School of Sport, Exercise & Health Sciences

Loughborough University

RESEARCH ASSOCIATE in Neurophysiology of Amyotrophic Lateral Sclerosis

Full-time (1.0 FTE, 37 hours per week); Fixed-term until 1st June 2027

Job Ref: REQ250219

As part of the University's ongoing commitment to redeployment, please note that this vacancy may be withdrawn at any stage of the recruitment process if a suitable redeployee is identified.

Internationally recognised for its contribution to the study of sport, exercise and health, the School has wide-ranging expertise, encompassing such diverse areas as biomechanics, medicine, molecular and cellular biology, nutrition, pedagogy, psychology, physiology, sociology, economics and sport management.

The School has an active and ambitious plan to grow capacity and influence through developments as part of the National Centre for Sport and Exercise Medicine, Loughborough in London, and StemLab.

The School is extremely proud to hold an **Athena Swan Silver Award** since 2013, recognising the commitment and work of the School in addressing gender inequalities in Science and to improving career progress for female academics. The School is committed to ensuring that female students and staff are able to achieve their full potential; and provides a flexible and open working culture to enable staff to maintain a work-life balance.

We support our Athena SWAN initiatives by investing in:

- Bespoke leadership programmes to encourage and build confidence in women to take leadership roles.
- Working lunches where needed to enable to meetings to be held between 10am and 4pm (as per our Silver Action Plan).
- Monthly coffee mornings which provide opportunities for networking and developing a sense of community within the School.

We also welcome applications from those who are looking to work part-time.

Research and Innovation

Research and Innovation within the School is characterised by excellence and breadth, and its quality was recognised in the 2021 Research Excellence Framework where Loughborough University ranked top for research power (GPA x volume) in Sport and Exercise Sciences, Leisure and Tourism. Loughborough University has also placed Number 1 in the QS world ranking for sport-related subjects for six consecutive years (2017-2022, every year since the category was introduced). A broad range of social and natural sciences contribute to the School's research and innovation activity which is organised within three overlapping themes:

- ***Sport performance***, understanding and supporting the enhancement of athletes' performance in competitive sport;
- ***Lifestyle for health and well-being***, encompassing research across several disciplines with the common goal of facilitating healthy living and ageing across the lifespan; and
- ***Sport, Business and Society***, exploring how individuals, communities and organisations engage with and facilitate sport and exercise opportunities.

The School's research themes articulate in particular with the Sport and Exercise Beacon and the Health and Wellbeing Global Challenge which are key elements of the University's CALIBRE (Collective Ambition at Loughborough for Building Research Excellence) framework.

Project Description

We are looking for a Research Associate to work on a study non-invasively assessing Amyotrophic Lateral Sclerosis (ALS) progression using electromyography (EMG). This longitudinal study will involve EMG assessments of a cohort of ALS patients and neurologically healthy controls three times over the course of six months. A highly competent, well-organised and industrious research associate is required to take a lead role in the collection and analysis of human muscle function, nerve stimulation, and high-density EMG data.

Job Description

Job Family & Grade: Specialist & Supporting Academic (Research) Grade 6

Job Purpose: To undertake research investigating human motoneuron properties in Amyotrophic Lateral Sclerosis progression.

Job Duties:

- To lead the day-to-day data collection of electromyography, nerve stimulation, and muscle function measurements within the project assessing human motoneuron properties in ALS progression.
- To lead the day-to-day data analysis and collation of electromyography, nerve stimulation, and muscle function measurements with appropriate data processing procedures.
- To contribute and assist with other studies within the laboratory, where appropriate.
- To plan, manage and conduct the work to agreed deadlines and standards.
- To contribute and assist with the study governance and regulatory compliance checks.
- To contribute to the running of the whole study and support other researchers within the research team.
- Write up the findings for dissemination as conference and journal submissions to high-quality academic journals.
- To attend and contribute to conferences.
- Where appropriate, to deliver teaching, tutorial and laboratory sessions to students.
- Engage in training programmes in the University (or elsewhere) that are consistent with the needs and aspirations of the project and those of the School.
- Undertake other duties as may be reasonably requested and that are commensurate with the nature and grade of the post.

Teaching:

There are no specific teaching responsibilities for this position.

Points to Note:

The purpose of this job description is to indicate the general level of duties and responsibility of the post. The detailed duties may vary from time to time without changing the general character or level of responsibility entailed.

Special Conditions:

All staff have a statutory responsibility to take reasonable care of themselves, others and the environment and to prevent harm by their acts or omissions. All staff are therefore required to adhere to the University's Health, Safety and Environmental Policy & Procedures.

All staff should hold a duty and commitment to observing the University's Equity, Diversity and Inclusion policy and procedures at all times. Duties must be carried out in accordance with relevant Equity, Diversity and Inclusion legislation and University policies/procedures.

Successful completion of probation will be dependent on attendance at the University's mandatory courses which include Belonging and Inclusion and, where appropriate, Recruitment and Selection.

Organisational Responsibility:

Reports to Dr Jakob Skarabot

Person Specification

Your application will be reviewed against the essential and desirable criteria listed below. Applicants are strongly advised to explicitly state and evidence how they meet each of the essential (and desirable) criteria in their application. Stages of assessment are as follows:

1 – Application
2 – Test/Assessment Centre/Presentation
3 – Interview

ESSENTIAL

Area	Criteria	Stage
Experience	Experience of undertaking neuromuscular physiology research	1,3
	Strong research background in the collection of neuromuscular data, especially electromyography in human participants	1,3
	Considerable experience with the assessment of human muscle function and dynamometry	1,3
	Extensive experience of working with human participants in research settings	1,3
	Authoring original work for academic journal papers, conference papers or technical reports	1
Skills and abilities	Experience collecting and curating extensive neuromuscular datasets in a safe and rigorous manner	1,3
	Extensive experience of working with human participants	1,3
	Excellent written and oral communication skills	1,3
	Self-motivated, with ability to meet deadlines	1,3
	Excellent interpersonal, and organisational skills	1,3
	Ability to write project reports and make technical presentations	1,3
	Knowledge of relevant Health & Safety issues	1,3
Training	Demonstrate evidence of having undertaken further training	1
Qualifications	PhD (or close to completion) in the area of neuromuscular physiology, neuroscience, physiology, biomedical engineering or closely related topic	1
Other	Commitment to observing the University's Equity, Diversity and Inclusion policy at all times	3

DESIRABLE

Area	Criteria	Stage
Experience	Experience contributing to studies within the NHS	1,3
	Experience in obtaining Health Research Authority approvals	1,3
	Extensive experience with signal processing and/or coding (e.g. Matlab/Python) to expedite data analysis	1,3
	Working in high-quality academic and clinical research environments	1,3
	Experience of supporting or mentoring colleagues and students in relevant areas	1,3
Skills and abilities	Experience working with ALS patients	1,3
	Experience and/or knowledge of clinical neurophysiology assessments	1,3
	Knowledge of motor neurone disease / amyotrophic lateral sclerosis	1,3

Conditions of Service

This full-time post is offered on a fixed-term contract, from 2nd June 2025 (or as soon as possible thereafter) to 1st June 2027 within the *Specialist & Supporting Academic (Research)* job family at Grade 6 (£35,116 -£38,249 per annum); starting salary to be agreed on offer of appointment.

The appointment will be subject to the University's normal Terms and Conditions of Employment for staff on Grade 6 and above.

The University is committed to enabling staff to maintain a healthy work-home balance and has a number of family-friendly policies.

We also offer an on-campus nursery with subsidised places, subsidised places at local holiday clubs and a childcare voucher scheme (further details are available at: Childcare Support)

In addition, the University is supportive, wherever possible, of flexible working arrangements. We strive to create a culture that supports equality and celebrates diversity throughout the campus. The University holds a Bronze Athena SWAN award which recognises the importance of support for women at all stages of their academic career.

Application & Interview

The closing date for receipt of applications is Wednesday 16th April 2025.
Interviews will be held during w/c 28th April 2025.