Job Description

NIHR Academic Clinical Fellowship

Endocrinology & Diabetes Mellitus ST1 or ST3-4 (1 post)

The University of Sheffield, in partnership with NHS England North East and Yorkshire and the Sheffield Teaching Hospitals NHS Trust, has developed an exciting pathway of academic clinical training opportunities.

Applications are now invited for an Academic Clinical Fellowship in Endocrinology & Diabetes Mellitus at ST1 or ST3-4 level. This new post has been created as part of the NHS England (NHSE)/National Institution for Health Research Trainee Coordinating Centre (NIHRTCC) programme of Integrated Academic Training and offers candidates a comprehensive experience of clinical academic medicine working alongside internationally renowned clinicians and researchers.

Please Note: ST3-level applicants - Only trainees who hold a Deanery Reference Number in the penultimate or final year of Internal Medical Training (CT2 or CT3) or ACCS acute medicine (CT3 or CT4) are eligible to apply. Trainees who have either: completed Core Medical Training, IMT training or ACCS acute medicine (ACCS-AM) or have alternative experience outside of UK training, are not eligible to apply.

Please note that the successful applicant must be in post by the end of March 2022.

We are seeking highly motivated, enthusiastic individuals with the potential to excel in both their clinical and academic training and who have the ambition to be the next generation of academic clinicians.

This Academic Clinical Fellowship (ACF) programme in Endocrinology & Diabetes Mellitus will be run by the University of Sheffield, the Sheffield Teaching Hospitals NHS Trust and NHS England North East and Yorkshire.

Academic Clinical Fellowships (ACFs) are 3 year fixed-term national training posts. They attract an NTN(A) and trainees undertake 75% clinical and 25% academic training over the term of the post. They are employed by the NHS Trust and have an honorary contract with the University at whose Medical School their academic research is supported.

ACF trainees also undertake a Research Training Programme provided by the University for which funding is provided by NIHR. They also are eligible for a £1,000 bursary per year to support research training activity (e.g to attend academic conferences).

ACF trainees would also normally complete and submit an external funding application for a research fellowship to enable them to complete a higher degree (PhD or research MD) following the completion of their ACF fixed-term post, which would be completed as Out-of-Programme-Research (OOPR).

All Academic Clinical Fellowships are run-through posts, regardless of specialty, with the exception of 'Medical Education' ACFs. A trainee entering ACF at ST1 or ST2 in a specialty with a Core Training period would therefore be guaranteed continued training to CCT in the eventual specialty, as long as they progress satisfactorily through both their academic and clinical training. Run-through status is withdrawn if ACFs do not complete the academic component.

This post is being offered under NIHR's theme of Therapeutics. The focus of the research programme is either 1) developing more effective interventions and treatment in type 1 diabetes or 2) optimising endocrine hormone replacement and developing new therapies for conditions of hormone excess.

POST DETAILS

Job Title

NIHR Academic Clinical Fellow (ACF) – Endocrinology & Diabetes Mellitus

Duration of the Post

Up to 3 years (25% academic, 75% clinical).

Lead NHS Hospital/Trust in which training will take place

Sheffield Teaching Hospitals NHS Trust.

Research institution in which training will take place

Academic Unit of Diabetes and Endocrinology

Within the Diabetes Unit led by Professor Simon Heller there is a longstanding interest in the pathophysiology and clinical consequences of hypoglycaemia in patients with diabetes. The other main area of interest is developing complex educational interventions in both Type 1 (DAFNE). Following controlled trials these interventions are being applied clinically and the Dept has received long term funding to explore success factors determining success and developing complex interventions to make them more effective.

Within the Neuro-Endocrine Research Unit led by Professor Richard Ross and Dr John Newell-Price the focus of both clinical and laboratory groups is on "Pituitary hormones", with a particular emphasis on growth hormone. The aim of clinical work is to define the best methods for the assessment and replacement of pituitary

hormones. In the laboratory there are programmes examining mechanisms by which hormones signal through their receptors and developing new drugs to block the action of hormones in conditions of excess.

Current Academic Staffing of AUDEM

Professor Richard Ross (Head of Unit)
Professor Simon Heller (Professor of Clinical Diabetes)
Professor John Newell-Price (Reader in Endocrinology)
Dr Dinesh Selvarajah (Senior Lecturer in Diabetes)
Dr Jackie Elliott (Senior Lecturer in Diabetes)
Dr Ahmed Iqbal (Senior Lecturer in Diabetes)
Dr Gordon Sloane (Clinical Lecturer in Diabetes)

NHS Department of Endocrinology

The Department of Endocrinology provides a cross-city service with most specialised inpatient and outpatient activities taking place on the RHH site and GIM on the NGH site. Endocrine services provide joint MDTs and clinics with endocrine surgery, neurosurgery and oncology and this innovative structure allows excellent communication between specialties and Endocrinologists. The unit also has a day case investigation ward staffed by 2.5 Specialist Nurses and supported by a research Sister and Clerk. There is a dedicated Endocrine SpR who supervises all Endocrine inpatients.

Clinics:

- Weekly General Endocrine
- Weekly thyroid
- Alternate week Obesity
- Alternate week Obstetric (Joint with Obstetricians)
- Alternate week Gynae (Joint with Gynaecologist)
- Alternate week Pituitary (Joint with Neurosurgeon)
- Alternate week Neuroendocrine tumours
- Alternate week Late Effects of Cancer (Joint with Paediatricians, Oncology & Fertility)
- Alternate week Paediatric Transition (Joint with Paediatricians)
- Monthly Thyroid Cancer
- Monthly MEN

MDTs:

- Weekly Endocrine
- Bi-weekly Pituitary
- Bi-weekly NETs
- Monthly Academic

Consultant Staff:

- Dr Amit Allahabadia
- Professor John Newell-Price
- Dr Miguel DeBono
- Dr Alia Munir

Mellanby Centre for Bone Research

Basic biomedical research within the Mellanby Centre covers all aspects of bone cell biology and is supported by two dedicated core laboratories for bone research and bone analysis.

The laboratories contain the latest automated immunoassay analysers, state of the art high resolution microCT imaging equipment, and the equipment and expertise necessary to undertake quantitative dynamic bone histomorphometry.

Clinical research within the Mellanby Centre ranges from skeletal diseases in childhood through to adult and elderly people, and covers both benign and malignant bone disease.

NHS Metabolic Bone Centre

The service offers direct-access fracture risk assessment to both general practitioners and hospital consultants, and currently receives approximately 700 referrals per month. There are four DXA scanners within the department and patients have an extended one-stop assessment incorporating vertebral fracture assessment scans, spine radiographs and investigation for underlying causes of osteoporosis. Further management in the metabolic bone clinic is offered for patients with severe osteoporosis in whom initial investigations suggest an underlying metabolic bone problem and for the management of other metabolic bone diseases including Paget's disease, osteomalacia, and parathyroid bone disease. The department is a tertiary referral centre for rare metabolic bone disorders such as fibrous dysplasia, osteogenesis imperfecta and hypophosphataemia.

There are regular MDTs with Endocrinology, Renal Medicine, Clinical Genetics and Cardiology. Monthly clinical meetings and x-ray meetings are held within the department.

NHS Department of Diabetes

The Department of Diabetes provides a comprehensive diabetes service to the population of Sheffield and the surrounding area. Care is provided by 10 consultants with a special interest in diabetes who work in both the Northern General and Royal Hallamshire campuses. They work within a large multi-disciplinary team consisting of 8 diabetes nurse specialists, 3 specialist dietitians and podiatry staff at both hospitals. General diabetes clinics run at both campuses as do specialist clinics. There are strong links with diabetes care provided within the community. Currently, two of the consultants regularly visit General Practices within the city within a programme designed to build expertise and confidence among primary care teams providing enhanced diabetes services. The diabetes service attracts tertiary referrals in the areas of autonomic and painful peripheral neuropathy, hypoglycaemia unawareness and pump therapy. The unit was one of the original secondary centres developing the self-management education DAFNE intervention in Type 1 diabetes and continues to train adults both from Sheffield and surrounding areas. Members of the team were also involved in developing the DESMOND type 2 self-management intervention which has been rolled out to the community.

Specialist clinics include:

Weekly pregnancy clinic (RHH)

Fortnightly renal clinic (NGH)

Fortnightly adolescent clinics (NGH)

Two monthly DAFNE review clinics (NGH and RHH)

Weekly foot clinics (NGH and RHH)

Consultant Staff

- Dr Leanne Hunt
- Professor Simon Heller
- Dr Rajiv Ghandi
- Dr Adrian Scott
- Dr Soon Song
- Professor Solomon Tesfaye
- Dr Dinesh Selvarajah
- Dr Jackie Elliott
- Dr Marni Greig
- Dr Emma Walkinshaw
- Dr Ahmed Iqbal

Research Protected Time:

Will be based on a block release system to allow dedicated protected time away from clinical duties for academic research.

Academic Clinical Fellowship Training Programme: Research Component

The clinical programme is designed to provide training from ST1 or ST3-4 level for a period of 3 years. It will also include training in General Internal Medicine.

The successful candidate will undertake specialist training in endocrinology and diabetes as part of the STR rotation, with experience of both district and teaching hospitals and of acute medicine.

In addition, they will be attached for 9 months in total (over the three years) to an academic department, obtaining research experience and preparing preliminary data upon which to base a fellowship application.

Objectives of the Training Programme:

1. To obtain core competencies in general internal medicine, endocrinology and diabetes.

All trainees will enrol and use the e-portfolio and training is centred around completion of the JRCPTB Core Curriculum. This will be assessed at the end of each training year (ST1 and ST2) through the ARCP process using the JRCPTB ARCP Decision Aid. Training records will be kept via the e-portfolio. An educational supervisor will

be appointed for each year of the programme and each trainee will have regular appraisals with their educational supervisor. Progress within the scheme depends upon satisfactory completion of these and the ARCP.

2. To obtain exposure to the breadth of research in diabetes/endocrine/metabolic bone medicine.
3. To undertake a generic programme in research methodology.
4. To identify an area of academic and clinical interest upon which to base an application for an externally-funded PhD programme.

This Fellowship Programme will provide clinical training in Diabetes, Endocrinology and Metabolic Bone that is fully integrated with in-depth exposure to endocrine research and a generic research training programme. The trainee will have the opportunity to develop core skills as an endocrine clinician and, with protected time for research mapped throughout the period of clinical training and 9 months in total of full-time research, will also complete a research training fellowship application. The timing of the 9 months of the programme devoted to research will vary between candidates but is likely to occur in the second to third year of the fellowship. The Fellow will be guided in the preparing, completing and interviewing for a Training Fellowship application by the Programme Lead and the Supervisor(s) of the specific research project in conjunction with the Research Placement and Portfolio Module of the Masters programme. Modules of the Masters programme will also cover generic research training, specifically for the Academic Training Fellows, that will run throughout the Fellowship. This will provide training in research governance and ethics, statistics, grant writing skills, relevant computer skills including bioinformatics and attachments within the CRF.

Relationship between Academic and Clinical Training

At all times there will be good access and regular communication with the medical school. Trainees will participate in the acute on call rota during their clinical placements.

Internal Medicine Training

During the Academic Clinical Fellowship, the candidate will spend a total of 12 months, usually configured by subdivision into separate modules, by arrangement with Dr Omar Pirzada, Clinical TPD for IMT. During the clinical training time, there is a standard oncall commitment, complementing full time trainees on a 1:1 basis, but during the research component of the post there is no out of hours on-call commitment. During the clinical component of the rotation, the ACF will have identical duties and responsibilities to non-academic trainees and will participate in the assessment and management of medical admissions, outpatient clinics and emergency duties as appropriate. The ACF will be expected to participate in postgraduate education, audit and teaching in accordance with the standard job description of each post in the rotation.

Academic training will be based in the Academic Unit of the Royal Hallamshire Hospital and the Metabolic Bone Unit at the Northern General Hospital with the Endocrine ward base on Q floor, the Diabetes Centre at the Northern General

Hospital and two CRFs one on O floor at RHH and the other at the Northern General Hospital.

Successful candidates:

The exit from this post will typically be to an externally-funded research fellowship, leading to award of a PhD and subsequently application either for a Clinical Lecturer post or a Clinician Scientist Fellowship.

Unsuccessful candidates:

If the post-holder does not achieve the expected clinical competencies, this will be handled in the same way as for all other trainees in speciality medicine.

If the post-holder fails to achieve academic competencies, or is unsuccessful in obtaining research funding, they would be anticipated to return to a clinical training post. This will be discussed in good time with the Programme Directors for Endocrinology and Core Medicine through the system for appraisal and mentoring of academic trainees. Whilst no guarantee of an appropriate post is possible, every effort will be made to accommodate such individuals within the local training schemes.

MAIN ACTIVITIES & RESPONSIBILITIES:

For entry at ST1, the MRCP diploma is not essential but trainees are expected to have Part 1 of the MRCP by the end of ST1 and the full MRCP(UK) diploma by the end of their ST2 year.

The successful applicant at ST3 will have the MRCP or equivalent, have evidence of academic achievement and ideally have research experience. They should be aiming to pursue a career in academic medicine in the field of diabetes, endocrinology and bone metabolism. Our approach is to offer the applicant the opportunity to pursue their research in the sub-speciality of their choice, be this diabetes, endocrinology or metabolic bone. Current opportunities are listed below:

Research

Basic laboratory research: The trainee will be inducted into the laboratory research program and receive training in molecular and cell biology through involvement in the two major programmes;

1. Development and bench testing of novel growth hormone agonists and antagonists including growth hormone and leptin, which will involve molecular design, structural biology, cloning, protein expression, purification and testing in bioassays and in vivo models.
2. Investigation of glucocorticoid feedback and development of novel therapies for Cushing's syndrome using cell based bioassays, SiRNA approaches and testing molecules in animal models of Cushing's disease.

Clinical research: the trainee will undergo GCP training, develop their own protocols, recruit and consent patients for clinical trials, performing phase 1-3 clinical trials.

In endocrinology these include studies with novel endocrine replacement therapies and treatments for hormone excess that include testing modified release formulations of hydrocortisone, novel formulations of oral testosterone, long acting growth

hormone agonists and antagonists, and new treatments for Cushing's syndrome. The trainee will obtain training in statistics and pharmacokinetics and be involved in data analysis including that from international registries established in Sheffield for rare endocrine diseases including acromegaly, Cushing's, and congenital adrenal hyperplasia.

In diabetes, active research studies include ongoing NIHR programme grant funding supporting research developing complex interventions for patients with diabetes (DAFNEplus), An NIH global clinical trial comparing educational interventions vs hybrid closed loop to treat impaired awareness of hypoglycaemia and how best to integrate technology into diabetes management, e.g. the use of insulin pumps, physical activity monitors, etc.
Another area of interest includes pathophysiology of hypoglycaemia in diabetes, the contribution of hypoglycaemia to the increased risk of sudden death in young people with Type 1 diabetes (the 'dead in bed' syndrome), the clinical benefits of insulin analogues. Current funding includes substantial IMI EEC grant funding (Hypo-RESOLVE) and an MRC trial (investigators Dr Ahmed Iqbal, Dr Simon Heller and Professor Rob Storey.
A further area of interest involves research into the pathogenesis and treatment of diabetic neuropathy, specifically exploring the contribution of the CNS to painful neuropathy as well as novel approaches to preventing and treating diabetic foot disease.

Teaching
The postholder will contribute to the undergraduate and postgraduate teaching programmes of the School.

Accommodation and support for the post
Office space will be made available within the Academic Unit. Laboratory space will be made available as required by Professor Richard Ross, Professor Richard Eastell.

Academic Clinical Fellowship Training Programme: Clinical Component

There will be minor variations in different posts in different hospitals but this list is aimed at covering the majority of duties:

1. Supervise, monitor and assist the House Officer (F1) in the day-to-day management of inpatients in posts with an attached PRHO.
2. Liaise between nurses, PRHO (F1 and F2), patients, relatives and senior medical staff.
3. Attend and participate in ward rounds as timetabled.
4. Attend outpatient clinics.
5. Take part in rostered emergency work.
6. Dictate discharge summaries.
7. Study for higher examination and maintain continued professional development.
8. Attend weekly educational and multidisciplinary sessions.
9. Undertake audit at various times throughout the rotations.
10. Attend postmortem demonstrations - when required.
11. Teach medical students as directed.

12. Co-operate with members of the personnel department when monitoring hours of work and other personnel issues.
13. Attend induction in each hospital or new department.
14. Comply with all local policies including dress code, annual and study leave.

CONTACTS

Academic Leads and Supervisors:

Professor Simon Heller

Professors John Newell-Price

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Academic, Educational and Clinical supervisors will be assigned following appointment to align with the individual's needs

College Tutors

Dr Phil Jackson:	phil.jackson@leedsth.nhs.uk
Dr Alison Lansbury:	Alison.lansbury@leedsth.nhs.uk
Dr Mark Alford (Deputy):	mark.alford@leedsth.nhs.uk

Training Programme Director (clinical):

Higher TPD: Dr Alia Munir alia.munir@nhs.net

Academic Training Programme Director

Professor D O Anumba d.o.c.anumba@sheffield.ac.uk

Further Information

Because of the nature of the work for which you are applying, this post is exempted from the provisions of Section 4 (2) of the Rehabilitation of Offenders Act 1974 by virtue of the Rehabilitation of Offenders Act 1974 (Exceptions) Order 1975.

Applicants are therefore not entitled to withhold information about convictions, which for other purposes are “spent” under the provisions of the Act, and in the event of employment any failure to disclose such convictions could result in dismissal or disciplinary action by the University. Any information given will be strictly confidential and will be considered only in relation to an application for positions to which the Order applies.

For further information about the Academic Clinical Fellowship programme, please refer to the NIHR (National Institute for Health Research) on https://www.nihr.ac.uk/explore-nihr/academy-programmes/integrated-academic-training.htm

Person Specifications

Applicants for this post will be required to meet the relevant Clinical eligibility criteria for the appropriate specialty and level listed at:-

Please note - (applicants applying for Surgical, Medical or Psychiatry specialties at ST3 or above may be required to consult the relevant Core Training person specification):-

http://specialtytraining.hee.nhs.uk/Recruitment/Person-specifications

AND the Academic eligibility criteria listed at:

http://specialtytraining.hee.nhs.uk/Recruitment/Person-specifications

How to Apply

For more information about applying to ACF vacancies in NHS England North East and Yorkshire please visit:-

http://www.yorksandhumberdeanery.nhs.uk/recruitment/our_vacancies/academic_recruitment/

Applications will only be accepted through the Oriel online application system:-

https://www.oriel.nhs.uk

After the application deadline no applications will be accepted. There will be no exceptions to this deadline. You are advised to complete and submit your application ahead of the deadline to allow for any unforeseen problems.

Please note: All applicants who do not already hold a National Training Number (NTN) or Deanery Reference Number (DRN) in the GMC specialty to which they are applying for will be required to undertake the national clinical recruitment process and attend an assessment/interview for that GMC specialty as appropriate.

Interviews will be held online. The date will be confirmed to applicants via the Oriel application system.