

## 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: Associate Professor Nicola Austin, Neonatal Paediatrician

Department - CDHB (if applicable):

First Supervisors Phone: 0272290598

First Supervisors Email: Nicola.austin@cdhb.health.nz

First Supervisors Mailing Address: Neonatal Service, Christchurch Women's Hospital

Co-Supervisors Name and Title(s): Rachael McEwing (Radiologist), Phillipa Depree (Radiologist), James Hector-Taylor (Paediatrician), Giovanni Losco (Paediatric Urologist) and Kiki Maoate (Paediatric Surgeon)

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

Clinical X

Laboratory

Community

Project Title (20 words MAXIMUM):

**Antenatal renal abnormalities require early postnatal follow up: an analysis of the conditions identified and long term outcomes.**

Project Description:

Introduction:

Renal tract dilatation can be seen on antenatal scans and is reported on the anatomy scan at 19-20 weeks as an early indicator of potential renal tract abnormality as well as a marker for chromosomal abnormality. A second antenatal in the third trimester is reviewed at the Fetal Abnormality Advice Committee attended by the Fetomaternal Medicine service obstetricians, Neonatal Paediatricians, Paediatric surgeons and Radiologists. A pathway for management has been in place in Canterbury for over 20 years. The use of a virtual clinic process for review of the early postnatal investigations at 6-8 weeks allows those that need ongoing investigation and follow up to be planned and advises the General Practitioner and the family where findings are within normal limits.

In 2016 a meeting was held to begin the process to develop A National Consensus Group: Diagnosis, assessment and management of antenatally detected asymptomatic renal tract dilation pathway. National recommendations for screening cutoffs and follow up pathways were introduced in April 2017. Canterbury modified their antenatal criteria for renal pelvis dilatation from 5mm to 4mm at 20 weeks and 10mm to 7 mm in the third trimester. Impact of these changes on radiology services and clinical outcomes is important to identify if these changes are valuable in terms of need for ongoing renal tract follow up.

Aim:

Identify the proportion of antenatal scans with renal tract abnormality and the diagnostic classification groups.

Assess the impact of the introduction of national criteria and subsequent investigation pathways.

Possible impact (in lay terms):

Antenatal renal abnormalities when found require follow up investigations in the first 3 months. A national pathway has been introduced in 2017. Analysis of the rates of antenatal cases meeting the follow up criteria, the diagnoses made and postnatal outcomes will assist with refinement of the national pathway.

Method:

5 years data will be reviewed prior to the April 2017 introduction of a National Renal Consensus, and the first 6 months of the national pathway. NHI will be used to identify maternal and infant cases.

Radiology databases in Christchurch radiology department and Pacific Radiology Group will be analysed to identify the antenatal scans have renal pelvis dilatation at the 19-20 week anatomy scan, or later scans in pregnancy.

The FAAC database will be used to identify those reviewed at the weekly meetings and the postnatal investigations recommended.

The radiology databases and decision support will be requested to identify those with postnatal tests, virtual renal clinic, genitourinary clinic or Paediatrician (James Hector-Taylor) follow up.

Student Prerequisites (eg. Medical Student) if applicable:

3<sup>rd</sup> -5<sup>th</sup> year Medical Student

## Administration Details

1. Is ethical approval required? Yes ~~/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) Yes Possibly ~~/No~~

If Yes: Please provide name of the funder Pacific Radiology Group pending decision

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.

3. Medical Records or Decision Support accessed Yes ~~/No~~

4. Health Connect South or other DHB records Yes ~~/No~~

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: