

Job Title:	Senior Exercise Research Technician (Exercise Physiology)
Grade:	5
Salary:	£26,338 to £30,805 per annum
Department:	Diabetes Research Centre
Hours/Contract:	Full-time, or job share considered, fixed term contract for 24 months with possibility of extension subject to funding
Job Family:	Technical and Experimental
Reference:	11968

Role Purpose

We are looking for a talented, motivated individual to join the [Leicester Lifestyle and Health Research group](#) (LLHRG). The LLHRG are part of the Diabetes Research Centre (DRC), [Leicester Diabetes Centre \(LDC\)](#), and [NIHR Leicester Biomedical Research Centre](#) with a diverse research portfolio that investigates how 24-hour lifestyle behaviours, including physical activity, sedentary behaviour, sleep and nutrition can be optimised to prevent and manage obesity and long-term conditions, such type 2 diabetes, in multi-ethnic populations.

The post holder will play a senior role in delivering research and other relevant activity within the exercise laboratory and associated clinical research facilities, according to study protocols, SOPs and working instructions. This will predominantly include (i) leading assessments of physical fitness and function (including maximal and submaximal exercise testing, strength and functional performance testing), (ii) supervision of exercise training programmes and other lifestyle interventions, (iii) conducting other assessments of cardiometabolic health (including body composition, resting metabolism), and (iv) coordinating the use of wearable technology to measure habitual activity. They will also contribute to the oversight of the safe and effective running of the exercise laboratory and associated spaces, preparing and organising these facilities and ensuring at all times that the work environment and equipment is maintained to a very high standard. This will include working to established processes and procedures, contributing to the development, implementation and reviewing of new ones, coordinating in-house and external maintenance of equipment, and supporting ongoing training/support of new and existing users of these facilities.

Located within the Leicester Diabetes Centre (LDC) at Leicester General Hospital, the post-holder will work with a multidisciplinary clinical and non-clinical team of senior and junior academic, delivery staff, management and administrative support and undergraduate/postgraduate students, and will contribute to the daily supervision of junior exercise research technician(s) and placement students or other visitors. They may also support with data cleaning, collation, and analysis under the guidance of senior researchers, contributing to research outputs.

The post is most suited to someone with background expertise and experience in exercise sciences or physiology, or in lifestyle and health research. Expertise in exercise testing and training is essential.

Resources Managed

The post holder will support senior members of the team in the deployment of resources within research budgets, including procurement of equipment within the exercise laboratory and associated spaces, and purchasing and stock control of research study consumables.





Main Duties and Responsibilities

- Prepare for and conduct maximal and submaximal exercise testing, strength, and functional testing within the exercise laboratory. This will require operation of a range of specialist exercise and physical activity monitoring/measurement equipment.
- Supervision of exercise or other lifestyle interventions on a day-to-day basis within the exercise laboratory and remotely for home-based exercise sessions.
- Prepare for and conduct various assessments of cardiometabolic health; including but not limited to resting metabolic rate, muscle imaging (using ultrasound), and body composition using iDXA. Notably, the post-holder will be an iDXA operator (full training provided) responsible for scanning research patients under supervision of the departmental radiation protection supervisor (RPS), complying to the IRMER procedures and other governance processes. They will supervise and train staff members to operate the scanner and conduct daily maintenance and calibration procedures.
- Contribute to the design and development of exercise training or other lifestyle interventions used within research studies and other activities of the group.
- Supervise the efficient and safe running of the exercise laboratory, ensuring that all resources within the department are in excellent working order and to the required standards for the research or other activities taking place. This will include working closely with the multidisciplinary team and providing support and supervision to junior technical staff members and students on a day-to-day basis.
- Manage the LDC/DRC/BRC stock of wearable technology (including accelerometers and consumer activity trackers), including maintaining inventory, regular charging, auditing, updating SOPs and managing the booking system and loaning of accelerometers. This will include Initialising and downloading data from a range of devices (including GENEActiv, Axivity, Actigraph and activPAL) for multiple studies within the LDC/BRC/BRC. The postholder may also process and analyse data using GGIR (in R), ActiLife, Java and SPSS under the guidance of senior researchers.
- Determine requirements and maintain adequate stock levels to support the departments activities, advising on pricing and compiling requisitions to purchase equipment and consumables with outside suppliers.
- Train and supervise students, new staff and visiting workers in key exercise laboratory techniques, for example determining maximal oxygen uptake, treadmill and cycle ergometer use, indirect calorimetry and iDXA.
- Adhere to the relevant COSHH, risk assessments and SOPs throughout all relevant activity.
- Assist and carry out quantitative analysis upon generated data including interpretation of results to support writing of academic research papers under the guidance of senior researchers. The post holder may also work in collaboration with academic staff to support external funding applications.
- Attend meetings relating to wider updates from the Exercise Laboratory Team and wider Lifestyle and Health Research Group.



Internal and External Relationships

The post holder will be situated in the Diabetes Research Centre, located at the Leicester Diabetes Centre, Leicester General Hospital, sitting within the Lifestyle Theme of the NIHR Leicester BRC (as part of the wider Leicester Lifestyle and Health Research Group).

Within the role, the appointee will be expected to liaise and work closely with all of the teams within the Diabetes Research Centre, external research groups that are part of the BRC Lifestyle Theme, and the other research themes across the BRC. This may include working with groups across sites at the University Hospitals of Leicester NHS Trust, and with other collaborative organisations as appropriate.

They will work closely with their line manager and senior researchers to plan and deliver specific tasks on a daily basis and to supervise junior technicians and other staff on day-to-day duties. They will assist in the technical training of undergraduate, postgraduate and visiting workers in key exercise laboratory techniques and use of exercise and clinical equipment.

They will also attend group meetings in order to update knowledge of the work of the group and to disseminate any issues or updates in the laboratory to lifestyle research group. They may also attend BRC Operational meetings and discuss updates related to the department and broader topics.

The post holder will also have contact with participants and their families involved in the research studies conducted by the Centre.

Planning and Organising

The post holder will be expected to:

- Plan and organise own work schedule in conjunction with the requirements of the department in order to meet deadlines.
- Organise and plan the resources for the week(s) ahead to ensure academics/students/clinical staff can undertake their research.
- Plan time to attend any relevant training courses to continue professional development and create learning/training schedule for junior technical staff.

Qualifications, Knowledge and Experience

Essential

- Understanding and experience using a range of exercise equipment and physical activity measurement tools*
- Experience of maximal and submaximal exercise testing*
- Experience of physical function assessments
- Experience of exercise training / supervision*
- Good depth of knowledge in field of expertise (exercise science and testing)*
- Experience of providing daily supervision within a team*
- Familiarity with a range of software packages for data analysis
- Knowledge of good exercise laboratory practice and health and safety procedures.



- Basic life support training (or ability to obtain)*

Desirable

- BSc (Hons) in Sport/Exercise Sciences or a related discipline, or demonstrable equivalent experience*
- Immediate life support (or willingness to obtain)
- Further relevant qualification such as REPS level 4, BACPR Phase IV Exercise Instructor or other
- Experience with cardiometabolic testing, including use of an iDXA scanner, indirect calorimeter and measurement tools for the assessment of physical activity
- Previous experience in research, including data analysis and/or publication of academic papers in respectable research journals
- Experience with management/supervision and support

Skills, Abilities and Competencies

Essential

- Proficient user of specialist software packages in exercise testing/training*
- IT skills especially in Microsoft Office applications and databases*
- Well-developed understanding of Health and Safety regulations and procedures
- Excellent oral and written* communication skills
- Accuracy in work and attention to detail*
- Ability to analyse problems and develop/implement effective appropriate solutions
- Good interpersonal skills and ability to work independently and as part of a research team and supervise junior staff and students
- Ability to initiate and develop professional relationships within the group and wider department, including external contacts
- Excellent time management

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

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.

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 Child & Adult Barred 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.

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.

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

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.

