

2017/18 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: Ruth Spearing, Haematologist CDHB.

Department - UOC &/or CDHB (if applicable): Pediatric Oncology/AYA Cancer Service, CDHB.

First Supervisors Phone: 03 3640383

First Supervisors: Ruth.Spearing@cdhb.health.nz

First Supervisors Mailing Address: Bone Marrow Transplant Unit , Christchurch Hospital. 2 Riccarton Ave, Christchurch 8011

Co-Supervisors Name & Title(s): CDHB: Tristan Pettit; Kate Gardner; Louise Sue; Southern DHB: Louise Bremer, Val Waugh

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

Clinical

Laboratory

Community

Project Title (20 words MAXIMUM):

Diagnostic delay in AYA Non-Hodgkin Lymphoma patients. Does it exist? A comparative analysis across all ages.

Project Description:

Adolescent and Young Adult (AYA) Cancer – Does diagnostic delay exist in the South Island Non Hodgkin Lymphoma population? A retrospective audit comparing the Pre Diagnostic Symptom Interval (PDSI) of AYA with paediatric and adult Non Hodgkin Lymphoma patients.

Introduction:

Diagnostic delay is widely reported as being one of the major contributing factors to poorer outcomes for AYA oncology patients (aged 15-24 years of age), when compared to paediatric (<15 years) and adult oncology (>24 years of age) patients with similar diagnoses. The implications of diagnostic delay vary with each tumour type – some studies have shown a strong association between diagnostic delay and a poorer outcome, whereas others have shown that whilst it exists, a negative impact on survival is not observed. A number of factors are felt to contribute to diagnostic delay in AYA patients – examples include: a lack of cancer symptom awareness from both the AYA patient, and the health providers, and developmental differences specific to AYA patients that prevent them from attending medical review, or prevent them from communicating the essential information required for a diagnosis.

This study group undertook a summer studentship last year, investigating diagnostic delay in sarcoma patients. The results of this study confirmed that AYA sarcoma patients, when compared to paediatric and adult sarcoma patients, had the longest interval from first symptom onset to review by a health professional, known as 'patient delay'. In **contrast, the adult sarcoma group had the longest 'oncologist' delay, which could be explained by the significantly higher patient volume in adult oncology services.** Overall, both AYA and adult sarcoma patients had a significantly longer PDSI than the paediatric sarcoma group.

This Non Hodgkin Lymphoma study aims to follow the same research structure as last year's sarcoma study. We also hope to undertake a second studentship this year that investigates the same question for South Island Hodgkin Lymphoma patients. The results of the three studies will be collated together, and if diagnostic delay is confirmed for the combined AYA patient group, then efforts will be directed at publishing this finding, and consideration of a future prospective study that investigates a link between diagnostic delay and outcome will occur.

Aim:

This study will aim to compare the PDSI of 20 Non-Hodgkin Lymphoma patients from each of the paediatric, AYA and adult oncology patient groups. The project will follow a retrospective medical file review format, with no direct patient contact. **We aim to collect all available information that is relevant to the patient's presentation history and the diagnostic process.** The data will be collated and a comparative analysis between the three age stratified patient groups will be undertaken. **The PDSI will be divided into 'patient delay, referral delay, and oncologist delay'.**

Possible impact (in lay terms): Analysis of the PDSI for paediatric vs AYA vs Adult Non-Hodgkin Lymphoma patients will allow the question of whether the AYA group take longer to present to health professionals, and whether

the total PDSI is comparatively longer also, to be answered. If the results of this project, and the Hodgkin Lymphoma project, reflect the findings of the Sarcoma Diagnostic Delay project, then we can generalize these combined results to suggest that yes, a delay in presentation of AYA oncology patients does exist in NZ patients. This allows us to then ask a further question – does this impact on survival? Further research options will then be considered – a prospective study that investigates both diagnostic interval and outcome, or an intervention study looking at cancer symptom awareness education in the AYA population.

Method:

Prior to student commencement of the studentship, the study group will compile a list of the 20 most recent Non-Hodgkin Lymphoma patients for each of the paediatric, AYA and adult oncology patient groups. The patient pool will include those patients diagnosed at both of Canterbury and Southern District Health Boards. The medical files will be collected at both Christchurch and Dunedin Hospitals, to be ready for analysis. The student will spend a representative amount of time at each Hospital, to collect the required information.

The student will review the patient's medical file. Information will be collated both from the patients file itself, and from Health Connect South. Information will be stored on a password protected spreadsheet.

Required information will include:

- Patient demographics
- Histological subtype of Non-Hodgkin Lymphoma
- Stage at diagnosis
- Time from:
 - first recognised symptom to first presentation to a health professional (e.g. primary care or Emergency Dep)
 - First presentation to a health professional to being referred with suspicion of cancer
 - Referral with suspicion of cancer to first specialist appointment
 - First specialist appointment to confirmation of diagnosis
 - First specialist appointment to commencement of treatment

The above information will be analysed within each age stratified patient group, and then comparative analysis will occur between the patient groups, with median intervals being used as the main metric to determine whether diagnostic delay exists, and whether there are differences within the different segments of diagnostic delay (patient, referral and oncologist delay).

Student Prerequisites (eg. Medical Student) if applicable:

Administration Details

1. Is ethical approval required? No.

If Yes: please circle or tick one of the following:

- a) Applied for (provide application #)
- b) Approved (attach a copy of the letter of approval from the ethics committee or application #)
- c) To be done – Yes, to be done.

2. Are you able to provide the funding for this project (ie. \$5,000 for the student, incidental expenses should be met from departmental or research funds) TBC

If Yes: Please provide name of the funder: Provisional awaiting confirmation: The Ruth Spearing Cancer Trust

If No: Please provide ideas of possible funding sources, including past funding agents and topics often associated with this research area, for the Research Office to contact.

If not RSCT, then Child & Adolescent Cancer Trust (contact Dr Pettit), Leukaemia Blood & Cancer NZ

If Yes: You will be sent a request for more information.

3. Medical Records or Decision Support accessed **Yes**

4. Health Connect South or other DHB records **Yes**

5. Signatures:

- I have read the 2017/2018 Summer Studentship programme handbook.
- I am prepared to supervise the project and will be available to the student during the studentship (including Christmas/New Year break if the student is working during this time).
- I agree to assume responsibility for the submission **of the student's reports to the Research Office** by the due date 29 January 2018.
- I agree that the project lay report may be available to local media for publicity purposes.


Signature of Project Supervisor(s):



Date: 07/07/2017

- I understand that I am responsible for hosting the Summer Student chosen for this project and will meet any costs incurred. I agree that incidental expenses will be met from departmental or research funds.

Signature of Head of Department:



Date: 07/07/17

(Print Name) Ruth Spearing – Clinical Lead for Adolescent and Young Adult Cancer Services in Canterbury

Signature of Clinical Director: (if applicable) N/A
(Print Name)

Date: