

2016/2017 Summer Studentship Project Application Form

Send to: Research Office, University of Otago Christchurch, PO Box 4345, Christchurch, by 5pm on **4 July 2016**

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

First Supervisor's Name and Title: Dr Manar Khashram

Department - UOC &/or CDHB (if applicable): University of Otago, Christchurch – Department of Surgery

First Supervisors Phone: 029 9323931

First Supervisors Email: manar.khashram@gmail.com

First Supervisors Mailing Address: Department of Vascular Endovascular & Transplant Surgery Christchurch Hospital

Co-Supervisors Name and Title(s): Prof Justin A Roake

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

Clinical X

Laboratory

Community

Project Title (20 words MAXIMUM):

What is the expansion rate of abdominal aortic aneurysms in the octogenarian population?

Project Description:

Introduction:

In New Zealand, abdominal aortic aneurysm (AAA) affects approximately 5% of the population greater than 60 years old and about one in 74 men aged over 65 years old dies from AAA. These figures however increase in the octogenarian population (1). With the frequent utilisation of radiological imaging and improved life expectancy, the average age of individuals with AAA is increasing. People with small AAA (less than 5cm) often require medical management and regular radiological surveillance with an aortic ultrasound to measure the aneurysm growth to prevent rupture. A meta-analysis of approximately 15,000 patients reported an average growth rate of 2.6mm per year (2). This rate increases in people who smoke and is lower in diabetic patients. These studies did not include any patients >80 year old, therefore the growth rate of AAA in the age group remains unknown. This is a key parameter in individualised patient care that should be factored in any predictive modeling.

Aim:

The aim of this study is to document the abdominal aortic aneurysm growth rate in people over the age of 80 and compare them to a control group of those people with aneurysms younger than 80 years old.

Possible impact (in lay terms):

From this data, an 80 year old diagnosed with a 3cm aortic aneurysm for example, will on average take ten years for the aneurysm size to grow to a size that may rupture. While this a well-established management for some people, others might not benefit from this strategy and this might incur additional psychological anxiety, harm and additional costs.

Method:

The vascular surgery department prospectively collects demographic and clinical risk factors on all patients with AAA assessed by the service on electronic databases. The AAA growth rate will be calculated from ultrasound aortic measurement over time. Similar data from Otago and Waikato vascular departments will be collected and the data will be collated to increase the sample size. Potential subgroup analysis includes: ethnicity, gender and risk factors.

Notes:

There will be an opportunity for the student to present the findings at the vascular society of NZ meeting in February 2017. This project will yield a peer reviewed journal publication in a vascular surgery journal.