

## 2017/2018 Summer Studentship Project Application Form

Send to: Research Office, University of Otago Christchurch, PO Box 4345, Christchurch, by 5pm on 3 July 2017

### Supervisor Information (First named supervisor will be the contact):

First Supervisor's Name and Title: Dr Peter Dooley

Department - UOC &/or CDHB (if applicable): UOC

First Supervisors Phone: 0210 272 0806      First Supervisors Email: anthony.butler@otago.ac.nz

First Supervisors Mailing Address: UOC, 2 Riccarton Ave, Christchurch

Co-Supervisors Name and Title(s):

Research Category (Choose one category only – to be used for judging the students' presentations):

Clinical

Laboratory

Community

Project Title (20 words MAXIMUM):

Psychological effects of virtual reality for patients in protective isolation

Project Description:

### Introduction:

Patients undergo bone marrow (BMT) or haematopoietic stem cell transplantsations (HSCT) for the treatment of haematological malignancies. Patients that undergo this treatment require high doses of chemotherapy, which results in high infection risks. Hence, they are required to be kept in protective isolation.

Protective isolation means that the patients are confined to single isolation rooms. According to a Christchurch Hospital's specialist, most patients that require protective isolation at Christchurch Hospital are confined up to a week, with 2-3 days being the most common.

Patients in protective isolation may develop anxiety and depression due to the feeling of isolation. This is because the patients feel lonely, disconnected with the outside world, and limited interaction with family and friends.

### Aim:

The goal of this research is to explore the potential of virtual reality (VR) in improving patients' experience in protective isolation. We expect to discover that VR can help reduce the sense of isolation in protective isolation, and hence, improve patients' overall experience.

### Possible impact (in lay terms):

If VR can help reduce the sense of isolation developed in patients in protective isolation, the benefits would range from improving the patients' experience, to encouraging patients to undergo the treatment.

### Method:

1. A patient that is admitted into the protective isolation will be asked by the hospital staff/person in-charge if they would like to participate in the study. If the patient agrees to participate, the hospital staff/person in-charge will call the researcher by phone to come to the hospital and meet with the patient immediately. The researcher will provide the information sheet, explain the study, and ask for the consent. The researcher will try to make himself available at all times (including weekends).
2. The patient will be asked on what they would like to see in the VR.
3. The researcher will make the content of the VR based on the patient's requests.
4. When the VR content is designed (expecting to complete within 1-2 days), specific times will be scheduled between the researcher, hospital staff, and the patient, to decide when is the best time to experience the VR.
5. To let the patient experience the VR, the researcher will guide the patient under the supervision of a hospital staff.
6. At the end of the isolation, the patient will answer a questionnaire.

Student Prerequisites (eg. Medical Student) if applicable: