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Institiúid Teicneolaíochta  
Leitir Ceanainn

Letterkenny Institute  
of Technology

**Project Title:** The impact of menstrual cycle on physical and cognitive performance in females.

**Supervisors:**

Dr Ken van Someren, Letterkenny Institute of Technology

Rónán Doherty, Letterkenny Institute of Technology

Prof Charles Pedlar, Orreco Ltd. and St Mary's University

Dr Georgie Bruinvels, Orreco Ltd. and University College London

**Keywords:** Menstrual cycle; female athlete; sleep; fatigue; performance; cognitive function

**Project Summary:**

This PhD studentship presents a unique opportunity to work with an industry partner. Orreco Ltd. deliver world class bio-analytics to world class athletes and their Female Athlete Programme aims to revolutionise how female athletes train and prepare.

This project aims to elucidate the impact of phases of the menstrual cycle on the ability to successfully perform physical and mental tasks. Sleep, fatigue, physical and cognitive performance will be evaluated throughout phases of the menstrual cycle in both a retrospective analysis of Orreco's data set (more than 7,000 athletes) and a prospective study. From this, sensitive methods to identify changes associated with menstrual cycle will be validated and used to evaluate a range of strategies to mitigate the negative impact of menstrual cycle on physical and cognitive performance.

**Candidate Qualifications/Requirements:**

A 2.1 or higher in a Level 8 degree in Sports Science or a related field.

An appreciation and understanding of female athletic performance.

Motivation to work with an industry partner and to translate science to performance.