



- Job Title:** NIHR Clinical Lecturer in Cardiology or Cardiothoracic Surgery; or Respiratory Medicine/Honorary Specialty Registrar (Available to ST3s and above)
- Salary:** £33,221 to £50,068 per annum (for those who were ST3 or above on 2 August 2016) £48,075 per annum (for those who were below ST3 on 3 August 2016)
- Contract:** Full-time fixed term contract for 4 years if approved by NIHR, or until relinquish NTN, whichever is earlier; the appointee must commence in post prior to 30 June 2021
- Reference:** 1917

Role Purpose

The post offers the opportunity for those with excellent potential as clinical academics to progress Specialist Training (Cardiology; Cardiothoracic Surgery; Respiratory Medicine) whilst further developing their academic skills, and undertaking high quality research or developing medical education expertise. The scheme is intended to develop the lecturer into an independent principal investigator or educator who is able to apply competitively for a senior academic position in the future.

Balance of Duties

The CL will be offered entry at their appropriate stage of training into their chosen specialty training programme.

The successful applicant will spend 50% of their time undertaking academic duties (research and teaching) and 50% of their time undertaking clinical training/work. The way that this split is arranged can be managed very flexibly through liaison between the post holder, the academic supervisor and the clinical supervisory team. If required, the research can be undertaken in dedicated blocks where there is no (or minimal) clinical commitment to ensure that the CL has the opportunity to focus on their own academic work, as well as participate in the training opportunities within the Department, College and wider University. There are a significant number of training courses and sessions that the University provides for clinical academic staff, and the trainee will be expected to identify, in consultation with their academic and research supervisors, the courses that are necessary for their on-going professional development as an academic clinician.

Excellent clinical training will be provided for those requiring specialty training through the Health Education East Midlands training scheme. The key principle underlying this phase of training is that the balance of academic and clinical training will be agreed on an *ad personam* basis between the trainee's academic supervisor, the training programme director, and the SAC taking into consideration the level of training of the candidate at appointment.

Main Duties and Responsibilities	% Time
<p>Research (see appendix)</p> <p>To contribute in a significant and meaningful manner to the Department and College's profiles by producing academic outputs of the highest standard.</p> <p>Ability to establish and develop an excellent and distinctive independent academic portfolio.</p> <p>Ability to write up research findings in a timely fashion resulting in publications in high quality peer-reviewed journals.</p>	45





Ability to establish successful collaborations within and beyond Leicester to enhance the overall College academic portfolio.

To secure, in collaboration with colleagues, as appropriate, external research funding relevant to their academic project(s) and future independent research area, which will deliver outputs of excellence

To attend and present research findings and papers at academic and professional conferences, and to contribute to the external visibility of the department

To ensure that all research activities undertaken are in compliance with the 'Research Code of Conduct' operated by the University.

To undertake research student supervision.

Teaching

The appointee will contribute to teaching appropriate to their expertise on the MB ChB and other undergraduate and postgraduate courses. The medical curricula are integrated, and the structure and content is the responsibility of a single Medical College Curriculum Committee. They are coordinated by the Leicester Medical School in consultation with academic departments. Staff may contribute to lectures, tutorials or practical work in either the core curricula or student selected Special Study Modules. In the case of the core curricula, staff will be responsible to a relevant Module Leader, who may not necessarily be based in the member of staff's own department, for the content and nature of their teaching.

Clinical Duties

This will be managed and delivered by Health Education England (East Midlands), in accordance with the National training curriculum for the clinical specialty.

Details of the clinical training curriculums can be found at:
<https://www.jrcptb.org.uk/specialties>

Clinical training attachments will be fully approved training posts in the East Midlands rotation and mapped to the academic and clinical needs of the trainee.

If individuals holding a category 2 contract (ST3 prior to Aug 16) are required to undertake on-call, an on-call availability supplement is payable as a percentage of the equivalent basic salary point on the equivalent ST NHS clinical pay scale. If you are on a University pay point at a rate above the top point of the NHS ST pay scale, your supplement will be based on the top point of the NHS scale.

If individuals hold a category 1 contract (ST3 post Aug 16) this will be managed in line with the new junior doctors contract.

5

50

Internal and External Relationships

Coordination with central University offices as required.

Delivery of research presentations at national/international conferences and meetings.





Attendance and contributions to group and departmental meetings

Liaison with collaborators within and outside the University of Leicester

Seek guidance from academic, research, clinical and educational supervisors, administrative support staff and other academic colleagues as required

Planning and Organising

Shaping the strategic direction of own area of activity, managing own time and leading the long term planning and delivery of activity with respect to agreed priorities/projects with a view to applying for funding for a senior academic position

Participation in the departmental operational planning process

Supporting the strategic direction of the research group and department.

Seek guidance from mentors, administrative support staff and other academic colleagues as required.

Supervision

Within the University the appointee will be responsible to their academic supervisor and ultimately to the Head of Department.

As part of the NIHR academic training scheme appointees from all specialties will have an academic supervisor and a research supervisor. The Director of the Clinical Academic Programme is responsible for ensuring that these supervisors are appointed and approved by the Clinical Academic Training Committee (CAT).

Those in specialty training will also have a clinical supervisor and an educational supervisor. The educational supervisor is appointed by HEE, must have undertaken appropriate training and is responsible for specifying the trainee's pathway to Certificate of Completion of Training. In addition the appointee will be responsible for their clinical duties to the Training Programme Director and Clinical Director/Head of Service.

Where an academic supervisor is also a trained educational supervisor, approved by the Deanery, they may undertake a dual role. A research supervisor cannot act as an academic or educational supervisor.

Person Specification

All candidates in specialty training must satisfy the clinical training person specification available at <https://specialtytraining.hee.nhs.uk/Recruitment/Person-specifications> in addition to the person specification for a clinical lectureship below.

Qualifications, Knowledge and Experience

Essential

- Basic medical degree, MB BS or equivalent*
- Full GMC registration*
- GMC Licence to practice*





- MRCP or equivalent
- Higher degree (MD, PhD or equivalent) in field related to this post. Candidates who have submitted for their higher degree at the time of application may be considered but must have been fully awarded before 31 July 2021
- Evidence of achievement of Foundation competencies in line with GMC standards/Good Medical Practice Evidence of achievement of ST1 and ST2 competencies in medicine at the time of appointment (ARCP outcome 1 in ST1 and 2)*
- Hold an NTN in the required clinical specialty and have achieved an outcome 1 at the most recent ARCP, or have been through national recruitment and be regarded as appointable at ST3 or above in the clinical specialty and be able to provide formal evidence of this
- Evidence of good progress in clinical training and that completion of specialty training may be accommodated either during or after the 4 year period of the CL award*
- A coherent, high quality and feasible plan of research
- Demonstration of understanding and commitment to academic career*
- Indication of medium and long-term career goals*
- Demonstration of reasons for applying for this Clinical Lectureship Programme*
- Evidence of teaching experience* and the ability to teach undergraduates and postgraduates
- Publications in national or international peer reviewed journals, with ability to meet REF requirements*
- Area of research compatible with the interests of the College/Department*
- Evidence of presentations to learned societies*

Desirable

- Evidence of commitment to specialty
- Intercalated honours degree and/or additional qualifications e.g. MSc etc*
- Knowledge of the centre hosting the research and how this is best placed to support the research, education and training needs*
- Prizes or distinctions significant to this post*
- Presentation of work at a national or international meetings*
- Minimum of two 3* REF returnable publications*

Skills, Abilities and Competencies

Essential

- High level of proficiency in English, sufficient to undertake research, teaching and administrative activities utilising English Language materials and to communicate effectively with staff and students
- Demonstration of the potential for scientific independence and the ability to lead a research team
- Demonstration of personal reasons for applying for this Clinical Lectureship Programme





- Evidence of leadership potential and potential to become a leader in chosen field
- Evidence of ability to work effectively and co-operatively as a member of a multi-disciplinary team
- Commitment to personal and professional development
- A high degree of motivation and personal self-discipline
- Organisational ability
- Capacity to prioritise own workload
- Able to initiate/innovate
- Effective written communication skills*
- Effective oral communication and spoken English skills

****Criteria to be used in shortlisting candidates for interview***

Other requirements

- Satisfactory enhanced DBS disclosure
- Satisfactory occupational health clearance
- Meets professional health requirements (in line with GMC standards/Good Medical Practice)
- Medical defence cover
- Able to commence in post no later than 30 June 2021

Additional Information

Candidates will have a higher degree (MD/PhD, or equivalent), or have submitted a higher degree at the time of application with it being awarded prior to commencement before 30 June 2021.

This post is a fixed-term post available for 4 years or for specialty trainees until the post holder relinquishes their NTN whichever is the earlier, and is part of the integrated clinical/academic training programme. Specialty trainees will hold an NTN (a). Should the appointee attain CCT during the 4 year period permission may be sought from NIHR to continue in post beyond CCT to enable the individual to make the transition to research independence. The duration of the CL extension would be dependent on the time remaining in the 4 year (1.0 WTE) post, with the extension phase being no more than 1 year (1.0 WTE) and within the existing funding period. Except in exceptional circumstances, post-CCT/CCST CLs must reduce their clinical commitments to 2 clinical sessions per week, which should be sufficient to maintain clinical skills and remain appointable as a NHS consultant. Those employed in the craft specialties may undertake up to 4 clinical sessions per week, with the extension request accompanied by an explanation for this requirement.

An honorary clinical ST contract will be sought from the University Hospitals of Leicester NHS Trust (<http://www.leicestershospitals.nhs.uk/aboutus>) or the hospital in which they are based on the training scheme, as appropriate.

Management of the Academic Programme

The academic programme is managed by the Clinical Academic Training (CAT) Operational Group comprising members from the University, Deanery and Trust, and chaired by the Director of CAT and the





Head of the Postgraduate Academic School. The CAT is responsible for ensuring the academic progression of the trainee.

Assessment and Appraisal

At the commencement of the academic placement the academic trainee must meet with their academic supervisors to ensure that an integrated and jointly agreed training programme/job plan is agreed, & at six monthly intervals thereafter to review progress. Specialty trainees must also meet with their educational supervisors. The trainee will also have an induction meeting with the Director of the Clinical Academic Training Programme and the College Assistant Registrar who administers the programme. In addition the appointee should meet regularly (at least bi-monthly) with their academic supervisor and research supervisor.

The appointee will be required to attend an annual academic review, and produce the appropriate documentation, at least one month before the annual ARCP. These normally take place in May each year. The academic supervisor must ensure that a report on academic progress is submitted to the Director of Clinical Academic Training (CAT) at least 2 weeks prior to the review. The documentation from the review will be submitted to the ARCP panel, together with written feedback from the Director of CAT and the academic review panel.

The ARCP will jointly assess academic and clinical progress and the outcome of the process will be recorded. The appointee, University & Postgraduate Dean will be advised of the overall outcome.

In the event that at the second year review it is evidenced that the appointee has been unsuccessful in developing an academic career a recommendation will be made for specialty trainees to join the standard clinical training programme.

Teaching Qualification

CLs with less than 3 years' experience of teaching in higher education are expected to complete the Postgraduate Certificate in Academic and Professional Practice within a reasonable timeframe of starting their employment with the University. CLs with more than 3 years' teaching experience, who do not already hold an Academic Teaching Qualification as defined by HESA such as teaching qualification (UK or International), or Fellowship of the Higher Education Academy, are expected to achieve the latter within a reasonable timeframe of starting their employment with the University. Fellowship of the Higher Education Academy can be achieved through the Experiential Route of the University's Professional Educational Excellence Recognition Scheme (PEERS).

Professional Requirements

You must be registered with the GMC, hold a licence to practice, abide by the codes of professional practice and have appropriate cover from a medical defence organisation for the duration of your appointment. Lapsing may render you subject to disciplinary action and you cannot be lawfully employed should registration lapse. You are required by the GMC to revalidate every five years. You must therefore advise the University of your revalidation dates and provide written evidence of your satisfactory revalidation where these fall within your period of employment with the University. You are also required to abide by the codes of professional practice as detailed by the professional body GMC.

Where the duties of a post involve work with NHS patients, identifiable patient data and/or patient material/tissues, or NHS staff or their data for the purposes of research it is necessary to ensure that the





performance of the duties attached to the post is covered by NHS research governance arrangements and the appointee must comply with all such arrangements.

It is a fundamental condition of employment for those in training that you hold and retain an honorary clinical specialty registrar contract with a recognised NHS Trust acceptable to the University for the duration of your employment. You must not commence work prior to this contract being awarded. The appointment with the University will automatically terminate should an honorary NHS contract be withdrawn or otherwise come to an end.

Appointees will be expected to engage in appropriate continuing professional development.

You will be required to comply with all NHS employment checks and satisfactorily meet these requirements prior to commencement in post. You are required to comply with the appropriate occupational health procedures for the post which you are to undertake. Where the post requires that you undertake Exposure Prone Invasive Procedures any offer of employment is subject to satisfactory clearance from the Trust Occupational Health department and you cannot commence in post until satisfactory clearance has been received. Where the post does not require Exposure Prone Invasive Procedures you must provide evidence of attendance at a Trust occupational health interview within the first 3 days of commencing in post.

Criminal Declaration and Disclosure and Barring Service (DBS)

If you become an employee, you must inform your manager immediately, in writing, if you are the subject of any current or future police investigations/legal proceedings, which could result in a criminal offence, conviction, caution, bind-over or charges, or warnings.

This post is exempt from the Rehabilitation of Offenders Act 1974 because the appointee will have substantial access to young people and/or vulnerable adults. Therefore, an appointment to this post will be subject to checking through the Disclosure and Barring Service (DBS). The successful applicant for this post will, therefore, be required to give consent for the University to check and obtain appropriate clearance with the DBS for the existence and content of any criminal record in the form of an Enhanced Disclosure.

Information received from the DBS and the police will be kept in strict confidence and will be destroyed once the University is satisfied in this regard.

Reason for Fixed Term Contract

The reason for the fixed term contract is stated in section 1.9 in the summary of contractual terms in your contract of employment.

VITAL

The University encourages all staff to live our [VITAL values](#) which are:

Valuing People, Innovators, Together, Accountable, Leaders.

Equality and Diversity

We believe that equality, diversity and inclusion is integral to a successful modern workplace. By developing and implementing policies and systems that challenge stereotypes across all aspects of our work, we have a culture that recognises and values the diverse contributions of our staff which benefits everyone. Our strong values of inclusivity and equality support our efforts to attract a diverse range of





high quality staff and students, and identify our University as a progressive and innovative workplace that mainstreams equality, diversity and inclusion.

Appendix: University of Leicester – Research Opportunities

Cardiology & Cardiothoracic Surgery

Research in Cardiology & Cardiothoracic Surgery at the University of Leicester is based at the Department of Cardiovascular Sciences, which is the largest within the College of Life Sciences. The Department’s mission is to undertake bench-to-bedside research, education and training, and clinical practice that impacts on the health and well-being of patients and the public.

The Department of Cardiovascular Sciences has laboratory and clinical research facilities at Glenfield Hospital, the regional cardiac centre, including the £12.5M state-of-the-art University of Leicester British Heart Foundation (BHF) Cardiovascular Research Centre, as well as research facilities at the Leicester Royal Infirmary, the Henry Wellcome Building and Hodgkin Building at the main University campus. The Department hosts two BHF-funded Chairs (Cardiology: held by Professor Sir Nilesh Samani until 31 Jul 2016; Cardiac Surgery: Professor Gavin Murphy), a National Institute of Health Research Chair (Professor Gerry McCann) and the Cardiovascular Theme of the NIHR Biomedical Research Centre. There are strong links with the University Hospitals of Leicester NHS Trust, where senior clinical academics provide leadership in patient care, as well as undergraduate and postgraduate medical teaching and training.

Cardiovascular Research has been a strength of the Leicester Medical School since its inception. The work of the Department has contributed to major advances in the treatment of coronary heart disease, cardiac arrhythmias, heart failure, hypertension and stroke, and at a fundamental level improved our understanding of the causes, including genetic predisposition, to cardiovascular diseases. Research is supported by strong Programme level funding from the BHF, NIHR and Medical Research Council. In the 2014 Research Excellence Framework, Cardiovascular Sciences contributed significantly to the University’s Clinical Medicine (UoA1) submission; over 70% of research was classified as internationally excellent (22% world leading), and 2 of the 4 submitted impact studies were cardiovascular and rated 4*.

The overarching strategy for cardiovascular research is based on two main principles: (i) to integrate high quality basic and clinical science research, and (ii) to focus on common cardiovascular diseases and on questions of direct clinical relevance and impact. In keeping with the University’s Strategic Plan for discovery-led research that ‘delivers and supports excellent research in all its forms’, our research is focussed across two major research themes, allied to those of the Cardiovascular Theme of the National Institute for Health Research Leicester Biomedical Research Centre:-

- 1) Cardiovascular Precision and Stratified Medicine (Biomarkers, Genomics, Imaging)
- 2) Drug / Device: Discovery / Intervention and Clinical Trials (Preclinical, translational and clinical trials)

Clinical Cardiology

The clinical Cardiology department is a busy cardiac centre providing secondary care to the local population as well as covering a tertiary population of ~3.5 million in the East Midlands for specialist services which forms a strong base for clinical delivery and research activities. Ground-breaking work include novel stents for percutaneous coronary interventions, the first UK series of transcatheter aortic valve implant, world-first robotic catheter ablation for cardiac arrhythmias and world-leading



discovery of genomic basis for coronary artery disease. The department continues to lead in many aspects of cardiac research including advanced cardiac imaging (CMR, PET, CT), novel mapping and ablation for complex arrhythmias (AF and VT), biomarker discovery and proteomics, heart failure, spontaneous coronary artery dissection and cardiovascular genomics. There is strong preclinical research into mechanisms underlying sudden cardiac death, aortic pathologies and drug discovery into vascular signalling pathways. In addition, there is active interaction with Engineering and Informatics colleagues both internally within the University and externally through other academic and commercial collaborations especially in the areas of medical device research, enterprise and technology transfer. This includes active programmes in data science, biomedical signal processing and the application of artificial intelligence and deep learning to cardiological data. There is also excellent research infrastructure to support clinical studies and trials from the NIHR BRC as well as the Clinical Trials Unit.

Clinical Cardiothoracic Surgery

The CL will join an established clinical research programme that is focused on the development of novel stratified organ protection interventions in cardiovascular disease. The post is linked to the new Leicester BHF Accelerator Award in Precision Medicine that aims to develop a new cohort of early career researchers in cardiovascular medicine. It is also linked to the Cardiovascular, Respiratory, Lifestyle and Precision Medicine themes of the Leicester NIHR Biomedical Research Centre, and the Leicester Precision Medicine Institute.

Specifically, this post will offer training in one of the following programmes:

Programme 1: Phenotyping frailty in adult cardiac surgery patients using a multi-omics approach:

This work will explore the frailty phenotype using linked clinical phenotyping, measurement of mitochondrial function and the metabolome in myocardial and skeletal biopsies obtained at surgery, and the breathome. This will align with the current programme of work within EMBER and the BRC, and an ongoing programme of research linking the cardiovascular, precision medicine and lifestyle BRC themes funded by a BHF Programme Grant awarded to Professor Murphy that is evaluating organ protection interventions that target metabolic status pre-surgery.

Programme 2: Exploring the phenotype of accelerated atherosclerosis in vein bypass grafts the main cause of graft failure

This work will explore the interaction between elevated shear stress, vascular endothelial phenotype evaluated ex vivo using –omics approaches, and accelerated atherosclerosis evaluated both ex-vivo and in-vivo. This work will align with the Precision Medicine themes of the BHF Accelerator and the BRC, and with the LPMI strategic plan. This work will also link three BRCs with cardiovascular themes (Bristol, Oxford, Leicester) who are also recipients of BHF Accelerator/ Centre of Research Excellence Awards, and who are all members of the new NIHR-BHF Cardiovascular Partnership.

Respiratory Medicine

Two main priority areas exist within Respiratory Medicine in Leicester that are likely research themes for a CL to pursue. Candidates with their own research theme are encouraged to apply however.

Multi-morbidity

The ACL will work within chronic respiratory disease in ageing patients with multi-morbidity, functional impairment and frailty. They will continue to develop their academic training within the Respiratory



and Lifestyle themes of the NIHR Leicester Biomedical Research Centre (BRC). They will also link with the Leicester Precision Medicine Institute (LPMI). They will build on collaboration within the Midlands Health Alliance with MRC-ARUK Centre for Ageing (Greenhaff/Atherton) and NIHR Birmingham Sarcopenia themes (Lord/Sapey).

Specifically, this post will offer training in the following specific programme.

Developing a stratified medicine approach to identify subgroups of patients with COPD characterised by potentially treatable clinical deficits in physical activity, exercise capacity and skeletal muscle function (Leads: Steiner, Singh, Evans, Greening).

Pulmonary rehabilitation is a high value intervention for patients with COPD that reduces subsequent healthcare costs in patients who attend and complete therapy. Multi-morbidity and frailty are common treatable traits. The refinement of the therapeutic offer (through stratification) to appropriately match individual health needs will be a major step to broadening access to therapy and enhancing adherence and treatment response. These clinical deficits, related to adverse health outcomes, are not adequately addressed by the current 'one size fits all' approach to exercise therapy.

Underlying skeletal muscle dysfunction, sarcopenia, contributes to these deficits and may result in a differential response to a spectrum of training modalities (Evans). Current work (Steiner, Greening) to understand these changes are currently being studied using sensitive state-of-the-art measures of muscle turnover and regeneration.

Appropriate and timely antimicrobial therapy

The ACL will work to further develop and validate the clinical applications of Leicester's exceptional capacity to sample and analyse exhaled air. In particular this will involve use of adapted face masks to detect pathogens and other biomarkers linked to specific pathologies. The pathogen detection approach has demonstrated value in tuberculosis and is clearly applicable to other respiratory infections, while work on exhaled volatile organic compounds (VOCs) supported by the East Midlands Breathomics MRC/EPSRC molecular pathology hub will provide complementary biomarker analyses. The focus of the work will be early selection of targeted therapy and monitoring of therapeutic responses and will be closely linked to our Respiratory theme in the Leicester NIHR Biomedical Research Centre (BRC) and the Leicester Precision Medicine Institute (LPMI).

Leicester's work on sampling exhaled air is advancing rapidly and new opportunities are constantly being recognised. We will work with the post holder to identify projects that offer the best combination of career development and clinical impact. A critical feature of the adapted masks is that, once captured, the microbial signals are stabilised in the sampling matrix and analysis may either be immediate or deferred.

