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# RESEARCH ASSOCIATE

# Health, the Environment and Sleep

Home Heat Health project: Sleep in the City (London-based)

(Full-time; Fixed-term to 31st May 2025)

Job Ref: REQ220867

As part of the University's ongoing commitment to redeployment, please note that this vacancy may be withdrawn at any stage of the recruitment process if a suitable redeployee is identified.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.
- Extra mile award which recognises the above and beyond contributions of staff from all job families and research students.

Further information about Athena SWAN and the School's commitment to uphold the Silver Award can be found at: http://www.lboro.ac.uk/departments/ssehs/about/athena-swan/

#### 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.

Further information about the School's research themes can be found at: <a href="http://www.lboro.ac.uk/departments/ssehs/research/">http://www.lboro.ac.uk/departments/ssehs/research/</a> and about the University's CALIBRE framework at: <a href="http://www.lboro.ac.uk/research/calibre/">http://www.lboro.ac.uk/research/calibre/</a>

## **Project Summary**

Sleep disruption degrades mental health, reduces work-place productivity and increases absenteeism, and increases the burden on health and social care systems. Homes that remain comfortable at night enable quality sleep which enhances health and well-being. As the climate warms, the frequency, intensity and duration of heatwaves is increasing. As cities become denser, the urban heat island intensifies, and noise levels rise. Whilst effort is being directed to reducing night-time overheating in new dwellings, there is no guidance, and no regulation, to protect existing dwellings from overheating. The Home Heat Health project therefore aims to establish a UK night-time overheating criterion in London flats and small dwellings, investigate behavioural changes before and during sleep, and bedroom adaptations which can improve summertime thermal comfort.

This project brings together a multi-disciplinary team of sleep scientists, engineers and experts in user centred design and health. The post holder will join a project team of six senior investigators, and two other appointed project Research Associates. The team will work with social housing providers, local authorities, housing developers and government departments. The project will be the first of its kind, to comprehensively explore the impact of the urban environment on sleep quality in UK residents. A large sample, currently planned at around 150 participants, of healthy adults of all ages, living in flats and small dwellings in London, will be actively involved in the study.

### **Job Description**

Job Family & Grade: Specialist and Supporting Academic Grade 6

Job Purpose: To conduct a series of studies to measure the quality of sleep in natural, urban settings, and the

impact of temperature and other relevant factors on sleep outcomes.

To identify behavioural changes and adaptation measures that can be deployed to enhance

sleep, population health and policy making.

#### Job Duties:

- Develop, organise and conduct London-based studies to: quantify temperatures, and other factors, that cause sleep disturbance in bedrooms; experimentally trial co-created socio-technical adaptations and assess their practicality, adoptability and influence on the indoor environment, sleep quality, and health and well-being for people of different ages; contribute to devising and illustrating strategies for city-located apartment blocks to reduce energy demand and improve the environment in bedrooms.
- Deploy and maintain the technology associated with the sleep and health variables measured in the project studies, which include sleep actigraphy, web-based applications, online/in-person administered questionnaires, and temperature monitors.
- Process and analyse data collected from participants on sleep and health variables.
- Liaise with the study participants and relevant stakeholders relating to the conduct of the proposed research, including conducting relevant personal and Public Involvement work (interviews and workshops) in the planning, commissioning, delivery and evaluation of the proposed studies.
- Provide support to other members of the research team, commensurate with the job Grade, eg. other researchers on the team and doctoral researchers involved in the project.
- Complete any administrative tasks related to the research, eg. data input, contacting and liaising with participants, stakeholders and partners involved in the research.
- Produce written reports and make presentations at specialist and relevant scientific and industry meetings and conferences, to disseminate findings and increase and maintain existing relevant research networks.
- Contribute to the writing of scientific research papers and to publish the outcomes of research in high quality journals.
- Ensure good working relationships with the research team, the participants and all research partners.
- Collaborate on research initiatives and contribute ideas for new research projects to move forward the area of research.
- Provide guidance to the co-investigators regarding the direction of the research.

- Travel to locations necessary for data collection and research-related meetings.
- Uphold high ethical research standards, maintain confidentiality, and ensure that data protection requirements are met at all times, and that intellectual property (IPR) agreements are not violated.
- 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, including any training relevant to the administration of the proposed project measures, and Standard Operating Procedures, to be used in the project.
- Undertake other duties as may be reasonably requested and that are commensurate with the nature and Grade of the post.

#### **Points to Note:**

This research project will focus on collecting data in London but will be led by academics based in Loughborough. A workspace will be available at our London campus, along with secure storage for project equipment and documentation, and it is anticipated that the post-holder will work in the field, and from home for some of their time. It is also expected that they will travel to Loughborough for project meetings when required, although most day-to-day interaction with the project team will be via MS Teams and email.

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 Equality & Diversity policy and procedures at all times. Duties must be carried out in accordance with relevant Equality & Diversity legislation and University policies/procedures.

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

#### Organisational Responsibility:

Reports to Dr Iuliana Hartescu (Co-investigator) and Professor Kevin Lomas (Principal Investigator).

This vacancy is being re-advertised, previous applicants should not apply.

# **Person Specification**

Your application will be reviewed with respect to meeting the essential and desirable criteria listed below. 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 conducting quantitative research into lifestyle interventions for health improvement	1,2,3
	Experience of planning, conducting and evaluating sleep and/or other health behaviour interventions	1,2,3
	Experience of deploying, maintaining, and analysing data from health behaviour monitoring devices e.g actigraphy, apps.	1,2,3
	Experience of analysing and interpreting quantitative data using relevant statistical packages, eg. SPSS, R.	1,2,3
	Experience of presenting research work at scientific conferences	1,3
	Experience of working as part of a team	1,3
Skills and abilities	Excellent communication skills and interpersonal skills	1,2,3
	Ability to work methodically	1,3
	Good time management	1,2,3
	Ability to work remotely and flexibly and use initiative, within project requirements	1,3
	Competence in IT skills including data input and data analysis packages	1,3
	Ability to work as part of a team and to collaborate with others	1,3
	Good track record in original research publications in the field of sleep and/or health-related interventions	1,3
	Willing to travel to various locations in London and the East Midlands to undertake data collection and/or for collaboration purposes	1,3
Training	Demonstrate evidence of having undertaken further training	1,3
	Willingness to undergo training in specific monitoring and data analysis techniques.	1,3
Qualifications	PhD in a relevant area (or near completion)	1
Other	Commitment to observing the University's Equal Opportunities policy at all times	3
	Willingness to work in London, and to travel within the UK	1,3

## **DESIRABLE**

Area	Criteria	Stage
Experience	Experience of public engagement and/or involvement in research with various industry stakeholders	1,2,3
	Experience of collecting and analysing qualitative data for sleep-related research projects	1,2,3
	Experience of recruiting and managing large cohorts of participants for research studies.	1,2,3

Skills	Experience with behaviour monitoring through actigraphy.	1,2,3
	Expertise with the deployment, maintenance and analysis of data from temperature and environmental monitoring equipment.	1,2,3

#### **Conditions of Service**

This full-time post is offered on a fixed-term contract from 1<sup>st</sup> October 2022 to 31<sup>st</sup> May 2025 within the *Specialist & Supporting Academic (Research)* job family at Grade 6 (£32,348 - £39,745 per annum <u>plus</u> London weighting); starting salary to be confirmed on offer of appointment.

The appointment will be subject to the University's normal Terms and Conditions of Employment for staff employed at Grade 6 and above, details of which can be found here.

The University is committed to enabling staff to maintain a healthy work-home balance and has a number of family-friendly policies which are available at <a href="http://www.lboro.ac.uk/services/hr/a-z/family-leave-policy-and-procedure---page.html">http://www.lboro.ac.uk/services/hr/a-z/family-leave-policy-and-procedure---page.html</a>.

In addition, the University is supportive, wherever possible, of flexible working arrangements. We also 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. For further information on Athena SWAN see <a href="http://www.lboro.ac.uk/services/hr/athena-swan/">http://www.lboro.ac.uk/services/hr/athena-swan/</a>

Loughborough University is committed to allowing its employees to **work dynamically** with a combination of working on campus and remotely, where possible. This has been identified as a role that could work dynamically and, if successful, your line manager will discuss these informal arrangements with you. Please note that there is a general expectation that the successful candidate will spend the majority of time working on the University campus (further information is available <a href="here">here</a>).