



**Neuromuscular Systems Lab**  
**School of Electrical & Electronic Engineering**  
**University College Dublin**

## **Post-doctoral Research Fellow: Multi-Domain Lifestyle Targets for Improving ProgNOsis in Huntington’s Disease**

### **Description**

Applications are invited for a full-time post-doctoral position with the Neuromuscular Systems Research Lab at University College Dublin. The project represents an exciting opportunity opportunity for enthusiastic candidates to work on DOMINO-HD, a multidisciplinary research project supported by EU Joint Programme on Neurodegenerative Disease Research (JPND) . In collaboration with the Centre for Clinical Trials at Cardiff University and European clinical partners, the project aims to identify key environmental factors (physical activity, sleep activity and nutrition) that may be responsive in targeted intervention with a view towards optimising disease management for individuals with Huntington's Disease.

A highly motivated post-doctoral research fellow is sought to analyse longitudinal sensor data recorded in patients. The ideal candidate will have expertise in the data analysis and development of algorithms for monitoring physical activity using wearable sensors, and/or in sensor deployment within the home.

The Neuromuscular Systems Lab is a multidisciplinary research group in the School of Electrical and Electronic Engineering at University College Dublin. Our research involves applying engineering principles, in particular mathematical modelling, signal analysis and experimentation, to understand how the nervous system controls muscle in healthy and diseased states. Through this research we aim to improve our understanding of the neuromuscular system to address fundamental questions in the control of human movement and to develop improved therapeutic and rehabilitation strategies.

### **Who Should Apply**

Applicants should hold a PhD in Biomedical Engineering, Electrical/Electronic Engineering or a related discipline. Prior experience in data analysis in the area of human movement, physical activity and/or wearable sensors is preferred. Excellent communication, analytical and programming skills are required. Suitable candidates should be able to work independently and as a part of team.

### **How to Apply**

Full details of the position and the application process are available through the UCD Human Resources website (<https://www.ucd.ie/workatucd/jobs/>): job ref **014135** ‘UCD Post-doctoral Research Fellow Level 1 or Level 2, Electrical and Electronic Engineering, 12 months.’ Informal enquiries may be made to Professor Madeleine Lowery ([madeleine.lowery@ucd.ie](mailto:madeleine.lowery@ucd.ie)) or Dr Emer Doheny ([emer.doheny@ucd.ie](mailto:emer.doheny@ucd.ie)).