

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 Sarah Metcalf		
Department - UOC &/or CDHB (if applicable): Infectious Diseases, Canterbury DHB		
First Supervisors Phone: 027 467 7592	First Supervisors Email: sarah.metcalf@cdhb.health.nz	
First Supervisors Mailing Address: C/- Infectious Diseases, 5th Floor, Riverside, Christchurch Hospital		
Co-Supervisors Name and Title(s): Dr Simon Dalton, Dr Sharon Gardiner, Dr Tony Walls, Dr Alan Pithie, Prof Steve Chambers.		
Research Category (Choose one category only – to be used for judging the students' presentations):		
Clinical <input checked="" type="checkbox"/>	Laboratory <input type="checkbox"/>	Community <input type="checkbox"/>
Project Title (20 words MAXIMUM):		
Point prevalence survey of antimicrobial use in inpatients at the Christchurch Hospital campus.		
Project Description:		

Introduction:

Antimicrobial resistance is a major threat to human health, and is a growing problem in New Zealand as well as overseas. To help slow this problem, hospitals must ensure that antimicrobials are being used appropriately and only when needed. A hospital wide census of antimicrobial prescribing has never been done at CDHB but should be undertaken as part of our efforts to ensure antimicrobials remain effective.

Aim:

- To establish the prevalence of antimicrobial use amongst inpatients at the Christchurch Hospital campus,
- To assess compliance with local prescribing guidelines (CDHB 'Pink Book Antimicrobial Guidelines' and 'Christchurch Paediatric Department Empiric Antimicrobial Guidelines'),
- To determine the appropriateness of antimicrobial prescribing against predefined criteria.

Possible impact (in lay terms):

This census will help us to determine the total proportion of patients on antimicrobials as well as the nature of antimicrobial prescribed (e.g. type of agent, dose and duration). This will give us a benchmark that we can judge the effectiveness of our future efforts to use antimicrobials appropriately, as well as tell us how we compare with other hospitals in New Zealand and internationally. Review of the appropriateness of prescribing and compliance with local guidelines will also help guide future quality improvement initiatives and determine a priority list for action.

Method:

- **Patients:** All inpatients at the Christchurch hospital campus at 08:00am on the census day will be included. Patients attending day stay units, outpatient services, or the emergency department prior to admission to a specialty will be excluded.
- **Process:** The census will be conducted on one day in late November/early December (to be confirmed). A list of all inpatients at 08:00am will be obtained from Decision Support and then divided amongst the auditing teams. The auditors will use Medchart to identify inpatients who are on antimicrobials, and will complete one hardcopy data collection form for each patient on an antibacterial, antifungal or antiviral agent. The documentation will include patient details (e.g. demographics, renal function) and the nature of the antimicrobial prescribed (e.g. dose, route, indication). It will also include assessment of 'appropriateness' of antimicrobial use and of compliance with CDHB antimicrobial prescribing guidelines against predefined criteria (based on the established method of the National Antimicrobial Prescribing Survey in Australia – www.naps.org.au). At the end of the study day, the forms will be returned to the Department of Infectious Diseases (ID) for analysis.
- **Auditors** will be multidisciplinary teams of two from relevant departments (e.g. ID, pharmacy), including the summer student. Auditors will be provided with training on assessment of appropriateness and guidelines compliance prior to the census day, and will have access to expert support (ID physician) on the day.
- **Data entry, analysis and publication:** The summer student will be responsible for entering the data into Microsoft Excel™, reviewing the forms to identify any deficiencies in data collection and working to resolve these, and analyzing the data to determine key outputs such as the total number of antimicrobial prescriptions evaluated, prevalence of antimicrobial use, description of the nature of antimicrobial use, percentage of prescriptions compliant with guidelines and percentage of prescriptions deemed 'appropriate'. The summer student will be involved in literature review and manuscript preparation for publication.

Student Prerequisites (eg. Medical Student) if applicable:

Medical student.

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

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) **No**

If Yes: Please provide name of the funder _____

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 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:

- 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:
(Print Name)

Date:

Signature of Clinical Director: (if applicable)
(Print Name)

Date: