



University of Otago, Christchurch

2010/2011 Summer Studentship Programme

Final Presentations

'Summaries of the completed research projects'

Friday 28th January 2011
Rolleston Lecture Theatre
Ground Floor
2 Riccarton Avenue
Christchurch

About the Studentships

Each year the University of Otago, Christchurch (UOC) hosts a Summer Studentship programme which is made up of a number of research projects. Participating students can get an introduction to research methods in a field of interest to them, such as Public Health, clinical or laboratory-based research. The studentships are of 10 weeks' duration, and participating students receive an educational grant of \$5,000.

The aim of this studentship programme is to encourage the most promising students to take up a research career. Accordingly, our programme is open to staff and students of any tertiary academic institution.

Sponsors

Each individual project in the Summer Studentship programme is generously sponsored by a charitable or business organisation. Sponsors' contributions are paid directly to students as an educational grant.

Prizes

Three prizes of \$500 each have been kindly donated for the best presentation in each of the following categories:

- Community (Courtesy of the Lions Club of Selwyn)
- Laboratory (Courtesy of Canterbury Scientific Ltd.)
- Clinical (Courtesy of Christchurch Radiology Group)

A further prize of \$500 for the 'Best Overall Presentation' of the above three categories has been kindly donated by the Canterbury Branch NZ Federation of Graduate Women (Inc) Trust Board.

These prizes will be awarded at the University of Otago, Christchurch Academic Inauguration Ceremony in February 2011.

- 9:00 **Haere Mai** *Welcome*
 Mark Brunton, Facilitator, Research Maori
 Professor Peter Joyce, Dean
 A/Professor Margreet Vissers, Associate Dean (Research)
- 9:10 **Jeremy Keown**
 Supervisors: Dr Bruce Dobbs, Dr Randall Allardyce, Dr Anthony Butler
Use of Radio-Opaque Nanoparticles for Micro-CT Scanning Using the MARS-CT System
 Sponsor: Christchurch Radiology Trust
- 9:16 **Anna-Maria Siegert**
 Supervisors: Dr Karsten Schrobback, Dr Anthony Butler, Dr Tim Woodfield
Novel Imaging Methods for Detecting Articular Cartilage Tissue Quality via MARS-Micro Computed Tomography (μ CT)
 Sponsor: Arthritis New Zealand
- 9:22 **Maggie Anderson**
 Supervisors: Dr Nicholas Cook, Dr Nigel Anderson
Construction of a Spectral Micro-CT Phantom to Optimize the Geometry and Calibrate the Response of the MARS Scanner
 Sponsor: Health Sciences Divisional Summer Scholarships
- 9:28 **Anna van Pomeran**
 Supervisors: Dr Tim Woodfield, Prof. Gary Hooper, Dr Barnaby May
Characterization of Ovine Forestomach Extracellular Matrix for Cartilage Tissue Engineering Applications
 Sponsor: Health Sciences Divisional Summer Scholarships
- 9:34 **Simon Hogg**
 Supervisors: Dr Kenny Chitcholtan, A/Prof. John Evans
Can Green Tea Extracts Sensitise Endometrial Microtumours To UV Radiation?
 Sponsor: Cancer Society of NZ Canterbury/ West Coast Division
- 9:40 **Andrew Gibb**
 Supervisors: Dr Kit Doudney, Prof. Martin Kennedy
Novel Behaviour of Polymorphic Alleles in an Imprinted Region of the Human Genome
 Sponsor: Health Research Council of NZ
- 9:46 **Hannah Kennedy**
 Supervisor: A/Prof. Mark Hampton
Mitochondrial Targets of Isothiocyanates
 Sponsor: Garth Streat Memorial Scholarship
- 9:52 **James Hadfield**
 Supervisors: Prof. Martin Kennedy, A/Prof. Dee Mangin
Preliminary Genetic Analysis in the Antidepressant Cessation Trial (ACT)
 Sponsor: Canterbury Health Laboratories
- 9:58 **Kristie Webber**
 Supervisors: Dr Michael Epton, Dr Jack Dummer, Dr Daniel Milligan, Dr Malina Storer
Biomarkers of Inflammation: Measurement of Exhaled Nitric Oxide by Selected Ion Flow Tube-Mass Spectrometry.
 Sponsor: SYFT Technologies Ltd.
- 10:04 **Min-Hi Han**
 Supervisors: Dr Paul Pace, Prof. Christine Winterbourn
Identifying Cell Targets for Hydrogen Peroxide
 Sponsor: Health Research Council of NZ

- 10:10 **Thomas Lechte**
Supervisors: Dr Peter Nagy, Prof. Christine Winterbourn
Glutathionylation of Superoxide-Modified Tyr Residues on Peptides and Proteins
Sponsor: Canterbury Scientific Ltd
- 10:16 **Teagan Hoskin**
Supervisors: Dr Sarah Gunningham, Dr Margaret Currie, Dr Neil Lambie, Dr Peter Sykes, Prof. Bridget Robinson
PAI-1 in Breast Cancer and Subsequent VTE Risk
Sponsor: Helen Poole and Ian McDonald Memorial Summer Studentship
- 10:22 **Conal Boland-Bristow**
Supervisors: Dr Tim Prickett, Prof. Tim Yandle
Characterization of a Novel proCNP Peptide(s)
Sponsor: Health Sciences Divisional Summer Scholarships
- 10:28 **Helen Abbott**
Supervisor: Prof. Tony Kettle
Purification of Mycothiol from Mycobacteria and Investigating Its Reaction with Bleach
Sponsor: Asthma and Respiratory Foundation of NZ
- 10:34 **Sarah George**
Supervisor: Prof. Peter George
Correlating Genotype and Phenotype in Familial Hypercholesterolaemia (FH)
Sponsor: Canterbury Health Laboratories
- 10:40 **Rebecca Mackay**
Supervisor: Dr Vivienne Bickley
Extending the Current Genetic Analysis of Local Patients with Familial Hypercholesterolaemia. Do RNA Splicing Mutations And The PCSK9 Gene Play A Role?
Sponsor: Canterbury Health Laboratories
- 10:46 **Morning Tea in the Rolleston Foyer**
- A simple line drawing of a teacup on a saucer with steam rising from the cup.
- 11:14 **Abby Zarifeh**
Supervisor: Dr Ben Hudson
How Effective Do Patients Expect Preventive Interventions To Be?
Sponsor: Pegasus Health
- 11:20 **Caitlin Boyce**
Supervisors: Beverley Burrell, A/Prof. Marie Crowe, Dr Lisa Whitehead
Factors Influencing the Ability of Women to Self-Care After Treatment Induced Menopause: A Systematic Review
Sponsor: Health Sciences Divisional Summer Scholarships
- 11:26 **Alex Yun Lee**
Supervisor: Dr Cameron Lacey
Hauora Maori Day - Evaluation of A Student Led Health Clinic At A Marae
Sponsor: Maurice & Phyllis Paykel Trust

- 11:32 **Kate Doak**
Supervisors: Candace Bobier, Fiona Howard
Youth Supporting Youth: A Focus Group Study of Experiences of Young Supporters of Service Users Engaged In Mental Health Services
Sponsor: Canterbury District Health Board
- 11:38 **Nicole Coman-Wright**
Supervisor: Dr Claire Dowson
Cognitive/Behavioural Function in Long Term SSRI Antidepressant Use: Control Group Study
Sponsor: New Zealand Federation of Graduate Women
- 11:44 **Jasmine Gooda**
Supervisor: A/Prof. Dee Mangin
Low Dose Antipsychotic Use and Metabolic Side Effects
Sponsor: Pegasus Health
- 11:50 **Amanda Polkinghorne**
Supervisor: Hilda Mulligan
Use of a Hospital Hydrotherapy Pool by User Groups from Within the Community: A Mixed-Method Analysis
Sponsor: Older Persons' Health & Rehabilitation, CDHB
- 11:56 **Katie Jefferson**
Supervisors: Prof. Les Toop, Kelly Maw
Exploring and Understanding the Learning Needs Of General Practice Administration Support Staff
Sponsor: Partnership Health Canterbury
- 12:02 **Ronald Puni**
Supervisor: Dr Lynley Cook
Pacific People and Non-Financial Factors Influencing Access to Mainstream General Practice Services
Sponsor: Partnership Health Canterbury
- 12:08 **Talia Wise**
Supervisors: Dr Ruth Savage, Dr Pip Mason
Why Do General Practitioners And Practice Nurses Differ In Their Behaviours And Attitudes Towards Performing And Coding Of CVD Risk Assessment?
Sponsor: Partnership Health Canterbury
- 12:14 **Courtney Bennie**
Supervisors: Virginia Maskill, Beverley Burrell, A/Prof. Marie Crowe
An Evaluation of the Content, Messages and Assumptions in New Zealand on Menopausal Hormone Therapy (MHT) Between 2002 - 2010.
Sponsor: Health Sciences Divisional Summer Scholarships
- 12:20 **Sarah Murphy**
Supervisors: Dr Dean Harris, Prof. Bridget Robinson
History of Oncology Management and Outcomes of the Elderly in Christchurch in The Last 20 Years
Sponsor: Cancer Society of NZ Canterbury-West Coast Division
- 12:26 **Nadia Schwass**
Supervisors: Prof. Bridget Robinson, Dr Dean Harris
Current Oncology Service Management of More Senior Patients
Sponsors: Cancer Society of NZ Canterbury-West Coast Division and Cancer Society Diamond Harbour Group
- 12:32 **Lauren Tarawhiti**
Supervisor: Dr Carl Hanger
Falls in Hospital: Different Falls May Need Different Fall Prevention Strategies
Sponsor: Older Persons' Health Specialist Service

12:38 **Dianne Parry**
Supervisor: Dr David Carlyle
Primary Care Health Service Usage by People Suffering From Borderline Personality Disorder And Co-Morbid Physical Illness in Urban Christchurch In 2008
Sponsor: Health Sciences Divisional Summer Scholarships

12:44 **Monica Johnson**
Supervisor: Dr David Jardine
An Audit of Waiting Times for Geriatric Patients Requiring Transfer from General Medicine to The Princess Margaret Hospital Rehabilitation Service
Sponsor: Health Sciences Divisional Summer Scholarships

12:50 **Heidi Blackburne**
Supervisors: Prof. Frank Frizelle, A/Prof. Ross Kennedy, Prof. Murray Barclay, Prof. Roger Mulder, Prof. Richard Porter, Liane Dixon
The Effect of Bowel Preparation on Cognitive Function
Sponsor: Canterbury Medical Research Foundation

12:56 **Samantha Moody**
Supervisors: Dr Geoffrey Shaw, Prof Geoffrey Chase
Implementing Next-Generation Glycaemia Control in the ICU - The STAR TGC protocol
Sponsors: The Govan Family Summer Studentship & Canterbury Medical Research Foundation

1:02 **Emily Grant**
Supervisors: Dr Virginia McIntosh, Dr Jennifer Jordan
Changes in the Nutritional Intake of Women with Bulimia Nervosa and Binge Eating Disorder with Cognitive Behaviour Therapy
Sponsor: Canterbury Medical Research Foundation

1:08 **Lunch in the Rolleston Foyer**



1:40 **Gemma Lilly**
Supervisors: Kathryn Taylor, Dr Virginia McIntosh, Dr Jennifer Jordan
Comparisons of Dietary Intake in Women with Anorexia Nervosa, Women Who Are Constitutionally Thin, and Women Who Are a Healthy Weight
Sponsor: Canterbury Medical Research Foundation

1:46 **Mariam Parwaiz**
Supervisors: Dr Helen Lunt, Lindsay Irons, Deborah Kendall, Dr Peter Moore, A/Prof. Chris Florkowski
Capillary Glucose Meter Performance in Pregnancy Complicated By Diabetes
Sponsor: Diabetes Training & Research Trust

1:52 **Rachael Stevenson**
Supervisor: Dr Ian Sheerin
The Canterbury Methadone Maintenance Model of Care
Sponsor: Pegasus Health

1:58 **Tom Wilkinson**
Supervisors: Dr John W Pickering, Prof. Zoltan Endre, Dr Geoffrey Shaw
Urinary Cystatin C and Microalbuminuria as biomarkers of Sepsis and Acute Kidney Injury
Sponsor: Kidney Health New Zealand

- 2:04 **Jonathan Stevenson**
Supervisors: Dr Judith Collett, Dr Martin Whitehead
Outcome of Immunohistochemistry Staining For Mismatch Repair Genes in All Patients with Colorectal Cancer under Age 50 Years
Sponsor: Cancer Society of NZ Canterbury-West Coast Division
- 2:10 **Clark Stevenson**
Supervisors: Mr Tim Eglinton, Dr Ben Hudson
Outcomes of the Canterbury Colorectal Symptom Pathway
Sponsor: Cancer Society Ashburton Group
- 2:16 **Zea Munro**
Supervisor: Dr Martin Than
Determination of an Acceptable Rate of Major Adverse Cardiac Event Following Discharge from Hospital after Attendance with Chest Pain
Sponsor: The Emergency Care Foundation
- 2:22 **Aindrea Brown**
Supervisors: Dr Matthew Croucher, Dr Colin Peebles, Dr Susan Gee
What Is The Clinical Value Of SPECT Brain Scanning In Psychiatry Of Old Age?
Sponsor: The Canterbury Health Care of the Elderly Education Trust
- 2:28 **Dru Norriss**
Supervisor: Melissa James
Outcomes for Patients Treated With Chest Wall Radiation Following a Mastectomy Using a Hypofractionated Radiation Regimen
Sponsors: Cancer Society of NZ Canterbury-West Coast Division / Cancer Society Hokitika Group / Cancer Society Greymouth Group / Cancer Society Westport Group
- 2:34 **Jessica Taylor**
Supervisors: Dr Peter Ganly, Dr Liam Fernyhough
Changing Treatment and Outcomes in Multiple Myeloma over the Last Decade for Patients in Christchurch
Sponsor: Ruth Spearing Cancer Trust (initiated by Barry Mather)
- 2:40 **Josh Faulkner**
Supervisor: Dr Robert Green
Secondary and Tertiary Health Service Usage and Cost by People Suffering From Borderline Personality Disorder In Urban Christchurch
Sponsor: Health Sciences Divisional Summer Scholarships
- 2:46 **Doug Winter**
Supervisor: A/Prof. Ross Kennedy
Peri-Operative Opioid Use and Quality of Short and Intermediate Term Recovery
Sponsor: Anaesthetists' Instrument Pool
- 2:52 **James Kennedy**
Supervisor: Dr Seton Henderson
Calculated Blood Levels of Drugs Used For Sedation in ICU and Responses to Interventions
Sponsor: Canterbury Intensive Care Research & Education Trust
- 2:58 **Kirsten Gray**
Supervisor: Dr Sue Luty
The Effectiveness of a Metabolic Screening Programme in a Specialised Mental Health Service
Sponsor: National Heart Foundation of New Zealand
- 3:04 **Tamas Major**
Supervisors: Dr Suetonia Palmer, Prof. Zoltan Endre, Dr John Pickering
Erythropoietin and Blood Pressure in Critically Ill Patients
Sponsor: Canterbury Medical Research Foundation

- 3:10 **Matthew Tennant**
Supervisor: Prof. Edward Shipton
Double Blind Randomised Placebo-Controlled Trial Subjectively and Objectively Assessing Efficacy/Safety of Topical Lignocaine on Mechanical/Cold Allodynia/Hyperalgesia in Neuropathic Pain
Sponsor: Canterbury Medical Research Foundation
- 3:16 **Sally van der Hulst**
Supervisors: Dr Tony Walls, Prof. Brian Darlow, Dr Anja Werno
A Prospective Study of the Incidence and Outcomes of Microbiological Contamination of Enteral Feeding Tubes in Neonates
Sponsor: Cure Kids

The following student was unable to give his presentations today:

- **Aaron Hayes**
Supervisors: Prof. Stephen Chambers, Prof. Tony Kettle
Pyocyanin Synthesis and Innate Immune Defense against Pseudomonas aeruginosa
Sponsor: Health Research Council of NZ

Thank you for your attendance

Please join us for afternoon tea in the Rolleston Foyer while the Judges make their decisions

We gratefully acknowledge the following sponsors for their support:

- ◆ Anaesthetists' Instrument Pool Ltd
- ◆ Arthritis New Zealand
- ◆ Asthma and Respiratory Foundation of New Zealand
- ◆ Cancer Society of NZ Canterbury/ West Coast Division
- ◆ Cancer Society Ashburton Group
- ◆ Cancer Society Diamond Harbour Group
- ◆ Cancer Society Greymouth Group
- ◆ Cancer Society Hokitika Group
- ◆ Cancer Society Westport Group
- ◆ Canterbury District Health Board (CDHB)
- ◆ Canterbury Health Laboratories
- ◆ Canterbury Intensive Care Research & Education Trust
- ◆ Canterbury Medical Research Foundation
- ◆ Canterbury Scientific Ltd
- ◆ Christchurch Radiology Group Trust
- ◆ Christchurch Diabetes Society/ Diabetes Training and Research Trust
- ◆ Cure Kids
- ◆ Emergency Care Foundation
- ◆ Garth Streat Memorial Scholarship
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- ◆ SYFT Technologies Ltd
- ◆ The Canterbury Health Care of the Elderly Education Trust
- ◆ The Govan Family Summer Studentship

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