

2015/2016 Summer Studentship Project Application Form

Send to: Research Office, University of Otago Christchurch, PO Box 4345, Christchurch, by 5pm on **3 July 2015**

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

Supervisor's Name and Title(s): Dr Sean MacPherson

Department: Pathology/Haematology

Institution: UOC

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Mailing Address: Pathology Department, UOC

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

Clinical

Project Title (20 words MAXIMUM):

Other Malignancies in Chronic Lymphocytic Leukaemia: A retrospective analysis

Project Description:

Chronic lymphocytic leukaemia (CLL) is the most common adult leukaemia. The occurrence of CLL is associated with a significantly increased risk of second cancers, particularly skin cancers such as melanoma and non-melanoma squamous cell carcinoma. In addition CLL appear to experience more aggressive forms of these second cancers resulting in poorer outcomes. This increase in risk and aggressiveness has been attributed to the immunodeficiency which occurs in these patients as a result of both the disease itself and associated treatments.

Currently little is known concerning the potential relationship between leukaemia progression and the occurrence of skin cancers. Similarly little is known concerning the occurrence of high risk tumour features in those skin cancers excised from CLL patients.

New Zealand represents a high risk environment for the development of skin cancer. This makes it particularly important to develop a better understanding of the features and potential clinical significance of skin cancer occurrence in a high risk population such as CLL patients.

Analysis of the Haematology Department data base has identified those patients diagnosed with CLL in the period 1998-2015. The student will undertake a retrospective analysis of the medical records of those CLL patients in order to firstly identify those patients who developed further malignancies. The records of this subset of patients will then be analysed in more detail in order to determine (i) their clinical features (ii) the course of their disease and (iii) the staging and histological features of the second cancer(s). Skin cancer histology data will be compared to that of a non-immunosuppressed population from which data was obtained in a separate study.

It is intended that the analysed data will be published and also provide pilot data for further investigations.

The student would be exposed to aspects of clinical research involving leukaemia, cancer staging, histology, and skin cancer.

The project would be carried out under the supervision of Dr Sean MacPherson, Dr Judith McKenzie and Dr Barry Hock.

Student Prerequisites (eg. Medical Student) if applicable:

4th or 5th year Medical Student