# Job Description

# NIHR Academic Clinical Fellowship

# Cardiology (NIHR Theme: Therapeutics)

# ST 1-2 level (1 post)

The University of Sheffield, in partnership with Health Education England Yorkshire and the Humber 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 Cardiology at ST1-2 level. This new post has been created as part of the Health Education England (HEE)/National Institution for Health Research Trainee programme of Integrated Academic Training and offers candidates a comprehensive experience of clinical academic medicine working alongside internationally renowned clinicians and researchers.

**Please note:-** Applicants looking for an ST2 post are encouraged to apply to this vacancy at ST1. If successful, your experience will be assessed upon commencing the post, enabling you to work at the appropriate level.

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 part of the next generation of academic clinicians.

This Academic Clinical Fellowship (ACF) programme in Cardiologywill be run by the University of Sheffield, the Sheffield Teaching Hospitals NHS Trust and Health Education England Yorkshire and the Humber.

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).

The Clinical Academic Programme at Sheffield has recently introduced a competitive ACF pump-priming award. Trainees can apply for up to £2000 for initial costs for work aimed at achieving a research fellowship.

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 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.

# POST DETAILS

## Job Title

NIHR Academic Clinical Fellow (ACF) – Cardiology (Theme: Therapeutics)

## 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

Department of Infection, Immunity and Cardiovascular Disease, The Medical School, University of Sheffield (<https://www.sheffield.ac.uk/medicine/iicd> ).

**Current staffing of unit:** There are 29 Consultant Cardiologists, including six Professors and two Senior Lecturers, with a full complement of junior doctors, based at the Northern General Hospital, with strong links to the Sheffield University Medical School, based at the Royal Hallamshire Hospital site.

**Research Protected Time: 25%**

## Academic Clinical Fellowship Training Programme: Research Component (min 250 words)

Cardiovascular disease remains the number one killer, with atherosclerotic disease predominant. New approaches to understand cardiac disease and its effect on the cardio-pulmonary function and pathology are urgently needed in order to target appropriate therapeutics We are bringing the power of computational modelling to bear on the problems of restricted arterial and valvular blood flow (Gunn, Morris). Our Cardiovascular Research Unit (Storey) focuses on the problem of atherothrombosis and tests novel therapeutic strategies in clinical trials. We have also strong interests in heart failure and pulmonary hypertension (Rothman). PH is rare, but lethal, and Sheffield has the largest treatment centre in Europe. Rupture of atherosclerotic plaques is induced by frictional forces (shear stress) generated by blood flow. Computational and biophysical approaches will be used to identify the mechanisms that control responses to shear stress and develop new medicines to prevent plaque progression and rupture with the study of shear stress and plaque rupture (Evans, Halliday). Comprehensive imaging-based approaches to assess cardiac function are being developed using artificial intelligence to make automated and precise measurements of left- and right-sided cardiac function. Our innovative imaging applications (Wild, Swift) have secured multi-million funding:

We have trained multiple PhD and ACFs, with 5 securing tenured Principal Investigator positions and 3 Wellcome Clinical Career Development Fellowships. Former trainees have won 17 prestigious national or international prizes including the ESC Young Investigator First Prize and UK Young Life Scientist First Prize. Sheffield has just (2022) been awarded an NIHR Biomedical Research Centre, and Cardiovascular Research and Imaging feature as two of the main themes within it.

In the ST1-3 phase of your career, you will be expected to start a programme of research and develop pilot data with your supervisors which will enable you to apply for a Research Fellowship (usually at ST4-5) in which you will undertake out-of-programme research for a PhD. Upon returning to the training programme, you should aim to apply for an Academic Clinical Lectureship, with a view to developing their senior academic plans.

## Academic Clinical Fellowship Training Programme: Clinical Component

You will start by joining the South Yorkshire Internal Medicine training programme (https://www.yorksandhumberdeanery.nhs.uk/General%20%28Internal%29%20Medicine/About%20Your%20Programme/South\_Yorkshire\_Programme). The Training Programme Director is Dr Omar Pirzada. You will do so at ST1-2 (IMT1-2), and will be expected to fufil all the appropriate GIM competencies and gain an ARCP 1 grading each year, and the MRCP (UK) qualification by ST3. Your posts will be in Sheffield Teaching Hospitals, and at one or more district hospitals of Barnsley, Rotherham, Doncaster or Chesterfield. If your clinical and academic progress is satisfactory, you will then run through to Cardiology Training at ST4. This will encompass Core Cardiology training (three years) followed by subspecialty training (two years), which is available in intervention, heart failure and devices, electrophysiology, imaging, inherited cardiac conditions and congenital heart disease. This will be combined with continued demonstration of competency in GIM.

**Post Details**

**JOB TITLE: NIHR Academic Clinical Fellowship in Cardiology (Therapeutics)**

**BRIEF OUTLINE:**

The clinical programme is designed to provide training from ST1-2 onwards in GIM for 3 years and Cardiology/GIM for a further 5 years, excluding any out-of-programme arrangements. Runthrough to Cardiology is guaranteed for the successful applicant, although the duration of the ACF means that the 25% protected research time would cease after three years, unless the candidate were successful in obtaining a Clinical Lectureship position.

**Objectives of the Training Programme:**

1. To undertake training in GIM (75% for 2-3 years) with the opportunity to run through to Cardiology training at ST4.

2. To undertake a generic programme of training in research methodology.

3. To identify an area of academic and clinical interest upon which to base an application for an externally-funded PhD programme in cardiovascular medicine with an emphasis on therapeutics.

4. To establish suitable senior support and generate some pilot data.

**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 Training Programme Director (TPD) 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.

# CONTACTS

## Academic Leads and Supervisors:

Professor Julian Gunn j.gunn@sheffield.ac.uk

Professor Rob Storey r.f.storey@sheffield.ac.uk

Professor Chris Newman c.newman@sheffield.ac.uk

Professor Tim Chico t.j.chico@sheffield.ac.uk

Dr Alex Rothman a.rothman@sheffield.ac.uk

Dr Paul Morris paul.morris@sheffield.ac.uk

**(There are many more potential supervisors - contact one of us for details)**

## Training Programme Director (clinical):

Dr Omar Pirzada omar.pirzada@nhs.net (GIM)

Dr Justin Lee (Cardiology) justin.lee@nhs.net (Cardiology)

## Academic Training Programme Director

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

HEE Yorkshire & The Humber academic.yh@hee.nhs.uk

# Further Information

For more information on Sheffield see https://www.sheffield.ac.uk/medicine-dentistry-health/study/clinical-academic-training

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