

## 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: Professor Roger Mulder		
Department - UOC &/or CDHB (if applicable): UOC/CDHB		
First Supervisors Phone:	First Supervisors Email: roger.mulder@otago.ac.nz	
First Supervisors Mailing Address: Psychological Medicine, UOC, PO Box 4345, Christchurch 8140		
Co-Supervisors Name and Title(s): Dr Colin Peebles, Dr Val Fletcher, Dr Matthew Croucher		
Research Category (Choose one category only – to be used for judging the students' presentations):		
Clinical	Laboratory	Community
Project Title (20 words MAXIMUM):		
Establishing the prevalence of delirium in hospital inpatient settings		
Project Description:		

### Introduction:

Delirium is a common problem in inpatient hospital settings. A recent overseas study of the delirium point prevalence (in subjects aged 65 years or older) showed rates ranging from 14% in rehabilitation wards to 28.5% in neurology wards<sup>1</sup>. In Christchurch Hospital delirium is coded for 6% of elderly admissions, suggesting that this disorder is either under-diagnosed or inadequately documented in medical notes. A brief screening tool, the 4AT ([www.4AT.com](http://www.4AT.com)), is being introduced in Christchurch and other CHDB hospitals to help with the identification of delirium, under the guidance of a CDHB Delirium Prevention and Management Group. The 4AT is reported to have a specificity of 87% and a sensitivity of 70% in elderly patients<sup>2</sup>. More information regarding the rates of delirium in CDHB wards and the utility of the 4AT in this setting will help guide service development and screening recommendations. Because alcohol use disorders are commonly associated with delirium the project will also screen for alcohol use disorders in the subjects.

### Aim:

The aim of the Summer Studentship is to establish the rates of delirium in several medical, surgical and rehabilitation wards at Christchurch and Burwood Hospitals, and to evaluate how well this is documented in the medical notes and discharge summaries.

### Possible impact (in lay terms):

This project will provide up to date information on delirium rates in various inpatient settings which will inform screening recommendations and improved service delivery.

### Method:

The researcher will aim to interview all patients aged 65 years or older on 6-8 inpatient wards in various settings (acute medical, acute surgical and rehabilitation). Each ward will be sampled over a 1-2 day period to provide point prevalence data. Two brief standardized assessments for delirium/cognitive impairment (the 4AT and the Confusion Assessment Method short form<sup>3</sup>) will be administered. The Alcohol Use Disorders Identification Test (AUDIT<sup>4</sup>) will also be administered to screen for alcohol use disorders (either on the same day or later in the admission if the patient is initially too confused to complete this). The results of these screening tools will be provided to the treating team on the day of assessment **so they can contribute to the participant's ongoing care as appropriate. The participants' medical records** will then be reviewed to obtain demographic information, the reason for admission and the time since admission, any previous diagnosis of dementia, and current medications. Where a delirium or possible delirium is identified the researcher will **recall the participant's notes after discharge to determine whether a delirium was diagnosed and managed, and whether this information was provided in the discharge summary to the patient's GP.**

### References:

1. Belleli G, Morandi A, Di Santo S G, Mazonne A et. al. "Delirium Day": a nationwide point prevalence study of delirium in older hospitalized patients using an easy standardized diagnostic tool. *BMC Medicine* 2016; 14: 106.
2. Hendry K, Quinn T J, Evans J, Scortichini V et. al. Evaluation of delirium screening tools in geriatric medical inpatients: a diagnostic test accuracy study. *Age and Ageing* 2016; 45: 832-837.
3. Inouye S K, van Dyck C H, Alessi C A, Balkin S et. al. Clarifying confusion: The Confusion Assessment Method. A new method for detection of delirium. *Annals of Internal Medicine* 1990; 113: 941-948.
4. Saunders J B, Aasland O G, Babor T F, de la Fuente, J R et. al. Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO collaborative project on early detection of persons with harmful alcohol consumption. II. *Addiction* 1993; 88: 791-804.

Student Prerequisites (eg. Medical Student) if applicable:

A medical student would be appropriate for this project.

## Administration Details

1. Is ethical approval required? Yes

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:

3 July 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:  
(Print Name) Professor Richard Porter

Date:

3 July 2017

Signature of Clinical Director: (if applicable)  
(Print Name) Dr Brian Deavoll, CD,  
Older Persons Mental Health

Date:

3 July 2017