

Faculty of Science and Health

**FACULTY RESEARCH COMMITTEE**



## Undergraduate Summer Research Internship Scheme 2017

**Project Title:** The Role of Exercise in the Lung Cancer Surgical Pathway.

**Principal Investigator:** Professor Niall Moyna

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

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### Project Description

Prof. Niall Moyna of the School of Health and Human Performance seeks an Undergraduate Summer Research Intern to assist in a randomized controlled trial investigating the effect of exercise before and after surgery on physical fitness and quality of life in individuals with lung cancer.

An estimated 2,500 people are diagnosed with lung cancer in Ireland every year and it is the most common cause of cancer death in Ireland. Treatment can include surgery, which is often associated with complications, poor outcome, and long recovery time. These risks are significantly increased in people with low physical fitness. This research will investigate the effect of exercise in getting patients “fit for surgery” and recovering from surgery. More information can be found at: <https://www.cancer.ie/about-us/news/new-irish-cancer-society-funded-research-study-effects-exercise-lung-cancer-treatment#sthash.xndwi6yk.dpbs>.

### *Principle Duties and Responsibilities*

Under the supervision of the Principle Investigator, the Intern will:

- Engage in appropriate training as required
- Work as part of the PI's research team
- Schedule participant assessments
- Administer quality of life questionnaires
- Administer accelerometers
- Administer field-based measures of body composition, strength, flexibility and aerobic endurance
- Assist with laboratory-based cardiopulmonary exercise tests
- Assist with lung function tests
- Assist with the implementation of the exercise intervention
- Input and manage data
- Perform basic statistical analysis
- Assist with patient reports
- Carry out administrative work associated with the project as necessary
- Present the findings to the MedEx Research team