

Marie Skłodowska-Curie Network Fellow (Doctoral Candidate)

Learning Network for Advanced Behavioural Data Analysis

Full-time (37-hours per week); Fixed-term for 3-years (from 1st October 2023)

Job Ref: REQ230777

Applications are invited for a fully funded International PhD Studentship at Loughborough University which includes a tuition waiver (fee-free). The PhD training includes carefully selected placements with academic and industry partners.

In addition to your local PhD training, you will participate in an attractive educational programme customised to Doctoral Candidates. The LABDA training program consists of three secondments (the specific locations/countries are yet to be decided), monthly online training, four in-person 3-day workshops conferences to optimally develop your academic and transferable skills.

We are seeking a highly motivated and ambitious scientist with an excellent academic track record, educated to Master level in sport science, exercise science, health science, public health, human movement science, kinesiology, data science, biostatistics, or closely related fields.

The LABDA project

LABDA (Learning Network for Advanced Behavioural Data Analysis) is an EU-funded MSCA Doctoral Network that brings together leading researchers in advanced movement behaviour data analysis at the intersection of data science, method development, epidemiology, public health, and wearable technology to train a new generation of creative and innovative public health researchers. Via training-through-research projects, 13 Doctoral Fellows will establish novel methods for advanced 24-7 movement behaviour data analysis of sensor-based data, examine the added value of advanced behavioural data analysis and multi-modal data for predicting health risk and facilitate the use and interpretability of the advanced methods for application in science, policy, and society

PhD Project

The title of the PhD project within the School of Sport, Exercise and Health Sciences at Loughborough University is "Evaluation, Acceptance, and Qualification of Advanced Data Analysis for Assessing 24/7 Movement Behaviours: LABDA Toolbox".

The objectives of this project are to:

1. Conduct a scoping review of analytical and data standards for open research and best practices in 24-hour wearable sensor data analysis.
2. Develop a prototype of a benchmark to compare algorithms and software for assessing 24/ movement behaviours.
3. Use consensus methodologies to engage with stakeholders across public health, industry, policy and research to identify measures that matter and fit-for-purpose resources (to take from a concept of interest to an outcome) that best meet stakeholder needs.
4. Design a conceptual framework and checklist for optimal accelerometer data-analyses across the pipeline and for multiple end-users.

Your specific responsibilities will be to:

Engage with all stakeholders relevant to the project on a regular basis.

1. Report on findings by publishing scientific articles, resulting in a dissertation.
2. Present findings at (inter)national meetings/conferences.
3. Collaborate and exchange knowledge and skills with the other LABDA Fellows.
4. Contribute to the LABDA toolbox of advanced analysis methods for sensor-based behavioural data.
5. Contribute to educational activities of the School and within the consortium.

The research project should result in a PhD thesis.

The project will provide the necessary robust research for informing a toolbox essential for successfully developing methodologies for measuring 24/7 movement behaviours (guided by the DIME Playbook (<https://playbook.dimesociety.org/>)). The project will promote a FAIR (<https://www.nature.com/articles/sdata201618>) culture of insight sharing, developing standards and benchmarks and participation in the policy and regulatory process through links with industry partners and the public.

The School of Sport, Exercise and Health Sciences, Loughborough University

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.

Eligibility Requirements

To be eligible, applicants must fulfil the MSCA basic requirements:

- At the time of appointment the successful candidate must not have already obtained a PhD. Please note that candidates who already have a PhD are not eligible to apply.
- Additionally, candidates must not have resided in the UK for more than 12 months in the three years immediately before the appointment.
- The language of MSCA is English and candidates must have evidenced proficiency in English to meet Loughborough University requirements. Further details are available on the International website (<http://www.lboro.ac.uk/international/applicants/english/>). Candidates must demonstrate that their ability to understand and express themselves in both written and spoken English is sufficiently high for them to derive the full benefit from the network training

Further details on Marie Skłodowska-Curie Early Stage Researcher eligibility criteria can be found on the following link (https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2021-2022/wp-2-msca-actions_horizon-2021-2022_en.pdf).

In addition it is preferable for applicants to have:

- programming skills in R and/or Python
- excellent broader computing skills
- preference to work in an interdisciplinary, collaborative and inclusive environment
- excellent communication and collaboration skills and fluent in English

Organisational Responsibility

Dr Dale Eslinger, Principal Investigator
Dr Andrew Kingsnorth, Secondary Supervisor

Conditions of Service

(In addition, please refer to and read **Appendix 1. below**)

This project is funded by UKRI as part of the LABDA project which is Marie Skłodowska-Curie Actions Doctoral Networks under the EU Research and Innovation programme Horizon Europe 2022 under grant agreement no. 101072993.

You will be appointed as a full-time MSCA Network Fellowship (Doctoral Candidate) at Loughborough University on a fixed-term contract for 3-years, during which time you will study for a fee-free PhD.

The MSCA programme offers competitive and attractive working conditions. You will receive a salary in accordance with the MSCA regulations for Doctoral Candidates. This consists of a monthly Living Allowance of €4654.611 per month, paid in Sterling, from which statutory payroll deductions are taken, eg. income tax, employer and employee National Insurance costs. Employer and employee pension contributions will also be deducted from the Living Allowance (unless you wish to opt out of the scheme). There is also a monthly Mobility Allowance of €600.

A family monthly allowance of €495 is available, if applicable (for additional information see EU MSCA website).

Please be aware that these amounts are subject to statutory payroll deductions and will be paid in Sterling. The currency rate has been set by the funder at 1.160354. The exact salary will be confirmed upon appointment.

The appointment will be subject to the University's normal *Terms and Conditions of Employment* for staff employed on Grade 5 and below, details of which can be found [here](#).

Informal Enquiries

For more information about this role, please contact Dr Dale Esliger d.esliger@lboro.ac.uk or Dr Andrew Kingsnorth a.kingsnorth@lboro.ac.uk

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.

The University's mandatory training courses must be undertaken, these include *Belonging and Inclusion* and *Information Security Awareness*.

MSCA Appendix 1.

Eligibility

Applicants will be considered on an equal basis, subject to the relevant permission to work in the UK as defined by the requirements set out by the UK Border and Immigration Agency. Please visit <http://www.ukba.homeoffice.gov.uk/> for more information.

Applicants need to fully respect the eligibility criteria (demonstrated in the Europass CV):

- Conditions of international mobility of researchers: Researchers are required to undertake transnational mobility (ie. move from one country to another) when taking up the appointment. At the time of selection by the host organisation, researchers must not have resided or carried out their main activity (work, studies, etc.) in the country of their host organisation for more than 12-months in the 3-years immediately prior to their recruitment. Short stays, such as holidays, are not taken into account.
- English language: Network Fellows (Doctoral Candidates) must demonstrate that their ability to understand and express themselves in both written and spoken English is sufficiently high for them to derive the full benefit from the network training.

Application

The application must include:

- A motivation letter, emphasising specific interests, qualifications, and motivation to apply for this position. Please try to impress us with the relevancy of your education and professional experience (if any) to the position. Moreover, please write about what and how you can contribute to the project.
- A detailed CV (resume) including a short summary of bachelor's or master's degree research and contact information of at least two references that may be consulted.
- Transcripts of bachelor and master's degree (diploma).
- International certificate in a foreign language, which certifies English levels of B2 - C2 (if any).
- Proof of eligibility criteria (see above).