

Fully Funded PhD studentship at the University of Essex

The School of Sport, Rehabilitation and Exercise Sciences (SRES) is offering a fully funded PhD studentship to conduct research;

“Analysing the Effects of Therapeutic Interventions on Physiological and Participant Perceived Responses following Muscle Damaging Exercise”

This fully funded studentship will bring together the outstanding research and educational expertise in sports and exercise science, physiotherapy and sports therapy in SRES. It offers an annual stipend of £12,500 plus Home/EU tuition fees, for a maximum of 36 months. Start date is the 1st Oct 2017.

Overview

The principal purpose of recovery is a simple concept and from a practical perspective can be defined as the ability to meet or exceed previous performance at a particular activity. Despite recovery being cited as a key element in exercise progression, little is known about how to monitor and effectively prescribe recovery interventions. Numerous protocols are available, all with the aim of recovery process acceleration but with very little scientific evidence to support their effectiveness. Recovery interventions that minimise post-exercise discomfort may have a role in optimising ongoing and consistent engagement in physical activity. Individuals' selection and application of these interventions will be influenced by their understanding and perceived effectiveness of each intervention as well as their physiological effects. The evidence base exploring this area is currently restricted.

Study Aims

The aim (s) of this PhD project will be to firstly understand participants' understanding and current beliefs related to the effects of therapeutic modalities and how these may affect exercise adherence / participation. Secondly; to effectively measure physiological markers related to muscle damaging exercise and responses to therapeutic interventions. Physiological markers including blood flow and associated metrics (vessel diameter, muscle oxygen, muscle oedema) will be considered.

Objectives:

- 1) Understand beliefs and expectations of therapeutic interventions.
- 2) Assess the impact of therapeutic interventions on physiological markers e.g. blood flow / volume.
- 3) Explore the efficacy of therapeutic interventions for exercise recovery and adherence.

The Student

The project will suit an applicant with a good science based degree (have or expect to receive a minimum of UK 2:1 honours degree), in addition to a specific interest in rehabilitation, biomechanics, physiotherapy, sports therapy, or sports science. The successful candidate will gain experience in state-of-the-art methodologies applied to clinical populations in a rehabilitation setting. This includes exposure to technologies to measure muscle blood flow and muscle oxygenation.

The project will be supervised by [Dr Ben Jones](#) and [Dr Sue Innes](#). For informal discussions about this studentship, please contact Dr Ben Jones at (bjonesa@essex.ac.uk) and / or Dr Sue Innes at (inness@essex.ac.uk).