Job Summary

Job Title: Lecturer in Clinical MRI (Research focused)
Grade: 8
Salary: £45,413 to £55,755 per annum
Department: Cardiovascular Sciences & UHL Medical Physics
Hours/Contract: Full-time, Permanent
Reference: 11206

Role Purpose

To draw on academic experience to underpin and carry out activities across a range of areas of academic and university life, aligned with the University's strategic themes of 'World Changing Research', 'Research Inspired Education' and 'Our Citizens,' together with the University values.

Our approach to the academic career recognises its plurality and encourages a balance between breadth and specialisation. This is underpinned by the academic career map, which articulates the expectations of academic staff at each stage of their academic career, and clearly establishes what they can do in order to progress their academic career at Leicester.

To provide high quality research and teaching in the field of Medical Physics and to support University Hospitals Of Leicester NHS Trust (UHL) Medical Physics research, innovation and training activities from within the UHL Medical Physics department.

To provide scientific and technical expertise, contributing to the development, management, and safe operation of MRI equipment across the Trust.

You will be a high-calibre and experienced scientist or academic, with an established research profile in the area of MRI. The successful candidate must either have Health and Care Professions Council (HCPC) registration as a Clinical Scientist (protected title), or achieve registration within 3 years of appointment. Training will be provided as required and you will be integrated within the clinical team at UHL.

Main Duties and Responsibilities

Research

- Develop a portfolio of internationally recognised publications that are world-leading in terms of originality, significance and rigour as appropriate to the field or discipline and with impact on society, economy, culture, government, policy or practice
- Engage in research and enterprise leadership, contributing to promoting and embedding an inclusive and respectful university research culture
- Attract external funding on an individual or collaborative basis, as appropriate to the field or discipline
- Provide high quality PGR/PhD/MD supervision and contribute to attracting and securing funding for postgraduate and early career researchers
- Develop networks and foster regional and national collaborations with external contacts in academia, professions and/or industry

UNIVERSITY OF LEICESTER

NHS University Hospitals of Leicester NHS Trust

Job Summary

Teaching

You will contribute to courses currently run within the College which are appropriate to your expertise.

In detail this means that you will:

- Undertake research-led teaching on undergraduate and/or postgraduate taught courses
- Give lectures, seminars, tutorials and other classes in support of the required teaching obligations, and to supervise laboratory and project work by undergraduate and postgraduate students as required
- Co-operate with colleagues in the continuous review of the curriculum and the development of new modules and degree streams, where appropriate
- Ensure that student feedback on teaching is obtained and to respond constructively to such
- feedback and to advice from peers
- Support students during any industrial or other placements or exchange programmes
- Take responsibility for specific areas of teaching and learning within the cardiovascular sciences undergraduate and postgraduate programmes
- Undertake the academic and administrative duties required to sustain the delivery of high-quality teaching
- Comply with the University and College teaching quality assurance standards and procedures, including the provision of such information as may be required

Our Citizens

- Contribute to initiatives and activities that have a beneficial impact outside the University and make a demonstrable contribution to society
- Engage in enterprise and public engagement activities which increase the external profile of the discipline and share the benefits of Higher Education and research
- Actively engage with the academic discipline both nationally and internationally and represent the School and University through undertaking roles on external committees, reviews and panels
- Participate and provide leadership in School, College or University roles, contributing to management and administration processes and committee structures
- Be involved in the recruitment, management and development of staff and act as a mentor and coach to colleagues

Clinical Duties

The post holder will be offered an honorary contract with UHL NHS Trust with effect from the date of the University appointment, for the period of occupancy of the post. They will be expected to comply with trust policies and procedures at all times.

The clinical duties will be agreed with the Trust and will focus on the area of MRI.

Duties will include:

- Provide academic leadership for the UHL Medical Physics department, increasing the volume, quality and output of research and development projects
- Undertake such specific departmental roles and management functions as reasonably required by the UHL Heads of Department
- Manually set up, calibrate and operate MRI equipment and associated test devices with particular focus on the NIHR funded Xenon Hyperpolariser being installed in 2025
- Deliver and enhance scientific and technical support for the management and operation of MRI equipment across the trust
- Ensure safe and effective use of highly complex, expensive MRI equipment, adhering to national and local guidelines to protect patients, staff, and the public
- Assist the Head of Non-Ionising Radiation to develop and implement MRI quality assurance protocols, performing measurements and analysing data to ensure optimal performance
- Support the MR Safety Expert in providing safety advice
- Provide scientific and technical support for advanced clinical MRI applications, including implementation of MRS (31P and 1H), 4D flow and of development of at least one of fMRI, CSI and DTI
- Supervise trainees, providing day-to-day management
- Provide basic and advanced training in MRI physics, techniques and safety to NHS staff
- Perform non-routine, highly specialised analysis of MRI images to support accurate and reliable clinical decision making
- Actively participate in research projects, supporting the clinical translation of innovations
- Collaborate with academic and NHS colleagues to prepare grant applications and business cases
- Develop and implement bespoke software solutions, including MRI pulse sequence programming (desirable) and image reconstruction to address specific clinical and research needs
- Work with manufacturers and other stakeholders to test and integrate new techniques and technologies.

Job Plan

The appointee will hold a jointly agreed and integrated job plan containing 50% academic duties and 50% healthcare duties for UHL (Medical Physics). Annual leave should be shared equally between duties for UoL and UHL. Occasional out-of-hours clinical working will be required for which single time off in lieu will be granted.

The job plan will be reviewed annually, and any changes mutually agreed between the appointee, the UHL service lead and the University; a first review after three months may be appropriate. The importance of study leave is recognised and supported. Funding for study leave related to the clinical elements of the role will be based on the Trust policy at the time of the request for study leave. Funding

for academic study leave related to the academic elements of the role will be based on the University's policy at the time of the request for study leave.

Internal and External Relationships

Develop mutually beneficial, effective relationships across the College and with local partners, that support and deliver the University and UHL strategy

Represent the University and UHL both regionally and nationally

Work collaboratively with other members of the module delivery team and participate in teaching team meetings

Coordination with central University offices

Accountability and Reporting Arrangements

You will be responsible for all academic activities to Professor Gerry McCann & the Head of the Department of Cardiovascular Sciences and accountable to the PVC & Dean of the College and to the University.

For clinical duties the post holder will be responsible to the Head of Medical Physics, Andrea Wynn-Jones & to the CSI Clinical Director

Planning and Organising

Shape the strategic direction in the research area, developing clear long term (many months/years) plans for sustaining and enhancing the research programme

Long term planning and organisation of the delivery of teaching and assessment

Participate in the departmental operational planning process, supporting the strategic direction of the School, College and UHL

Qualifications, Knowledge and Experience

Essential

- PhD in a relevant subject area* (or near completion)
- Must either have full HCPC registration as a Clinical Scientist (protected title), or achieve full registration within 3 years of appointment
- Expertise in MRI physics, safety and advanced imaging techniques*
- Fellowship of the HEA or equivalent accredited teaching qualification, or commitment to gain an accredited teaching qualification on appointment within a set timescale*
- Expertise that complements or enhances existing strengths within the Department & College*

- Publication of outputs (commensurate with disciplinary norms), some of which are evidenced to be internationally recognised and of a quality that has the potential to be world-leading in terms of originality, significance and rigour*
- A portfolio of fundable external grant applications, with evidence of success in winning external funding that meets or exceeds the discipline benchmark or of submitting grant applications which have been favourably peer-reviewed prior to submission*
- Experience of teaching at undergraduate and postgraduate level, evidenced by a successful track record of excellent student outcomes and progression*
- A demonstrable contribution to the administration of an academic Department/discipline*
- Evidence of external recognition of teaching practice through sustained excellent student feedback, module evaluation, peer review, and external examiners or external assessors comments*
- Involvement in relevant internal and external committees, organisations and groups*
- Proficiency in programming languages such as Python, Java, C++, C or MATLAB
- Knowledge of DICOM standards and experience with the anonymisation, storage and management of complex MRI datasets
- Strong analytical and problem solving skills with experience in QA procedures and the interpretation of MRI data
- Technical skills in designing and developing MR phantoms, including the preparation of chemical solutions and construction of test objects for precise imaging simulation

Desirable

- A strong background in cardiovascular diseases/MRI would be advantageous*
- Successful completion of CPD*

Skills, Abilities and Competencies

Essential

- Effective oral & written communication skills in English; clear, fluent and articulate in verbal presentation*
- Clear forward plans for sustaining and enhancing the research programme*
- Ability to work independently and as part of a team
- Excellent interpersonal skills, to develop networks and form collaborations
- Ability to plan, organise, implement and deliver programmes of work
- Effective presentation skills
- Ability to develop resource material to enhance teaching quality
- Ability to deliver classes using a comprehensive range of delivery methods, including lectures, seminars and tutoring
- Ability to prioritise tasks within agreed work schedules
- An understanding of and strong commitment to equity and an awareness of diverse community issues

Desirable

- Ability to teach classes using distance learning

- Ability to provide support to students via Blackboard
- Experienced medical physicist with experience of protecting patients and healthcare workers from potential hazards, including radiation
- Skills in coaching, mentoring and developing others, including students, early career researchers and colleagues
- Skills in pastoral care and motivation of students
- A commitment to the delivery of a high-quality service to students

Criteria to be used in shortlisting candidates for interview

Contract

An individual who does not already hold HCPC registration will be appointed to the G8 extended Lecturer scale £45,413-£48,149pa. Appointees must obtain HCPC registration within 3 years of commencement. HCPC registered individuals will be considered for appointment across the full G8 scale.

Professional Requirements

You must either be registered with the HCPC as a Clinical Scientist, or achieve registration within 3 years of appointment, maintain appropriate personal professional indemnity and abide by the codes of professional practice for the duration of the post.

It is fundamental condition of employment that you hold and retain an honorary contract with University Hospital of Leicester (UHL) for the duration of your employment. It is your responsibility to ensure that you do not undertake any clinical work or research associated with the NHS prior to receipt of your honorary contract. It is the responsibility of an individual member of the clinical academic staff to advise the University immediately if his/her honorary contract is terminated or withdrawn or if he/she is at any time subject to disciplinary action under the honorary contract.

You will be required to hold a joint integrated job plan which will be reviewed annually and any changes mutually agreed between you, the UHL and the University; a first review after three months may be appropriate.

You are required to participate in joint annual appraisal; UoL and UHL will perform separate appraisals which will be shared & discussed between the two organisations. The post will be managed in line with the agreed UHL & University guidance for the management of clinical academics.

You are required to have active involvement in continuing professional development in line with best practice & maintain appropriate records such that the HCPC will grant successful revalidation of fitness to practice at the required time. You must provide evidence of successful revalidation to the College HR Office. If not already registered, a training plan must be in place to achieve HCPC registration as a Clinical Scientist within 3 years. Once registered, lapsing your registration may render you subject to disciplinary action.

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 with Child & Adult Barred List.

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.

NHS Research Governance

Where it is determined that the duties of this post for the purposes of research involve work with the NHS, it is necessary to ensure that the performance of the duties attached to the post are covered by NHS research governance arrangements and the appointee must comply with all such arrangements, which may include occupational health clearance and DBS clearance.

Infection Control

The UHL Infection control policy has achieved remarkable improvements with impressive reductions in hospital-acquired infection. You will be expected to be familiar with the policy/practice but also to show leadership to other colleagues especially juniors.

Supporting University Activities

As a University of Leicester citizen, you are expected to support key university activities such as clearing, graduation ceremonies, student registration and recruitment open days. We expect all staff as citizens to work flexibly across the University if required.

University Values

Job Summary

Inclusive - We are diverse in our makeup and united in ambition. Our diversity is our strength and makes our community stronger.

Inspiring - We are passionate about inspiring individuals to succeed and realise their ambitions. We challenge our community to think differently, to get involved, and to constantly embrace new ideas.

Impactful - As Citizens of Change we will generate new ideas which deliver impact and empower our community

Equity and Diversity

We believe that equity, 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 equity 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 equity, diversity and inclusion.

Appendix

University Hospitals of Leicester NHS Trust

University Hospitals of Leicester (UHL) NHS Trust is one of the biggest and busiest NHS Trusts in the country, serving the one million residents of Leicester, Leicestershire and Rutland. Specialist services such as cancer, renal and extra corporeal membrane oxygenation (ECMO) reach a further two to three million patients from the rest of the country. UHL operates 3 main hospital sites which are situated at Leicester Royal Infirmary, Glenfield Hospital and Leicester General Hospital. As a teaching hospital, UHL works closely with partners at the University of Leicester.

Around 1,000 clinical trials take place every year at UHL and it is now home to an NIHR Biomedical Research Centre which supports key research including lifestyle, diabetes, and cardio-respiratory diseases, and has been designated as an NIHR Clinical Research Facility.

The Trust is a nationally and internationally-renowned specialist in cardio-respiratory and the cardiac centre at the Glenfield hospital leads the way in developing new and innovative research and techniques, such as surgery with a Robotic Arm, TAVI (Trans-Catheter Aortic Valve Insertion) and the use of the suture less valve in heart surgery. It has also become one of the world's busiest ECMO centres and is the only hospital in the UK to provide ECMO therapy for both adults and children.

UHL Clinical Support & Imaging

University Hospitals of Leicester (UHL) NHS Trust is divided into 9 Clinical Management Groups (CMG) and Clinical Support and Imaging (CSI) is one of the largest. The Healthcare Science workforce represents 6% of the full- time equivalent staff (FTE) at UHL and CSI has the largest proportion of these based in Laboratory sciences, Physiological sciences, Bioinformatics and Medical Physics.

Job Summary

Medical Physics

The Medical Physics department has a WTE of approximately 130 (headcount over 140) with radiation specialisms: Radiation Safety and Diagnostic Radiology, Imaging with Non-Ionising Radiation (including this post based in MRI) and Nuclear Medicine. The department also includes Clinical Engineering, Visual Electrophysiology Service, Newborn Hearing Screening and Urodynamics with the latter 3 identified as Physiological sciences. Several specialisms are research active and staff regularly present at national meetings.

Strong professional links also exist with Radiotherapy Physics (situated in Cancer, Haematology, Urology, Gastroenterology and General Surgery CMG) and the use of MRI is commonly part of the radiotherapy treatment pathway however, staff are excluded from the above data.