIONS

MEDICINE

Overview

The Department of Medicine is the largest department in the Clinical School, comprising 12 divisions, each involved in research related to human disease. The Department of Medicine currently houses 24 professors and over 750 directly employed and affiliated research and support staff. The department currently holds grants to the value of approximately £145m, with an annual expenditure of approximately £15m.

Research Component

Principal investigators in the Department of Medicine are a mix of clinical and non-clinical scientists, and direct world-class research programmes in the fields of

Cardiovascular Medicine
Diabetes and Endocrinology
Experimental Medicine and Immunotherapeutics
Gastroenterology and Hepatology
Immunology
Infectious Diseases
Metabolic Medicine
Renal Medicine
Respiratory Medicine
Rheumatology

The research interests of the Divisions are necessarily broad, although many groups work in the general area of immunity, inflammation and infection. Investigators in the Department perform high quality basic scientific as well as translational research, and to do this maximise synergy with other scientists on the Cambridge Biomedical Campus and throughout the region. Research is focused on areas of relevance to human disease, with the aim being to understand the mechanisms of disease and to deliver novel therapeutic approaches to the clinic.

AFY trainees will find a rich field of research opportunities to choose from. Details on the scope, breadth and depth of these research programmes can be found at http://www.med.cam.ac.uk (see also Cambridge Immunology at http://www.immunology.cam.ac.uk).

Given the vast number of opportunities, personal advice and guidance for trainees admitted to the programme is available through the AFY lead for Medicine, Arthur Kaser.

Department Academic Teaching/ Department Expectations

During their four-month attachment, AFY trainees will be embedded within thriving research environments within individual labs and be exposed to and learn pertinent state-of-the-art (experimental, clinical, and computational) techniques. They will work on a specific research project and receive formal training relevant to the context of the chosen research. This will also create an excellent environment to identify research groups to team up with for future research, e.g. to prepare for PhD or post-doctoral fellowship applications.

Lead Academic

Professor Arthur Kaser ak729@medschl.cam.ac.uk http://www.med.cam.ac.uk/

CLINICAL NEUROSCIENCES

Overview

Neuroscience in Addenbrooke's Hospital enjoys a long and formidable academic history. The Department of Clinical Neurosciences comprises Neurology, Neurosurgery and the Cambridge Centre for Brain Repair. From the clinical perspective both the Neurology and Neurosurgery are leading academic units with international reputations.

Research Component

In Neurology, areas of research expertise encompass the neurodegenerative disorders (Alzheimer's disease, Huntington's disease, Parkinson's disease), neuroinflammatory disease (multiple sclerosis and antibody-mediated disorders), stroke, neurogenetics and mitochondrial disorders. Patient-based studies are supported by world-class neuroimaging (including 7T MRI and PET-MRI) at the Wolfson Brain Imaging Centre and cognition research in collaboration with the MRC Cognition and Brain Sciences Unit. The Department has a strong track record in therapeutics, with the pioneering of novel monoclonal antibody treatments for MS and involvement in stem cell-based treatments for Huntington's disease, as well as in diagnostics such as the use of app- and VR-based navigation tasks to detect preclinical Alzheimer's disease. Lab-based research into disease mechanisms are undertaken within the Department and in the Centre for Brain Repair, and in this context Cambridge is one of the centres for the UK Dementia Research Institute which aims to elucidate mechanisms of disease with a view to developing disease-modifying therapies.

In Neurosurgery, research into neurovascular disorders, traumatic brain injury, hydrocephalus, brain tumours and spinal disorders complements a wide ranging clinical practice which includes both adults and children. Current projects include the application of advanced cerebral imaging (MRI, XeCT, PET and 3D CT) and multimodality monitoring (e.g. intracranial pressure, microdialysis, brain oximetry, transcranial Doppler, near-infrared spectroscopy. These methods are used to evaluate head injury, stroke, brain tumours and other cerebral disorders. There is also a growing clinical trial portfolio that will provide experience with trial management and design.

For further information on current research interests please see our list of postgraduate research projects on http://www-neurosciences.medschl.cam.ac.uk/postgraduate-training/projects/

Department Academic Teaching/ Department Expectations

Each trainee will be expected to:

1. Participate in a new and/or ongoing research project under a named supervisor. This work may form part of a higher degree or pave the way for an application to do so.
2. Contribute to abstracts, peer reviewed publications and grant applications as appropriate.
3. Present at Neuroscience meetings.
4. Participate in the research/ laboratory meetings of the research supervisor's group.
5. Attend Clinical Departmental and Academic meetings.
6. Attend outpatients as appropriate.
7. Foster links with senior members of the Department with the aim of considering a future academic career

Lead Academic

Dr Dennis Chan dc598@medschl.cam.ac.uk http://www-neurosciences.medschl.cam.ac.uk/

NEURO-CRITICAL CARE & PAIN

Overview

Established in 1991, the University of Division of Anaesthesia provides a world-class academic environment with research programmes in brain injury, major trauma, critical illness and persistent pain. The Academic FY2 rotation in Neuro-Critical Care & Pain combines clinical training in an acute medical specialty and critical care with an introduction to research. We encourage applicants with academic and clinical aspirations in a range of specialties, including anaesthesia, intensive care medicine, emergency medicine, acute medicine, rheumatology, palliative care, neurology and neurosurgery.

Research Component

Successful applicants can choose to join in a current research theme within the Division of Anaesthesia (http://anaesthetics.medschl.cam.ac.uk/) or work in the laboratories of our research collaborators in the University of Cambridge. The programme provides opportunities for exposure in genetics, cellular biology, systems neuroscience and data science, with links to all clinical specialities but particularly those mentioned above (see **Overview**). Additionally, the Academic Division is linked to regional, national and international clinical and research networks, including East England Major Trauma Network, NIHR-Health Informatics Collaborative, Collaborative European NeuroTrauma Effectiveness research.

Department Academic Teaching/ Expectations

The AFY placement will be overseen by Professor David Menon (Head of Division) and Dr Michael Lee (Programme Lead) with day-to-day supervision by a named investigator. All AFY appointees will be offered a formal interview prior to starting the attachment, after which a suitable project or supervisor will be identified.

During the 4 month attachment, AFY trainees are expected to (i) provide a written review of scientific literature relevant to their project, (ii) acquire methodological skills (iii) develop an understanding of ethical and governance issues that are particular to critically ill adults unable to consent for themselves or experimental pain research methods, (iv) present at least one research abstract at a scientific conference and (v) participate in relevant group or departmental meetings, hospital rounds or clinics.

Past appointees have gone on to a range of posts, including NIHR Academic Clinical Fellowships, ACCS schemes, core medical training, fellowships in intensive care, pain medicine and run-through neurosurgical training.

Lead Academic

Dr Michael Lee ml404@cam.ac.uk or Professor David Menon dkm13@cam.ac.uk.

AFY applicants are encouraged to directly contact investigators within the Division of Anaesthesia for information on specific research themes, or potential projects.

SURGERY

Overview

The University Department of Surgery is one of the leading academic surgical departments in the UK and offers a stimulating and challenging academic environment in which to gain experience of surgical research. The major research focus of the department is organ transplantation, regenerative medicine and tissue engineering. This research interest is aligned to the world-renowned multi-organ transplant unit and to the Division of Orthopaedic Surgery at Cambridge University Hospitals NHS Foundation Trust. Cambridge is the only fully integrated abdominal organ transplant unit in the UK offering kidney, pancreas, liver and intestinal/multi-visceral transplantation. The transplant unit offers a fully integrated multi-professional environment for training with close working relationships between consultant transplant surgeons, nephrologists, hepatologists and gastroenterologists. The Department holds the NIHR Blood and Transplant Research Unit in Organ Donation and Transplantation under the directorship of Prof Nicholson. Regenerative medicine is the major research focus of the Division of Orthopaedic Surgery, led by Prof Andrew McCaskie, the Director of the Arthritis Research UK Tissue Engineering Centre and the Head of the Department of Surgery. He leads a translational research programme with emphasis on regenerative therapy in Osteoarthritis. This work ranges from stem cells to advanced materials and the associated clinical translation.

Research Component

During the research attachment you will be expected to select a clinically based research project to undertake with help and guidance from the senior academics within the department of surgery. There are many potential projects to choose from, including projects which are already on-going and those which you will fully develop yourself. In addition, you will be encouraged to write up a paper, case report or review. The experience will provide a stimulating introduction to clinical research and is expected to lead to a publication and presentation of results both locally and nationally. You will also have the opportunity of contributing to research meetings and journal clubs within the department of surgery.

Department Academic Teaching/ Department Expectations

You will gain excellent experience in the medical and surgical management of all types of abdominal organ transplantation in a supportive and evidence based clinical environment. This includes the management of patients with life-threatening and complex problems in the high dependency beds within the transplant unit. Ward rounds are multidisciplinary and allow involvement in all aspects of management of patients undergoing transplantation.

You will gain an excellent introduction to clinical research and an understanding of the scope and nature of academic surgery.

Lead Academic

Professor Michael Nicholson mln31@cam.ac.uk http://surgery.medschl.cam.ac.uk/

CHOICE A, B, C and D

Overview

Trainees can select one of the 8 Choice academic options available. They are Clinical Radiology, Experimental Medicine and Immunotherapeutics, Haematology, Medical Microbiology, Oncology, Paediatrics, Psychiatry and Transplant and Regeneration.

Posts will be offered in order of final ranking. You will be asked to confirm your academic specialty preference. Again, you do not have to have made a decision but please be aware that Departments will find it easier to accommodate you the more notice they are given.

CLINICAL RADIOLOGY

Overview

The University Department of Radiology is located on the Addenbrooke's site and is closely integrated with the Cambridge University Hospitals NHS Foundation Trust Department of Radiology. The department provides a wide range of research and educational activity along with clinical imaging services within the NHS. We have access to some of the best imaging equipment available and Radiology is now one of the most popular and competitive training programmes in the UK. We have been running a highly successful Academic Clinical Fellowship programme in Radiology since 2006 and we are now offering experience in Clinical Radiology to more junior trainees as part of the AFY programme.

Research Component

Imaging has become an essential part of the biomedical sciences, not only for diagnosis and monitoring of subsequent therapy, but also for providing unique insights into causation of disease, pathophysiology and the translation of novel treatments from the laboratory into patients. We have world-class imaging facilities both clinically and pre-clinically; the University of Cambridge is among the leading centres for imaging research in the UK and undertakes world-leading research in many areas. The University Department of Radiology has close links with many other departments/institutes to facilitate this research e.g. CRUK Cambridge Institute, Wolfson Brain Imaging Centre, Departments of Clinical Neuroscience, Medicine, Oncology and Engineering. Mentorship will be provided within the department to successful candidates.

During the academic phase of this rotation, Foundation Year doctors have no clinical commitments but will be required to maintain their training portfolios. This may include attendance at documented case discussions and will be outlined when you commence your rotation. There will be the opportunity to attend clinical reporting sessions in plain films, CT, MRI, ultrasound as well as gaining experience in other aspects of imaging such as nuclear medicine (including PET) and radiological intervention. Trainees can attend multidisciplinary team meetings and clinic-radiological conferences as well as the weekly radiology lecture series on Wednesday. However, given the short attachment to the departments we encourage you to dedicate this stage of the rotation to research.

Department Academic Teaching/ Department Expectations

The department has a strong track record for research. Trainees will be given the opportunity to pursue their own interests where possible and will be assigned a supervisor and a specific project during the programme. Trainees will be encouraged to present their results at national conferences as well to produce peer-reviewed publications from their work. This programme will be an excellent preparation to consider an application for ACF training and/or a higher degree in medical imaging. Trainees will be taught the skills to achieve their own publications in co-operation with the lecturers, professors and consultant staff.

Lead Academic

Dr Ferdia Gallagher fag1000@cam.ac.uk http://radiology.medschl.cam.ac.uk/
Dr Tristan Barrett tb507@medschl.cam.ac.uk

EXPERIMENTAL MEDICINE AND IMMUNOTHERAPEUTICS

Overview

EMIT (Experimental Medicine and Immunotherapeutics) is part of the department of Medicine that has a very strong international scientific reputation. EMIT seeks to lead on translational experimental medicine projects on Campus. Many of these are undertaken in collaboration with the two world-leading Pharmaceutical companies that are located on the Addenbrooke's Campus (Astra-Zeneca, including MedImmune, and GSK).

Research Component

The protected research components of this programme can be undertaken in a variety of established labs on Campus or within groups of our on-site Pharmaceutical partners. The breadth of our work is shown here: http://www.med.cam.ac.uk/divisions-and-research-groups/experimental-medicine-and-immunotherapeutics/

Department Academic Teaching/ Department Expectations

The programme gives a unique opportunity to experience the full bench-to-bedside pathway of modern drug development. Projects may be suitable for subsequent Masters or PhD research which is strongly encouraged. ACL posts funded by AZ are available now and this funding is expected to increase.

Lead Academic

Dr Kevin M O'Shaughnessy kmo22@medschl.cam.ac.uk

HAEMATOLOGY

Overview

The University Department of Haematology provides a superb research environment with world-class programmes in haematopoietic malignancies, stem cell biology, transcriptional and epigenetic regulation, bone marrow failure syndromes, the structural biology of blood coagulation and transfusion medicine. Furthermore, the Department also has close links with other departments and Institutions within the University, particularly the Cambridge Stem Cell Institute (CSCI), with which it shares a number of investigators and with the nearby Wellcome Sanger Institute. In addition, members of the department make up the majority of the investigators in the Haematological Malignancies Programme within the CRUK Cambridge Cancer Centre, one of only two major Cancer Centres within the UK. The Department has a large number of clinician-scientists within its consultant body and also an enviable recent track record in developing successful trainees towards independent group leader positions. Applicants will be based in existing research groups within the department, where they will be able to expand their research experience, which will occur in 3 distinct blocks.

Research Component

There are a number of world-class programmes of research within the department of haematology. For specific details the applicant is referred to http://www.haem.cam.ac.uk/

Department Academic Teaching/ Department Expectations

Applicants will gain exposure to the research groups currently working in the department of Haematology and their collaborators and to the techniques that they are applying. Exposure to a number of groups will expand the research experience of the applicant and allow them to make an informed decision about which research group to partner with for future research/PhD.

Lead Academics

Professor Brian Huntly bjph2@cam.ac.uk http://www.haem.cam.ac.uk/

Dr Daniel Hodson djh1002@cam.ac.uk

MEDICAL MICROBIOLOGY

Overview

The Public Health England (PHE) Clinical Microbiology and Public Health Laboratory (CMPHL) functions as the diagnostic laboratory for Cambridge University Hospitals NHS Foundation Trust, and provides clinical Microbiology services to East & North Herts NHS Trust, Papworth NHS Foundation Trust, Hinchingbrooke Hospital, part of North West Anglia Trust, and the surrounding GPs in collaboration with neighbouring Trusts in the East of England. The service provides clinical advice and consultation services for the diagnosis and management of community and nosocomial infections. The service also provides Infection Control strategy and guidance, on antibiotic and antifungal stewardship. The department has a strong track record in clinical microbiology training and the range and complexity of patients seen at Addenbrooke's and Papworth Hospitals provide excellent clinical training opportunities. There are 5 specialist registrars, one Academic Foundation trainees, two Academic Clinical Fellows and one Academic Clinical Lecturer; this provides the flexibility required for research-active trainees to undertake blocks of research training and experience. There are 10 WTE Consultant staff who are responsible for educational and clinical supervision of trainees. The application of microbial microbial whole-genome sequencing to diagnostic and public health microbiology is at the forefront of research in this speciality. Although this technology is likely to become widely disseminated and used in the future, there are currently few clinical centres where training in its application can be gained.

Research Component

The academic Department of Microbiology was established in 2009 with the appointment of Professor Sharon Peacock as Professor of Clinical Microbiology at the University of Cambridge. She held this post from 2009-2015; the post is pending re-appointment. Professor Gordon Dougan joined the Department as Professor of Microbial Pathogenesis in 2015. His research focuses on the genetic analysis of host/pathogen interactions during infection, particularly those involving enteric bacteria. He has worked extensively in both academia and industry, making important contributions in the field of vaccinology where he has worked to improve vaccine delivery to poorly resourced regions. Dr Estee Torok is a Clinician Scientist Fellow (Department of Medicine), Consultant in Microbiology and Infectious Diseases (Addenbrooke's Hospital) and an Honorary Consultant Microbiologist (Public Health England). She has 20 years' clinical research experience in infectious diseases including malaria, viral hepatitis, TB, HIV and *S. aureus* and multidrug-resistant Gram negative infections in the UK and southeast Asia. Her current research focuses on translating microbial whole-genome sequencing from a research tool into the clinical environment. She is also interested in medical education and public engagement and mentors clinical academics. There are strong links between the Department of Medicine and Professor Julian Parkhill, Professor Nick Thomson, Dr Trevor Lawley, and Professor David Aanensen at the Wellcome Trust Sanger Institute http://www.sanger.ac.uk/, and with Professor James Wood at the Department of Veterinary Medicine http://www.vet.cam.ac.uk Additional research opportunities available through the Cambridge Infectious Diseases Strategic Initiative http://www.infectiousdisease.cam.ac.uk/

Department Academic Teaching/ Department Expectations

There are several weekly educational opportunities in infectious diseases and medical microbiology including seminars and departmental meetings to which the trainee will be expected to contribute. The trainee will also be involved in teaching undergraduate medical students.

Lead Academic

Dr Estee Torok et317@cam.ac.uk

Professor Gordon Dougan gd1@sanger.ac.uk

ONCOLOGY

Overview

The Cancer Directorate of Cambridge University Hospitals is the clinical arm of the Cancer Research UK (CR UK) Cambridge Centre. It is a busy regional cancer centre providing comprehensive research-led care by consultants in both Medical Oncology and Clinical Oncology to the local population as well as attracting increasing numbers of patients from outside the region.

The CR UK Cambridge Centre combines the research of the University, industrial partners and clinical facilities of the Hospital. Cancer Research UK awarded "Major Cancer Centre" status to Cambridge along with the Universities of Manchester.

The educational mission of the CR UK Cambridge Centre places a particular emphasis on training the future leaders of research in cancer. Cambridge is particularly well-suited to the conduct of basic and translational research. Excellent links between the clinical and scientific parts of the department are therefore crucial.

We are therefore very excited to offer Academic Foundation Year posts to allow trainees to experience oncology practice and research in Cambridge. Given the oncology facilities and people in Cambridge, we are extremely well placed to offer further clinical and research training opportunities to gifted trainees who wish to pursue research related to cancer, within the integrated academic training program of their chosen speciality.

Research Component

Cambridge has research strengths ranging from the very basic to the fully clinical. Examples include:

1) Cancer Research UK Cambridge Centre (https://crukcambridgecentre.org.uk/)
2) Cancer Research UK Cambridge Institute (https://www.cruk.cam.ac.uk/)
3) Cambridge Cancer Trials Centre (https://crukcambridgecentre.org.uk/patient-care/cctc/clinical-trials-in-cambridge)
4) Experimental Medicine Training Initiative (https://emi.medschl.cam.ac.uk/), a strategic scheme, supported by the University of Cambridge in partnership with the Cambridge University Hospitals, NIHR Cambridge Biomedical Research Centre and Industry Partners AstraZeneca/MedImmune and GSK .

During the AFY, the post-holder will have an excellent opportunity to experience clinical and translational oncology research both in the in-patient and out-patient setting. Post-holders are encouraged to develop their research interest and approach group leaders to organise their research block in a relevant subject area. Mentoring and advice will be available from senior academics and for the duration of the AFY post-holders will hold an honorary contract in the Department of Oncology (https://www.oncology.cam.ac.uk/).

Department Academic Teaching/ Department Expectations

During the AFY post, the trainee will become familiar with the management of oncology emergencies and with the key components of the medical care of cancer patients.

There is a wide range of academic and clinical seminars available which the AFY will be encouraged to attend. Attendance at the weekly radiological review meeting and the varied seminar program on campus is expected.

We hold regular Oncology Fellows Day at which Clinical Research Training Fellows, who are usually studying for a PhD, present their work to their peers and the faculty in order to receive constructive feedback in a semi-formal setting. The AFY will be expected to attend one of these days, but will not be expected to present at this stage.

Lead Academics

Medical Oncology: Dr Simon Pacey scp46@medschl.cam.ac.uk http://www.oncology.cam.ac.uk/

Clinical Oncology: Dr Rajesh Jena rjena@nhs.net

PAEDIATRICS

Overview

The Department of Paediatrics is an internationally recognised centre for research in child health and development. In particular, leading groups study Neonatal neurodevelopmental disorders and brain injury, Paediatric solid cancers, Endocrine-Genetic regulation of child growth and development, Type-1 diabetes, Epigenetics and mucosal immunology, and Experimental Medicine and Phase I/II Studies in Children. The senior academic staff include:

Professor David H Rowitch, Head of Department
Professor Topun Austin (Director, Evelyn Perinatal Imaging Centre)
Professor David Dunger (Director of Research)
Professor Roman Hovorka (Director of Research – Institute of Metabolic Science)
Professor Ken Ong (Programme Leader – MRC Epidemiology Unit)
Dr Carlo Acerini (University Senior Lecturer)
Dr Kathryn Beardsall (University Lecturer)
Dr Nazima Pathan (University Lecturer)
Dr Matthias Zilbauer (University Lecturer)

Research Component

The AFY trainee will undertake a short 4 month research project under the supervision of one of our senior academic staff members. They will also have to opportunity to gain understanding of a wide range of Paediatric Research methods, including clinical trials, physiological studies, epidemiology, genetics and laboratory-based research. Key research areas of the Department of Paediatrics are described on its website: http://paediatrics.medschl.cam.ac.uk/

Department Academic Teaching/ Department Expectations **

The AFY placement will be overseen by Professor David H Rowitch (Head of Department) and Professor Ken Ong (Regional Academic Advisor) with day-to-day supervision by specific investigators. In addition to hands-on research experience, we will guide the AFY trainee to develop a short research proposal to include: scientific background, hypothesis generation, study design, outcomes, and ethical and methodological issues.

The AFY trainee will gain a valuable exposure to the whole scope of Paediatric Research and an understanding of the ethical, governance, and study design issues particular to carrying out research in children and young people. We anticipate that the AFY trainee will develop a keen interest in and enthusiasm to pursue a clinical academic career in a particular area of Paediatric Research.

Lead Academics

Professor David H Rowitch dhr25@medschl.cam.ac.uk

Professor Ken Ong Ken.Ong@mrc-epid.cam.ac.uk

http://paediatrics.medschl.cam.ac.uk/

PSYCHIATRY

Overview

The Department of Psychiatry in Cambridge has been highly successful in the Research Assessment Exercises undertaken in 1996, 2001, 2008 and 2014, gaining top (or nearly top) rankings in all of them.

The Department in Cambridge is particularly well placed to train academic psychiatrists in research and teaching that can support the critically important goals of enhancing the practice and application of both type 1 (bench to bed-side) and type 2 (bed-side to health-service) translational research. We have strong links with both NHS and academic structures, including Cambridgeshire and Peterborough Foundation Trust, the local CLAHRC, Department of Psychology and MRC CBU. We have a strong clinical academic training tradition, and currently have several successful ACFs and ACLs and medically-trained MPhil/PhD students.

Research Component

Our department carries out world-leading research using several methodologies including epidemiology, neuroimaging, neuropsychology, neuroendocrinology, psychometrics, psycho-pharmacology, health services research and randomised controlled trials. We carry out research in the healthy population and with a wide variety of patient groups, including psychosis, adolescent depression, intellectual disability, old age psychiatry and autism. AFYs will be welcome to carry out research in any of our areas of research, with expert supervision by one (or more) of our senior academics. Trainees will receive specific training in research methodology, appropriate to their areas of interest. Trainees will be welcome to attend, and expected to contribute to, local research meetings. Research support and supervision will be given before, during and after the 4 month research project.

Please see our webpage (http://www.psychiatry.cam.ac.uk/) for more details.

Department Academic Teaching/ Department Expectations

We hope that AFYs will gain useful training to help them in the start of their research careers. This training will be both broad-based, providing transferable skills, and more narrow, to help them gain expertise in one or two research techniques. We expect trainees to learn from research meetings and more informal discussion with colleagues about research in other areas. In particular we hope that the AFYs will be part of the department's ACF/ACL peer group, gaining support from clinical academic trainees further into their careers.

We hope that following the AFY programme, trainees will progress and become the research leaders of tomorrow. The Department of Psychiatry will provide support for application for the next stage of academic training, whether that be an ACF post or applying for funding for an MD/PhD.

Lead Academic

Dr Paul Wilkinson pow12@cam.ac.uk http://www.psychiatry.cam.ac.uk/

Transplant and Regeneration
Overview
The Transplant and Regenerative choice programme is a programme suited to both Surgery and Medicine, where aspects of transplant or regenerative therapy apply. The programme is aligned to the BRC Transplant and Regenerative theme and also relates to wider international strengths on the Biomedical Campus. Many areas of this field can be explored and, by way of example, this could range from regenerative therapy in osteoarthritis (McCaskie) to aspects of immunity in organ transplantation (Clatworthy).
Research Component
The protected 4 month research time will be laboratory based. The specific laboratory will be selected when the research topic is confirmed, allowing for the candidates with a specific interest to be taken into account (although this is not a requirement). This will make use of the world class facilitates available across the biomedical campus.
Department Academic Teaching/ Department Expectations
Applicants will gain exposure to the research groups currently working in the field of transplant and regeneration and their collaborators and to the techniques which they are applying. This will expand the research experience of the applicant and allow them to make an informed decision about their future research/PhD (Please note that this programme will be limited to three placements).
Lead Academic
Professor Andrew McCaskie awm41@medschl.cam.ac.uk

Supervision

Academic supervisor

As an Academic Foundation Doctor you will be given the opportunity to engage with an academic supervisor who will be responsible for overseeing your academic work and providing constructive feedback during your placement. This supervisor will also act as your research placement supervisor.

Your academic supervisor should agree the academic learning objectives and how they will be achieved at the beginning of the academic placement or programme. He/she will be responsible for the assessment of academic progress and confirming what has been achieved within the academic component of the programme.

Clinical supervisor

A clinical supervisor will be responsible for overseeing your clinical work and providing constructive feedback during each training placement.

It may be appropriate for the clinical supervisor to delegate some supervision to other doctors although he/she remains responsible for your supervision.

Educational supervisor

Your educational supervisor will be a clinician responsible for the overall supervision and management of your educational progress during your foundation training placement or series of placements. They are responsible for your educational agreement as a clinical foundation doctor. Your educational supervisor will help with your professional and personal development as a foundation doctor.

The Academic Compendium

All Foundation Trainees, including Academic trainees, will be expected to acquire the core competencies of foundation training. For details of the Foundation Programme curriculum, please see the UK Foundation Programme Office website.

In addition, Academic Trainees can use the UK Foundation Programme's Academic Compendium to identify, with their academic supervisor, outcomes and competences that they can work towards, to demonstrate academic achievement.

The Compendium identifies outcomes related to research, medical education, and management/leadership.

Those related to research include:

- Identifies a specific research question and develops an appropriate study protocol
- Writes and submits an application for funding
- Writes and submits an application for ethical approval (local/national)
- Conducts a study/experiment (lab-based study, a study that uses patients/human volunteers or a population-based study)
- Writes up a study/experiment for publication in a peer-reviewed journal
- Presents the study/experiment results at a local/national/international meeting

Progress and achievement in competences from the Academic Compendium should be recorded in the trainee's ePortfolio.

Other Learning Opportunities

There is a wealth of learning opportunity available through Departments, the Clinical School, CATO and the organisations on the Cambridge Biomedical Campus. Academic supervisors are often be best placed to offer advice if needed. Opportunities include:

- Seminars and Events advertised through the School of Clinical Medicine and CATO
- Department specific seminars and training
- Grand Rounds take place every Wednesday during term-time at the Clinical School
- Access to University of Cambridge library / journals on completion of VRA (Visiting Researcher Agreement)

Clinical Academic Training Office (CATO)

The University's Clinical Academic Training Office (CATO) co-ordinates the Clinical Academic Programmes here at Cambridge, including the Academic Foundation Programme.

The team are the **first point of contact** for any concerns or queries clinical academic trainees may have. If they can't directly help, they will signpost you on to someone who can.

There are many opportunities available to clinical academic trainees that will present themselves through the CATO office. These include:

A **Welcome Event** which is held each September to introduce new AFY and ACF trainees to their programmes and offer an opportunity to meet other clinical academic trainees and academic leads.

The **Annual Academic Dinner** is held in April. Usually accompanied by an invited speaker, this is another opportunity to meet fellow AFY, ACF and CL trainees.

Each July, the AFP **Annual Research Day** is held in conjunction with NIHR BRC Cambridge. At this event, the AFY2 trainees are expected to submit an abstract of their academic block research and present a poster. A number of trainees each year will be asked to make a presentation based on their abstract.

A **Mentoring Scheme** is in place. This is part of a framework offering various options to meet the needs of trainees on the academic clinical programmes.

Bar Scientifica and **other events** are organised and/or publicised through the CATO office. Details are usually emailed to trainees. Recent events include mentoring and basic science.

Circulation of relevant/useful information Trainees are included in circulation of information related to clinical academics. These may be specific to their programme or for general interest.

Access to **seminars** run as part of the MPhil in Translational Biomedical Research, details will be available on the Graduate and Clinical Academic Training website along with contact details for the Administrator.

Website CATO's website offers a range of information on all the programmes it manages, useful links and information, calendar of events and information specific to current trainees. You can view the website here.

The Application Process

Application to the Academic Foundation Programme is made through the national process, via the online Oriel system. For the Person Specification, please refer to the UK Foundation Programme (UKFP 2019) Eligibility Applicant Guidance 2019. For detailed guidance on applying for the 2019 Foundation Programmes, please go to The UK Foundation Programme Office website. The site has lots of information on the Foundation Programmes, including the FP/AFP 2019 Applicant's Handbook

Please remember that any applications submitted via Oriel past the deadline of 12.00 noon (BST) 12 October 2018 will not be considered.

Interviews

Candidates shortlisted for interview will be informed via Oriel.

Interviews for the Cambridge Academic Foundation Programme will be held during the period **26-28th November 2018** at the Cambridge Biomedical Campus.

On the day of interviews, each applicant will be interviewed and scored by a single panel comprising both clinical and academic personnel using standardised scoring criteria and consists of both clinical and academic questions. You will not be required to bring a portfolio with you, but should ensure you have proof of identity (preferably a passport).

Interview travel expenses will not be reimbursed.

Please note that Skype interviews are not offered - even if your elective period coincides with the interview dates. Therefore you must attend in person. If you have a medical condition or caring responsibility which precludes you from attending any of the interview dates, you should contact the Foundation School Administrator directly for advice.

Points to Note

'White Paper' Questions in the application form
These questions offer an opportunity for applicants to show the shortlisting panel why they would be an excellent Academic Foundation trainee. Please take time to give full, considered responses in this section.

If you have any queries regarding the application process, e.g. Oriel, completing your application, interview dates etc., please contact recruitment.eoe@hee.nhs.uk

Feedback
Interview feedback can be provided for unsuccessful candidates only, following confirmation of the outcome. Requests for feedback can be made by email to recruitment.eoe@hee.nhs.uk or cato@medschl.cam.ac.uk

ACADEMIC FOUNDATION PROGRAMME

FREQUENTLY ASKED QUESTIONS……

How many AFY posts are there each year?
21 AFY posts were advertised from 2014-2016. For 2017-2019 and 2018-20 there were 24 posts advertised.

Do you miss out on clinical training?
No - Academic trainees are expected to meet the same clinical competencies as their non-academic colleagues.

What is looked for in a good application?
Strong academically, interest in research, good answers to the 'white paper' questions, evidence of a rounded person, who can relate to patients.

Do I need to have a PhD to apply for an AFY?
No, only 9% of this year's applicants held PhDs.

But I don't know what project I would want to do!
For the AFY programme, you're not expected to know.

How does an Academic Career Pathway work?
In a nutshell, Clinical Academic Training programmes allow you to complete your clinical competencies alongside protected academic time.

What happens after AFY?
Trainees frequently move on to an Academic Clinical Fellowship or other academic opportunity.

What are past trainees doing now?
We have 41 trainees who have gone on to be Clinician Scientists, Senior Fellows or University Lecturers. 49 have won Wellcome Trust / AMS Starter Grants, 76 ACFs have progressed to PhD or equivalent academic posts. Many at all levels have won prestigious prizes and published work.

I don't want to jeopardise a clinical place if I'm unsuccessful.
The application processes are separate so that's not a problem.

Do I have to start my academic career NOW?
No – if you miss out on an AFY place, it will not exclude you from other academic programmes and opportunities in the future.

What if I decide the academic life is not for me?
You can return to a purely clinical path.

QUERIES AND FURTHER INFORMATION

The East of England Foundation School manages the **application process** locally. Any queries related to application requirements, eligibility, Oriel, shortlisting or interview notifications, offers and similar should be directed to them.

Health Education East of England (HEEoE)
2-4 Victoria House,
Capital Park
Fulbourn
Cambridge
CB21 5XB

Foundation School Enquiries: recruitment.eoe@hee.nhs.uk

Information about the **Clinical Academic Training Programmes** managed by the University of Cambridge, can be found through the Clinical Academic Training Office (CATO) website. Queries regarding specific departments can be directed through the Academic Leads for the Academic rotations available. This information is detailed on pages 5-15 above. Other queries can be directed to the CATO office: cato@medschl.cam.ac.uk

UNIVERSITY OF CAMBRIDGE

APPENDIX 1

The University of Cambridge

https://www.cam.ac.uk/

We are one of the world's oldest universities and leading academic centres, and a self-governed community of scholars. The University comprises 31 Colleges and 150 Departments, Faculties, Schools and other institutions. The mission of the University of Cambridge is to contribute to society through the pursuit of education, learning, and research at the highest international levels of excellence.

The School of Clinical Medicine is one of the UK"s leading Medical Schools. Its strength is built on close relationships with pre-clinical science on the one hand, and on translational partnerships with NHS organisations on the other. It comprises Departments, including Clinical Biochemistry, Haematology, Medical Genetics, Medicine, Obstetrics and Gynaecology, Oncology, Paediatrics, Public Health and Primary Care, Psychiatry, Radiology, Surgery and Clinical Neurosciences. For further information, please visit: http://www.medschl.cam.ac.uk/.

Research Themes

- Cancer Research
- CardioVascular Medicine
- Diabetes, Endocrinology and Metabolism
- Epidemiology and Public Health
- Genetics and Genetic Medicine
- Haematological and Transplantation Medicine
- Infection and Immunity
- Neurosciences and Mental Health
- Stem Cells and Regenerative Medicine
- Women's health

Further information may be found at https://www.medschl.cam.ac.uk/research/

Excellence in Partnership
The School is a member of Cambridge University Health Partners, a partnership between the University of Cambridge, Cambridge University Hospitals NHS Foundation Trust, Royal Papworth Hospital NHS Foundation Trust and the Cambridge and Peterborough NHS Foundation Trust.

Information about Cambridge University Health Partners can be found at- http://cuhp.org.uk/

The NIHR Cambridge Biomedical Research Centre (BRC) is a partnership between Cambridge University Hospitals NHS Foundation Trust and The University of Cambridge. The partnership between the hospital and the University creates an environment where internationally outstanding biomedical and clinical scientist work alongside clinical practitioners to achieve translation or research for the benefits of patients.

Information about the NIHR Cambridge Biomedical Research Centre can be found at - https://cambridgebrc.nihr.ac.uk/

APPENDIX 2

Organisations:

Health Education England East of England

University of Cambridge

Hospitals:

Addenbrooke's Hospital

Bedford

Peterborough

Queen Elizabeth, King's Lynn

West Suffolk, Bury St Edmunds

Lister Hospital, Stevenage

The Princess Alexandra, Harlow

Other Useful links:

School of Clinical Medicine

Cambridge Biomedical Campus

The UK Foundation Programme

FP/AFP 2019 Applicant's Handbook

Rough Guide to the Academic Foundation Programme

The UK Foundation Programme Academic Compendium

Visit Cambridge

Cambridge News