

Faculty of Science and Health

FACULTY RESEARCH COMMITTEE



## Undergraduate Summer Research Internship Scheme 2017

**Project Title:** *The development of a musculoskeletal screening protocol for participants in the MEDEX programmes.*

**Principal Investigator:** *Mr. Enda Whyte*

**School/Research Centre:** *School of Health and Human Performance*

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### Project Description

#### Project Aims

An intern is required to assist in the development of a musculoskeletal (MSK) screening protocol for MEDEX. MEDEX is a supervised exercise programme for people with chronic illnesses such as cardiac disease, respiratory disease, diabetes and cancer. The aim of MEDEX is to improve participants' health, fitness and subsequent quality of life through exercise. Physical exercise can also delay or reverse progression of the illness. However, a participant's ability to exercise is often not restricted by the disease but by musculoskeletal conditions such as musculoskeletal pain, arthritis, impaired balance, inflexibility and muscle weakness. A baseline measurement of the MSK wellness is essential for a number of reasons.

1. To see if the MEDEX programmes improve the musculoskeletal wellness of participants by comparing pre and post intervention scores.
2. To identify aspects of MSK wellness which improve or not during a MEDEX programme. This can be used to refine the existing MEDEX programme
3. It may identify the need for targeted MSK interventions to maximize a participant's health related benefits from MEDEX.

#### Potential Candidates

An intern is required to assist with collation of data collected and development of a summary of findings. The intern is also required to research and develop a MSK screening protocol. This protocol would then be piloted in the baseline assessment for new MEDEX participants which is spread over two days prior to commencement of the programme. Under the guidance and direction of the principal investigator, the intern will collate the collected data and contribute to the process of developing the MSK screening protocol. This process will also form a basis for submission of research articles to international, peer reviewed, health and physical activity journals.

The PI will provide training in data management, research methods and statistics and the use of Excel and SPSS. The intern will be integrated in the research team, which includes the principal investigator, other members of the research cluster and under-graduate students. The environment will promote the development of the intern as a young researcher with exposure to the interdisciplinary research experience, and the training and mentoring this group can offer. The group will have weekly meetings to progress the development of the research.