DIVISION OF HEALTH SCIENCES
RESEARCH REPORT 2002–2006
FROM THE PRO VICE CHANCELLOR

It is with great pleasure that I present this report on the research activities of the Division of Health Sciences at the University of Otago, for the period 2002-2006.

The quest for excellence in research has been a hallmark of the University of Otago since its inception. Correspondingly, the quest for internationally recognised research excellence underpins all of the research activities within the Division of Health Sciences. The Division is in an enviable position in terms of its research environment. Undeniably, much of the Division’s research edge comes from the close synergy between areas as diverse as Biochemistry, Microbiology, Immunology, Human Nutrition, Physiology, Anatomy, Genetics, Chemistry, Pharmacology, and the wide range of departments in the clinical areas of Medicine, Dentistry, Pharmacy and Physiotherapy. This means that students at the University of Otago are taught by academics and clinicians who are at the forefront of new knowledge. Research students can expect to be trained by people who are themselves passionate researchers, and to have access to the latest equipment and technologies.

It is the intention of this Report to provide local, national and international researchers and clinicians with a comprehensive insight into what is happening at the forefront of health science research at Otago. The Report spans five years of research activity and as such allows for an examination of trends over successive years. The Report reveals that research endeavours within the Division have gone from strength to strength during this time period.

The Division continues to be highly successful in securing research funding in what has become an intensely competitive environment. In 2006 alone the Division attracted over $49 million of external funding, and more than 1200 scientific publications were produced during the same period. There has never been a more productive postgraduate population, with many departments registering increases in numbers of Masters and Doctoral students. These are tangible measures of research success. Others include the attraction and retention of quality staff and the number of prestigious prizes and scholarships awarded to a given department. This Report provides a summary of these research outputs for each of the departments within the Division.

There are also other indicators of research success that are more difficult to quantify. One of these is collaborations between like-minded researchers, through the formation of research groupings spanning diverse disciplines. This Report also provides an outline of the activities of some of the larger research groups and units within the Division. The Division is privileged to host a number of prestigious research groups, examples are the Cancer Genetics Laboratory, the Centre for Neuroendocrinology, the Christchurch Cardioendocrine Research Group, the Virus Research Unit, the Injury Prevention Research Unit (IPRU) and the Dunedin Multidisciplinary Health and Development Research Unit (DMHDRU).

An important consideration is determining whether our communities receive value for money from research investments. Benefits to the community in terms of improvements in health are important outcomes. Ground breaking discoveries within the Division have contributed to advances in a number of fields including human genetics (particularly cancer genetics), neural function and the neurosciences, infectious diseases, reproductive biology, cardioendocrinology, personalised medicine, public health and structural biology. Strong interactions with the biotechnology industry, both nationally and internationally, mean that Otago’s Health Sciences researchers are contributing to the advancement of knowledge in medical science for the benefit of all New Zealanders, as well as the rest of the world. Translation of research from the bench to the clinic, leading to improvements in the quality of life of those in our community, is the ultimate goal of the Division of Health Sciences.

We hope you enjoy reviewing the research activities of the Division of Health Sciences. We will continue to build on our research successes in 2007 and beyond.

Don Roberton
Pro Vice Chancellor—Health Sciences
# Contents

**Divisional Organisational Chart**
- 4

**Research Themes and Centres**
- 5

**Faculty of Dentistry**
- Department of Oral Diagnostic and Surgical Sciences: 12
- Department of Oral Rehabilitation: 15
- Department of Oral Sciences: 19

**Faculty of Medicine**
- Otago School of Medical Sciences
  - Department of Anatomy and Structural Biology: 32
  - Department of Biochemistry: 45
  - Department of Microbiology and Immunology: 61
  - Department of Pharmacology and Toxicology: 74
  - Department of Physiology: 83
- Otago University Christchurch
  - Department of Anaesthesia: 94
  - Department of Medicine: 96
  - Department of Obstetrics and Gynaecology: 123
  - Department of Orthopaedic Surgery and Musculoskeletal Medicine: 126
  - Department of Paediatrics: 127
  - Department of Pathology: 132
  - Department of Psychological Medicine: 149
  - Department of Public Health and General Practice: 160
  - Department of Radiology: 173
  - Department of Surgery: 175
  - Centre for Postgraduate Nursing Studies: 182
- Dunedin School of Medicine
  - Department of General Practice: 184
  - Department of Medical and Surgical Sciences
    - Anaesthesia and Intensive Care: 189
    - Bioethics Centre: 190
    - Medicine: 194
    - Ophthalmology: 206
    - Orthopaedic Surgery: 208
    - Surgery: 211
  - Department of Pathology: 214
  - Department of Preventive and Social Medicine: 220
  - Department of Psychological Medicine: 253
  - Department of Women's and Children's Health: 256
- Otago University Wellington
  - Department of Medical Radiation Therapy: 264
  - Department of Medicine: 265
  - Department of Obstetrics and Gynaecology: 277
  - Department of Paediatrics and Child Health: 279
  - Department of Pathology and Molecular Medicine: 284
  - Department of Primary Health Care and General Practice: 293
  - Department of Psychological Medicine: 300
  - Department of Public Health: 304
  - Department of Surgery and Anaesthesia: 324

**School of Pharmacy**
- 328

**School of Physiotherapy**
- 341

**Research Support Services**
- 346

**Research Office**
- 351

**Appendix 1: Notes on How These Data Are Reported**
- 352
RESEARCH THEMES AND CENTRES

Research Themes and Centres are areas of research and/or collaborative groups of researchers in which Otago University is pre-eminent and to which it gives particular recognition and support. Researchers within the Division of Health Sciences are leaders of a significant number of the University’s Research Themes and Centres. Details are given below. Further information relating to the research grants and publications of specific researchers can be found in this report under a given researcher’s home department.

RESEARCH THEMES

Formulation and Drug Delivery
Director: Professor Ian Tucker, (School of Pharmacy)

Bioactive materials such as drugs, vaccine antigens, pesticides and nutrients cannot be administered in pure form but must be incorporated into biocompatible formulations which maintain the stability of the bioactive material and deliver it in a suitable way to achieve optimal beneficial effects while minimising unwanted side effects. Thus, the science of formulation and drug delivery has human, veterinary and agricultural applications. It combines physical chemistry, biology and materials science to investigate physico-chemical properties of bioactives, excipients and formulations and behaviours of bioactives and formulations in the biological environment in order to develop an underpinning science. This science is the basis for design and manufacture of delivery systems with predictable behaviours.

Areas of particular research focus include: studies on the chemical stability of drugs in formulations; physical stability in formulations; neural networks and fuzzy logic to facilitate formulation; controlled release devices to deliver antibacterial agents to specific regions of the mouth; single-shot vaccines for veterinary use; delivery of poisons or vaccines to possums for control of Tb; absorption of drugs from the intestine of surgical patients; delivery of peptide drugs orally; microencapsulation technologies. These projects have fundamental, applied and developmental aspects.

http://pharmacy.otago.ac.nz/pages/research.html

Functional Genomics, Gene Expression and Proteomics
Directors: Professors Warren Tate, Kevin Farnden, and Associate Professor John Cutfield: Department of Biochemistry, (Otago School of Medical Sciences)

The era of automated DNA sequencing and genome databases (genomics) has arrived and with it have come new methods for identifying particular genes and their protein products (proteomics). It is the expression of a set of genes in a particular cell type which defines the function of that cell. The pattern of gene expression can change, for example during development, or as a result of mutation or disease, so that analysis of altered expression profiles provides fundamental information on basic biological processes. However, understanding how such changes come about requires knowledge of factors that control gene expression as well as the functions of the individual protein products. Assigning function to an unknown protein depends on knowing its precise composition and 3-dimensional structure, as well as its interaction partner. Functional proteomics leads in turn to a deeper understanding of physiological processes.

Such genome to proteome studies rely on some sophisticated technology (most of which is now in place on this campus, or soon will be) that can be applied to the study of any tissue or organism. The equipment includes a gene microarray facility, laser capture microscope, LC-mass spectrometer and limited X-ray diffraction equipment, all of which have received support from the University. Underpinning the operations is the use of advanced methods in computational biology (bioinformatics). A number of proven investigators are embracing these new technologies with the common goal of understanding or manipulating gene expression. In addition to using common methodologies, members of this theme share a similar intellectual approach to the analysis of genes and proteins, irrespective of the great diversity of organisms under study. Current research interests are many and varied. Details can be found at:

http://biochem.otago.ac.nz/FGGEPtheme/home.html
Immunological Basis of Disease and Protective (Imunet)
Directors: Associate Professors Glenn Buchan, Margaret Baird: Department of Microbiology & Immunology, (Otago School of Medical Sciences)

An understanding of the immune response underpins our understanding of infectious and autoimmune diseases. Cures for these diseases, as well as cancer and asthma, require knowledge of the immune response and how it can be manipulated. Basic and applied research is essential for the health of both people and economically important livestock.

Nine research groups, comprising more than 40 senior researchers, are working on research projects that can be grouped under this theme. The theme has also recently expanded to include immunologists in Crown Research Institutes and industry. This grouping has been renamed Immunet, and it aims to foster immunological research and the training of immunologists in New Zealand. Researchers involved with this theme have achieved international eminence and attract over $3 million in funding per annum.

Research focuses on the development of improved vaccines against cancer and infectious diseases such as meningitis and tuberculosis. It also seeks to understand the immunology and infectious basis of autoimmune diseases, control of adhesion molecules in inflammatory diseases, and the role of the immune system in asthma.

http://immunet.otago.ac.nz/

Oral Microbiology and Dental Health
Director: Dr Geoffrey Tompkins: Department of Oral Sciences, (School of Dentistry)

Oral microbes cause discomfort, distress, or disease in a large proportion of the population. For example, ‘tooth decay’, which is caused by the bacteria present in dental plaque, is one of the most common human diseases. It is painful and it is costly to treat. Other microorganisms, such as periodontal pathogens and the yeast *Candida albicans*, are also present in the mouth and can give rise to oral diseases.

This theme comprises a number of pre-eminent research groups investigating various aspects of oral microbiology and dental health. These groups come from a variety of backgrounds including: the Faculty of Dentistry; the Department of Microbiology & Immunology, (Otago School of Medical Sciences); the Department of Pathology and Molecular Medicine (Otago University, Wellington) and the New Zealand Dental Association.

Research carried out by members of the Oral Microbiology and Dental Health research theme covers a broad and cross-disciplinary range of topics. Research focuses on the study of the microorganisms responsible for a range of oral diseases, understanding how these diseases are caused, and devising strategies to prevent them. Specific areas of study include: oral biofilms, plaque mineralisation, microbial adhesion, drug resistance, designer antimicrobials, bacteriocins, dental epidemiology, forensic dentistry, mining microbial genomes, and iron acquisition.

http://dentistry.otago.ac.nz/research/oralmicro/index.html

Oxidative Stress in Health and Disease
Director: Professor Christine Winterbourn: Department of Pathology, University of Otago Christchurch

Oxidative stress occurs when the production of damaging free radicals and other oxidative molecules exceeds the capacity of the body’s antioxidant defences to detoxify them. Oxidants also play an important positive role in the immune system. We live in an oxygen-rich environment and use oxygen to extract energy from food. As a corollary of this, oxygen radicals are released. The production and control of reactive oxidants, therefore, are integral life processes. However, these can be disrupted and oxidative stress contributes to many diseases including inflammation, autoimmune diseases, cancer, neurodegenerative diseases, heart attack and stroke. The general objective of the theme is to understand the specific mechanisms of oxidative injury in these conditions and determine whether antioxidant intervention is protective.

Members of the theme are drawn from at least seven different departments, spread across three campuses, and include biochemists, clinicians and nutritionists.
Current projects include: mechanisms of antioxidant defence; oxidative stress in premature infants; oxidative stress in asthma; nutritional antioxidants; oxidative mechanisms of neurodegeneration, nitric oxide and mitochondrial function; oxidative damage and kidney disease; glucose transport; markers of neutrophil oxidation in inflammation; and redox regulation of gene expression and cell signalling.

http://www.otago.ac.nz/research/themes/theme_oxidative.html

Memory: Mechanisms, Processes and Applications
Directors: Associate Professor David Bilkey, Dr Anthony Robins: Department of Psychology, University of Otago

Although this theme is not led by a member of the Health Sciences Division, Divisional staff have significant input into it. Please refer to the following website for further information:

http://psy.otago.ac.nz//memory/

Rehabilitation and Disability
Director: Professor David Baxter: School of Physiotherapy

The Rehabilitation and Disability Research Theme represents a collaborative effort by researchers from diverse backgrounds to conduct high quality research that will enhance the effectiveness of rehabilitative care and optimise quality of life for people with injury and disabilities, including those musculoskeletal, neurological, and chronic health conditions that may lead to impairment and/or disability.

Research is being undertaken that will improve the quality, effectiveness, and cost-effectiveness of patient care and outcomes. This includes investigations focusing on the prevention, reduction and resolution of disability, as well as quality of life for those affected by injury or disability, and the quality of life of their families and carers. The Rehabilitation and Disability Research Theme provides research training in a variety of specialties, including rehabilitation, neuroscience, neuropsychology, biomechanics, health care outcomes, rehabilitation engineering, and other related fields.

Due to the wide scope of members’ specialties from clinicians to academics, doctors, physiotherapists and health practitioners, qualitative to quantitative researchers, we believe that a wealth of knowledge, understanding and ideas will be generated through the current collaborations.

http://physio.otago.ac.nz//res/centre.asp

The Kidney in Health and Disease
Directors: Professor Rob Walker: Department of Medical and Surgical Sciences, (Dunedin School of Medicine), Professor Zoltan Endre: Department of Medicine (Otago University, Christchurch).

This theme involves approximately 20 researchers from the University’s clinical medical schools in Christchurch and Dunedin and from departments in the wider University. The latter include the Department of Physiology and the Schools of Pharmacy and Physical Education. Strong links have been established between the researchers and District Health Boards, and with other research institutions nationally and internationally.

The Group is dedicated to investigating innovative ways to prevent and treat kidney disease. The group's expertise ranges from molecular and cellular-level investigations of kidney function, to applying therapies to prevent kidney injury or the progression of kidney disease. Research is aimed at better understanding the mechanisms of insult to the kidney, so as to allow earlier detection and better treatment. Efforts are underway to find new markers for early acute renal failure so it can be treated before irreversible damage or death occurs. Current research projects include: effects of lithium on renal function, therapeutic targets of polycystic liver disease, dietary induced obesity and metabolic syndrome, clinical renal trials, renal function and high performance exercise, and progression of renal disease.

http://kidney.otago.ac.nz/
Virology
Directors: Associate Professor Vernon Ward and Professor Andrew Mercer: Department of Microbiology & Immunology, (Otago School of Medical Sciences)

The Virology research team at the University comprises several interconnected groups located in the Divisions of Sciences and Health Sciences, and spread across the Dunedin, Christchurch and Wellington campuses. Together members of the team have expertise in all areas of virology.

Current research activities encompass multiple projects in the areas of: viruses and cancer; viruses and immunity; human and animal health virology; invertebrate virology; viral infections and diagnosis; vector-borne diseases; plant virology; and human respiratory disease and hepatitis.

The group has an exceptionally strong track record of publications, and collaborates internationally with research institutes in Germany, the United Kingdom, the USA, Australia, Finland and Israel. Theme participants have won in excess of $6 million in research funding from national and international sources in the last five years.

http://virology.otago.ac.nz/

RESEARCH CENTRES

Brain Health and Repair Research Centre
Director: Professor Cliff Abraham: Department of Psychology, University of Otago

Although this Centre is not led by a member of the Health Sciences Division, Divisional staff have significant input into the Centre. Please refer to the following website for further information:

http://psy.otago.ac.nz/staff/abraham.html

CardioEndocrine Research Group
Director: Professor Mark Richards: Department of Medicine, Otago University Christchurch

Regulation of the consistency of the circulation (pressure and volume) and the heart’s pumping efficiency are crucial to health and normal organ function. Hormones play a major role in regulating the fluid compartments of the body, blood pressure and the heart’s pumping action. Cardiovascular endocrinology is the science linking these interlocking hormone systems with the functional state of the heart and circulation. The current focus of theme research is the role played by hormones secreted by the heart (cardiac natriuretic peptides) and how these hormones interact with other hormone systems and local tissue factors in maintaining circulatory homeostasis both in health and after acute or chronic cardiac injury.

Centre members have won funding from the Health Research Council, the National Heart Foundation, and the Canterbury Medical Research Foundation.

Current projects encompass: natriuretic peptides in diagnosis, prognosis and management of heart failure; bioactivity metabolism and tissue interaction among natriuretic peptides; neurohormonal intervention in acute and chronic cardiac injury; molecular biology of natriuretic peptides; adrenomedullin's role and regulation in circulatory disorders.

http://www.chmeds.ac.nz/research/cardioen/

Centre for Reproduction and Genomics
The University of Otago and AgResearch Limited, two of New Zealand’s largest research institutions, have established a joint Centre for Reproduction and Genomics. The Centre includes the endowed AgResearch Chair in Reproduction and Genomics, for which an international search is underway. As part of the agreement the two institutions have established a joint fund for collaborative research of $1.5 million over three years. AgResearch and the University have a long history of collaboration – and are currently jointly involved in approximately 70 research projects.

The Centre will foster a number of research interests including viral pathology, pre-implantation embryology, male reproductive biology, ovulation, fecundity genes, and bioinformatics.
Centre for Urban Health and Development (CUHAD)
Director: Professor Philippa Howden-Chapman: Department of Public Health, Otago University Wellington.

The CUHAD is a newly developed University of Otago Research Centre which carries out pioneering collaborative research that contributes to the health and balanced development of New Zealand cities. With over 85% of our population living in urban environments, we face a challenge to keep our cities sustainable and attractive internationally, and the people within them healthy and socially connected. As our cities develop, we need to work to maintain their quality so that we can attract the innovative start-ups and the participants in the knowledge society as well as meet the needs of less advantaged residents.

CUHAD arises from long-term collaborations and strong international linkages. It focuses on housing, transport, energy and social infrastructure in six urban areas. It includes analysis of carbon emissions, energy use, internal and external air quality, health drivers such as levels of physical activity and social cohesion, and health outcomes such as our internationally high rates of respiratory illness.

Research carried out at the CUHAD influences the way our growing cities develop, how we transform our infrastructure as the economy develops, and the way we modify our largest urban environment, Auckland.

Centre for Translational Cancer Research (CTCR)
Director: Professor Anthony Reeve: Department of Biochemistry, Otago School of Medical Sciences

We know that drugs precisely delivered to molecular targets on the cancer cell can save lives, that early detection provides the simplest path to patient survival, that the body’s own immune system can be manipulated to eliminate disease, and that, with the right diagnostic tools, conventional cancer treatment can be individualised to radically improve the outcome for the patient.

However, the incremental gains made in the research laboratory all too rarely reach the hospital oncology wards.

This new Centre brings together scientists and clinicians from across New Zealand, enhanced by significant collaborations with elite international cancer groups. The Centre will provide unique training opportunities for young scientists and clinicians, and provide them with national and international networks which will support them through a life of research and clinical practice. This highly coordinated, multidisciplinary team will develop an integrated strategic research and clinical programme to convert ground-breaking research into nationwide improvements in the diagnosis, management and treatment of New Zealand’s most pressing cancer problems, in particular, melanoma, colorectal and gastric cancer.

Centre for Translational Research in Chronic Diseases: Obesity
Director: Professor Jim Mann: Department of Medical and Surgical Sciences, Dunedin School of Medicine

This Centre examines chronic diseases through the process of translational research. The initial focus is on obesity, the leading cause of many chronic diseases in New Zealand and overseas.

The Centre unites multidisciplinary research groupings, including researchers of international standing from five New Zealand universities, to identify needs and provide effective, socially inclusive and sustainable solutions for evidence-based management and public policies. These research groups drive the process of translational research, establishing research questions and new prediction tools from observational research, to address basic science mechanisms in the inter-regulation of eating and physical activity, through clinical trials (Phase-1 translation), controlled family- and community- interventions and then population-directed policy measures (Phase-2 translation) which need to be made sustainable by research into continuous improvement methods (Phase-3 translation).

The Centre will adapt WHO Guidelines and nurture new research capacity to integrate (1) promotion of healthful behaviours with (2) evidence-based public-policy approaches to create supportive physical, educational, fiscal and food environments, and (3) improved clinical responses to the existing burden of obesity-related ill-health.
Mental Health and Addiction Research Centre (MHARC)
Director: Professor Peter Joyce; Department of Psychological Medicine, University of Otago Christchurch

Mental disorders, such as depression, bipolar disorder, anxiety and eating disorders and alcohol and drug addictions are major contributors to the burden of disease for young New Zealanders and their families. The Mental Health and Addiction Research Centre (MHARC) undertakes research into the causes and treatments of these disorders. MHARC brings together the Mental Health Clinical Research Unit (Director: Professor Peter Joyce), the National Addiction Centre (Director: Professor Doug Sellman), and the Gene Structure and Function Laboratory (Director: Associate Professor Martin Kennedy). Two University of Otago Leading Thinker projects are included with MHARC - The Carney Centre for Pharmacogenomics, and the Gama Bipolar Fellowship. The major current funder is the Health Research Council of New Zealand via a Programme Grant and Project Grants.

National Centre for Lifecourse Research
Director: Associate Professor Richie Poulton; Department of Preventive and Social Medicine, Dunedin School of Medicine

The National Centre for Lifecourse Research is a newly developed University of Otago Centre. The Centre aims to become the world’s most comprehensive source of information about family relationships, human development, and adaptation, from cradle to grave, by repeatedly measuring New Zealand families across multiple generations. The Centre promotes innovative approaches such as prospective-longitudinal studies of intra-individual change and pathways to opportunity; new multigenerational-transmission studies of risk and resilience across three generations of New Zealand families; intervention studies with at-risk individuals and families, and Pacific-region longitudinal-migratory studies.

The Centre provides a ‘one-stop shop’ for knowledge about the human condition, from birth through old age, via multidisciplinary, multigenerational research. It will study a broad range of positive and problematic outcomes, spanning: chronic physical disease (e.g., cardiovascular disease, emphysema); disease risk factors (e.g., obesity); mental health problems (e.g., depression, schizophrenia, suicidality); criminality and pro-social behaviour; health-promoting and health-risk behaviours (e.g., diet, sedentary behaviour); sexual and reproductive behaviour; educational achievement and employability; optimal cognitive development; social relationships (ranging from close personal relationships to engagement with civic institutions); parenting; cultural/national identity, and the ageing process.

http://dunedinstudy.otago.ac.nz/CoRE.html

Neuroendocrinology Research Centre
Directors: Professor Allan Herbison: Department of Physiology, Otago School of Medical Sciences; Associate Professor Dave Grattan: Department of Anatomy and Structural Biology, Otago School of Medical Sciences

The Centre for Neuroendocrinology brings together eight laboratories investigating the neural regulation of fertility, fluid volume homeostasis, catecholamine secretion, and adaptations of the maternal brain. These laboratories have their bases in the Departments of Physiology, Anatomy and Structural Biology and Obstetrics and Gynaecology at Otago University, Christchurch.

Current research focuses on the following topics: neuroprotective actions of estrogen; effects of estrogen on cholinergic and GnRH neurons; nutritional factors regulating fertility; role of RFamide-related peptide in mammalian reproduction; tyrosine hydroxylase activity in the brain; regulation of catecholamine release from the adrenal medulla; oxytocin and vasopressin neurons; peptidergic regulation of LH and FSH release from the anterior pituitary gland; neuroendocrine regulation of prolactin secretion; regulation of body weight during pregnancy; neuroendocrine adaptations of the maternal brain during pregnancy and lactation; biological basis of pulsatility in GnRH neurons; mechanisms of gonadal steroid feedback upon GnRH neurons; regulation of GnRH neuron migration during embryogenesis; outgrowth and guidance of axons from GnRH neurons; and differentiation of neuroendocrine neurons.

http://www.otago.ac.nz/neuroendocrinology/
Webster Centre for Infectious Diseases
Director: Professor Kurt Krause, Department of Biochemistry, Otago School of Medical Sciences

A worldwide resurgence in infectious diseases that has created an environment in which new and emerging pathogens such as bird flu are assuming prominence and pose a threat to people and native and domestic animals. There is a significant void in New Zealand’s front line of defence against infectious disease due to a reliance on acquiring therapies offshore. To address this issue, the Centre is bringing together a community of scientists with the expertise to develop new therapies against infectious diseases and rapidly respond to the threat of new pathogens. Research in the Centre is interdisciplinary involving biochemists and chemists, in collaboration with pharmacologists, microbiologists, immunologists, epidemiologists and clinicians.

http://www.otago.ac.nz/research/centres/res_cen_webster.html
FACULTY OF DENTISTRY

The Faculty of Dentistry was founded in 1907, and is the only Faculty and School of Dentistry in New Zealand. It forms an integral part of the Division of Health Sciences. The Faculty consists of three Departments – the Department of Oral Diagnostic and Surgical Sciences, the Department of Oral Sciences and the Department of Oral Rehabilitation.

Research in the Faculty of Dentistry underpins the teaching of dentistry, its clinical practice, and the identification of oral health-related problems. Researchers in the Faculty are committed to the systematic development of new knowledge of oral science and how best to improve the oral health of the general public.

SIR JOHN WALSH RESEARCH INSTITUTE

In 2006, funding provided by the University led to the establishment of the Sir John Walsh Research Institute within the Faculty. It is named after a former Dean of the Faculty of Dentistry, who's appointment in 1946 advanced dentistry on many levels. By actively reaching out to all interested groups (including Faculty, students, the dental profession and the wider community), the Institute will serve as a focus and advocate for oral health research that will instil a research ethos throughout New Zealand. The Institute aims to obtain a sustainable balance between basic, translational, practice-based and public health research.

DEPARTMENT OF ORAL DIAGNOSTIC AND SURGICAL SCIENCES

The Department of Oral Diagnostic and Surgical Sciences is organised into the disciplines of Oral and Maxillofacial Surgery, Oral Medicine, Oral Radiography, Oral Pathology, Special Needs Dentistry, Clinical Pharmacology and Sedation, and General Dental Practice. The main areas of research in the department are:

- oral diseases and healing with particular interest in human and experimental epithelial hyperplasia, preneoplasia and neoplasia
- basic and clinical research into salivary disease
- endodontic microbiology and the molecular mechanisms involved in bacterial invasion of dentine
- the development of endodontic medicaments for root canal disinfection and their effects on bacteria and tissues culture
- clinical research in endodontics, dental implantology, oral and maxillofacial surgery, trauma, and prosthodontics.

http://dentistry.otago.ac.nz/departments/odss.html

Staff

Professor Robert Love  Professor and Head of Department
A/P John Broughton  Associate Professor
A/P Alison Rich  Associate Professor
Mr Norman Firth  Senior Lecturer
Mr Rohana Kumara  Senior Lecturer
Mr Dusan Kuzmanovic  Senior Lecturer
Miss Eithne MacFadyen  Senior Lecturer
Mr Darryl Tong  Senior Lecturer

External Research Grants

<table>
<thead>
<tr>
<th>Total $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined 2002-2006 income for all grants ≤ $50,000</td>
</tr>
</tbody>
</table>
Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masters</td>
<td>4</td>
<td>6</td>
<td>5</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

*as at 1 June each year

Publications

Chapter in Book

Journal Article


DEPARTMENT OF ORAL REHABILITATION

Research undertaken within the Department of Oral Rehabilitation covers a diverse range of topics related to Clinical Cariology, Endodontics, Biomaterials, Prosthodontics and Dental Technology. More specifically, research is directed at the prevention and treatment of dental disease, the repair and replacement of teeth and their associate structures affected by disease, trauma or wear, the restoration of form, function and appearance, mechanical testing and computer modeling of the behaviour of dental tissues and biomaterials.

http://dentistry.otago.ac.nz/departments/oralrehabilitation.html

Staff

Mr David Purton  Senior Lecturer and Head of Department
Professor Brian Monteith  Professor
Professor Michael Swain  Professor
A/P Nicholas Chandler  Associate Professor
A/P Alan Payne  Associate Professor
Dr Vincent Bennani  Senior Lecturer
Mrs Catharina Hauman  Senior Lecturer
Mr Karl Lyons  Senior Lecturer
Dr Richard Cook  Lecturer
Mr Paul Ichim  Lecturer
Mr David Campbell  Clinical Lecturer

External Research Grants

<table>
<thead>
<tr>
<th>Year</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>Associate Professor Alan Graham Payne</td>
<td>A multicentre prospective evaluation of mandibular bilateral distal extension removable partial dentures, supported by ITI dental implants</td>
<td>ITI Foundation</td>
<td>$114,924</td>
</tr>
</tbody>
</table>

Total  $114,924

Combined 2002-2006 income for all grants ≤ $50,000  $128,593

Grand Total  $243,517

Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Masters</td>
<td>8</td>
<td>10</td>
<td>10</td>
<td>15</td>
<td>7</td>
</tr>
</tbody>
</table>

*as at 1 June each year
Publications

Chapter in Book

Journal Article


**Commissioned Report for External Body**

**DEPARTMENT OF ORAL SCIENCES**

The major research interests of the Department of Oral Sciences are cell biology, community oral health, education in dentistry, molecular oral microbiology, immunopathology, orthodontics and periodontics. Areas of particular research strength within the Department include craniofacial biology, dental epidemiology and public health, oral implantology, and immunopathology. The Department has a Molecular Microbiology Laboratory and laboratory research staff and students contribute to the University of Otago Oral Microbiology and Dental Health Research Theme. Research carried out under this theme in the department includes studies of the microorganisms responsible for a range of oral diseases, an understanding of the aetiology of oral diseases and their relationship to health and development of strategies to prevent them. The immunopathology group is a newly formed group which has an international reputation and has already established a number of international collaborations.

http://dentistry.otago.ac.nz/departments/oralsciences.html

**Staff**

<table>
<thead>
<tr>
<th>Professor Jules Kieser</th>
<th>Professor and Head of Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor Tom Kardoš</td>
<td>Professor</td>
</tr>
<tr>
<td>Professor Richard Cannon</td>
<td>Professor</td>
</tr>
<tr>
<td>Professor Murray Meikle</td>
<td>Professor</td>
</tr>
<tr>
<td>Professor Greg Seymour AM</td>
<td>Professor</td>
</tr>
<tr>
<td>Professor Murray Thomson</td>
<td>Professor</td>
</tr>
<tr>
<td>A/P Bernadette Drummond</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Ms Mary Callinan</td>
<td>Senior Research Fellow</td>
</tr>
<tr>
<td>Dr Warwick Duncan</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Mr David Healey</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Mr Jonathan Leichter</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Mr Douglas Holborow</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Ann Holmes</td>
<td>Senior Research Fellow</td>
</tr>
<tr>
<td>Mrs Alison Meldrum</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Brian Monk</td>
<td>Senior Research Fellow</td>
</tr>
<tr>
<td>Dr Kyoko Niimi</td>
<td>Senior Research Fellow</td>
</tr>
<tr>
<td>Mr Andrew Quick</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Geoffrey Tompkins</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Mr Anuj Batra</td>
<td>Lecturer</td>
</tr>
<tr>
<td>Mr Jonathan Broadbent</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Dr Nicholas Heng</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Dr Erwin Lamping</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Ms Susan Moffat</td>
<td>Lecturer</td>
</tr>
<tr>
<td>Ms Kate Morgaine</td>
<td>Lecturer</td>
</tr>
</tbody>
</table>
## External Research Grants

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Dr Warwick Duncan</td>
<td>In vivo response of sheep osseous models to blasted-surface titanium dental implants treated with a novel anodising process</td>
<td>Chonbuk University, Megagen Implants Ltd, Osstem Implants Ltd</td>
<td>$256,000</td>
</tr>
<tr>
<td>2006</td>
<td>Professor William Murray Thomson</td>
<td>Oral health among older people in Otago/Southland</td>
<td>HRC Feasibility Study</td>
<td>$112,517</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Brian C Monk</td>
<td>Inhibition of fungal drug efflux pump CaCdr1p</td>
<td>Japan Health Sciences Foundation</td>
<td>$68,493</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Richard D Cannon</td>
<td>Membrane protein structure and function</td>
<td>Lottery Grants Board</td>
<td>$51,559</td>
</tr>
<tr>
<td>2005</td>
<td>Professor Richard D Cannon</td>
<td>Fungal transporters: from resistance to new antifungals</td>
<td>National Institutes of Health</td>
<td>$1,393,610</td>
</tr>
<tr>
<td>2005</td>
<td>Professor Julius A Kieser</td>
<td>High resolution X-ray micro-tomograph</td>
<td>Lottery Health Research</td>
<td>$172,000</td>
</tr>
<tr>
<td>2005</td>
<td>Professor Richard D Cannon</td>
<td>Molecular analysis of antifungal resistance and identification of drug targets in pathogenic fungi</td>
<td>Japan Health Sciences Foundation</td>
<td>$82,082</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Richard D Cannon</td>
<td>Inhibition of fungal drug efflux pump CaCdr1p</td>
<td>Japan Health Sciences Foundation</td>
<td>$119,663</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Murray C Meikle</td>
<td>Mechanisms of mechanically-induced remodelling and tooth movement</td>
<td>Lottery Health Research</td>
<td>$84,454</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Richard D Cannon</td>
<td>Molecular analysis of antifungal resistance and identification of drug targets in pathogenic fungi</td>
<td>Japan Health Sciences Foundation</td>
<td>$68,400</td>
</tr>
<tr>
<td>2003</td>
<td>Professor William Murray Thomson</td>
<td>Oral health disparities in the first 4 decades of life</td>
<td>National Institutes of Health</td>
<td>$887,950</td>
</tr>
<tr>
<td>2002</td>
<td>Professor Richard D Cannon</td>
<td>AIDS: Combating drug resistance of Candida albicans</td>
<td>National Institutes of Health</td>
<td>$480,014</td>
</tr>
<tr>
<td>2002</td>
<td>Professor Richard D Cannon</td>
<td>Drug discovery tools that circumvent antifungal resistance</td>
<td>Japan Health Sciences Foundation</td>
<td>$86,416</td>
</tr>
</tbody>
</table>

**Total** $3,948,479

**Combined 2002-2006 income for all grants ≤ $50,000** $539,838

**Grand Total** $4,498,317
Research Contracts

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Contractor</th>
<th>Organisations</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-06</td>
<td>Professor Richard D Cannon Associate Professor Bernadette K Drummond Professor Richard D Cannon</td>
<td>Astellas Pharma, BLIS Technologies Limited, Fujisawa pharmaceutical company.</td>
<td>$463,481</td>
</tr>
</tbody>
</table>

Combined 2002-2006 income for all contracts ≤ $20,000 $34,211

Grand Total $497,692

Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Masters</td>
<td>11</td>
<td>13</td>
<td>12</td>
<td>13</td>
<td>14</td>
</tr>
</tbody>
</table>

*as at 1 June each year

Awards and Scholarships

<table>
<thead>
<tr>
<th>Year</th>
<th>Researcher</th>
<th>Award/Scholarship</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Dr Erwin Lamping</td>
<td>Visiting Scientist (funded by National Institutes of Health) at the Membrane Protein Expression Centre, University of California San Francisco, USA</td>
</tr>
<tr>
<td>Oct-Dec 2006</td>
<td>Dr Erwin Lamping</td>
<td>Japan Society for the Promotion of Science (JSPS) short term fellowship</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Ann Holmes</td>
<td>Japan Health Sciences Foundation Fellowship</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Brian Monk</td>
<td>Japan Health Sciences Foundation Fellowship</td>
</tr>
<tr>
<td>2002</td>
<td>Dr Brian Monk</td>
<td>Japan Health Sciences Foundation Fellowship</td>
</tr>
<tr>
<td>July-Sept 2004</td>
<td>Dr Erwin Lamping</td>
<td>Japan Society for the Promotion of Science (JSPS) short term fellowship</td>
</tr>
<tr>
<td>Sept-Dec 2002</td>
<td>Dr Erwin Lamping</td>
<td>Japan Society for the Promotion of Science (JSPS) long term fellowship</td>
</tr>
</tbody>
</table>
publications

chapter in book


journals


**Intellectual Property**


**Commissioned Report for External Body**


**Video**


The University of Otago Faculty of Medicine consists of four Schools located on three campuses throughout New Zealand. These are the Otago School of Medical Sciences in Dunedin, and the Dunedin, Christchurch and Wellington Schools of Medicine. The Otago School of Medical Sciences comprises the Departments of Anatomy and Structural Biology, Biochemistry, Microbiology and Immunology, Pharmacology and Toxicology, and Physiology.

The Faculty of Medicine has an international reputation for the calibre of its research and postgraduate programmes. Expertise within the Faculty's four schools is comprehensive and a number of multidisciplinary research projects span the Faculty's three campuses. Departments carry out a broad range of research activities related to their specific disciplines, ranging from purely basic scientific research to applied medical and clinical research.

**FACULTY OF MEDICINE**

**OTAGO SCHOOL OF MEDICAL SCIENCES**

**DEPARTMENT OF ANATOMY AND STRUCTURAL BIOLOGY**

Research activity within the Department of Anatomy and Structural Biology covers a wide range of topics including: preimplantation embryos and stem cell biology; mammalian reproduction and fertility; the neuroendocrine control of reproduction; learning and memory; theory and function of the mammalian forebrain; schizophrenia; neurobiology of aging; neurodegenerative disorders; alcohol and brain development; structure and function of normal and hypoxic basal ganglia; motor control; neuroendocrinology; muscle and motoneuron development; bioethical issues relating to the human body and human tissues; biological anthropology of prehistoric populations; vascular disease; clinical anatomy as relevant to surgery; and development of bone graft substitutes and composite surgical appliances.

The Department boasts a number of first-rate research facilities including a new Roche GS FLX Gene Sequencer, light microscopy facilities (including a laser capture micro-dissection system and a Zeiss inverted microscope), X-ray and ultrasound, dedicated image analysis suites, a plastination laboratory, and an extensive human skeletal remains collection. The Department also houses the Otago Centres for Electron Microscopy and Confocal Microscopy.

http://anatomy.otago.ac.nz/

**Staff**

**Professor David Green**  
Professor and Head of Department  
Professor and DVC (Academic and International)

Professor Gareth Jones  
Professor Helen Nicholson  
Professor Gordon Arbuthnott  
Professor Jeff Wickens  
A/P David Grattan  
A/P Ian McLennan  
Dr Hallie Buckley  
Dr Stephen Bunn  
Dr George Dias  
Dr Marilyn Duxson  
Dr Peter Hurst  
Dr Kyoko Koishi  
Dr Beulah Leitch  
Dr Jan Leunissen  
Dr Ruth Napper  
Dr Dorothy Oorschot  
Dr Phil Peplow  
Dr John Reynolds  
Dr Mark Stringer  
Dr Nancy Tayles  
Dr Ming Zhang  
Dr Greg Anderson  
Mr John Dennison  
Dr Greg Jones  

**Lecturer**

Mr John Dennison  
Lecturer (Contracted)
Dr Ilona Kokay Research Fellow
Dr Ping Liu Lecturer
Dr Margaret Ryan Research Fellow
Dr Jo-Ann Stanton Research Fellow
Dr Joanna Williams Lecturer
Dr Stephanie Woodley Lecturer
Dr Robert Miller Research Fellow (Honorary)
Dr Andrew Clarkson Postdoctoral Fellow
Dr Koreen Clements Postdoctoral Fellow
Dr Cyril Dejean Postdoctoral Fellow
Dr Manfred Oswald Postdoctoral Fellow
Dr Toni Pitcher Postdoctoral Fellow
Dr Janette Quennell Postdoctoral Fellow
Dr Chris Rawle Postdoctoral Fellow
Dr Alexander Tups Postdoctoral Fellow
Dr Walter Wittmann Postdoctoral Fellow

External Research Grants

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>A/Professor Ian McLennan</td>
<td>Does MIS drive boys towards manhood?</td>
<td>Marsden Fund Project</td>
<td>$752,508</td>
</tr>
<tr>
<td>2006</td>
<td>A/Professor David R Grattan</td>
<td>Brain actions of Prolactin in the postpartum period</td>
<td>HRC International Investment Opportunities Fund</td>
<td>$210,002</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Kyoko McLennan</td>
<td>How does MIS support neurons?</td>
<td>Lottery Health Research</td>
<td>$154,368</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Gordon W Arbuthnott</td>
<td>Finding the substrate upon which deep brain stimulation acts to relieve parkinsonian symptoms</td>
<td>NZ Neurological Foundation Project</td>
<td>$142,843</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Ping Liu</td>
<td>Polyamines and age-associated cognitive decline</td>
<td>Lottery Health Research</td>
<td>$129,935</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Ping Liu</td>
<td>Agmatine and age-associated cognitive decline</td>
<td>NZ Neurological Foundation Project</td>
<td>$115,209</td>
</tr>
<tr>
<td>2006</td>
<td>Dr John N J Reynolds</td>
<td>Effect of theta-burst stimulation on the plasticity of synapses onto single cortical neurons</td>
<td>NZ Neurological Foundation Postgraduate Scholarship</td>
<td>$82,500</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Nancy Tales, Professor Charles Higham</td>
<td>The Neolithic revolution in SouthEast Asia</td>
<td>Marsden Fund</td>
<td>$690,923</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Greg M Anderson</td>
<td>Gonadotrophin-inhibitory hormone: a new player in the control of fertility</td>
<td>Marsden Fund</td>
<td>$577,779</td>
</tr>
<tr>
<td>Year</td>
<td>Author(s)</td>
<td>Project Title</td>
<td>Funding Source</td>
<td>Funding Amount</td>
</tr>
<tr>
<td>------</td>
<td>-----------</td>
<td>---------------</td>
<td>----------------</td>
<td>---------------</td>
</tr>
<tr>
<td>2005</td>
<td>Dr John N J Reynolds</td>
<td>Monkey see; monkey do. How does visual information become associated with specific actions?</td>
<td>Marsden Fund</td>
<td>$546,667</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Greg M Anderson</td>
<td>The link between nutrition and fertility</td>
<td>HRC – Project</td>
<td>$546,292</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Greg M Anderson</td>
<td>The link between nutrition and fertility</td>
<td>HRC – Project</td>
<td>$253,599</td>
</tr>
<tr>
<td>2005</td>
<td>Professor Helen D Nicholson</td>
<td>A novel method for the study of prostate growth</td>
<td>Lottery Health Research</td>
<td>$133,249</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Ming Zhang</td>
<td>Cellular patterning during myogenesis in vivo</td>
<td>Lottery Health Research</td>
<td>$99,513</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Stephen J Bunn</td>
<td>Estrogenic regulation of catecholamine synthesis in the adrenal medulla</td>
<td>Lottery Health Research</td>
<td>$97,831</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Ping Liu</td>
<td>Contribution of arginase to learning and memory – whether and how?</td>
<td>NZ Neurological Foundation</td>
<td>$78,475</td>
</tr>
<tr>
<td>2005</td>
<td>A/Professor D Grattan</td>
<td>LIF in leptin receptor signaling</td>
<td>Auckland University Subcontract</td>
<td>$67,130</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Marilyn J Duxson</td>
<td>Control of myelination in the peripheral nervous system</td>
<td>Lottery Health Research</td>
<td>$59,794</td>
</tr>
<tr>
<td>2005</td>
<td>Dr John N J Reynolds</td>
<td>How widely distributed brain cells become synchronised through reward-related learning</td>
<td>Lottery Health Research</td>
<td>$61,513</td>
</tr>
<tr>
<td>2005</td>
<td>A/Professor David R Grattan</td>
<td>Elucidating prolactin action in the brain through transgenics</td>
<td>Lottery Health Research</td>
<td>$54,000</td>
</tr>
<tr>
<td>2004</td>
<td>Professor David P L Green</td>
<td>ART and Stem cell biomarkers</td>
<td>FRST:NERF</td>
<td>$4,936,099</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Jeffery Wickens</td>
<td>Behavioural and cellular mechanisms of hyperactivity and movement disorders</td>
<td>HRC Programme</td>
<td>$1,829,001</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Joanna Williams, Professor Cliff Abraham, Professor Warren Tate</td>
<td>Regulation of synaptic plasticity across time: Mechanisms of metaplasticity</td>
<td>HRC – Project</td>
<td>$860,351</td>
</tr>
<tr>
<td>2004</td>
<td>Dr John N J Reynolds, Dr Dorothy E Oorschot</td>
<td>Spreading the word: how sparsely-distributed brain cells learn to respond to the same stimulus.</td>
<td>Marsden Fund Project</td>
<td>$761,067</td>
</tr>
<tr>
<td>2004</td>
<td>A/Professor Ian McLennan</td>
<td>Does the location of an external signal influence how a cell responds to it?</td>
<td>Marsden Fund</td>
<td>$586,667</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Joanna M Williams</td>
<td>Why do we forget when we get old?</td>
<td>Marsden Fund</td>
<td>$560,001</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Greg M Anderson</td>
<td>The Link Between Nutrition and Fertility</td>
<td>Lottery Health Research</td>
<td>$1,493,330</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Hallie R Buckley</td>
<td>Human skeletal biology in prehistoric Vanuatu, Pacific Islands: Human adaptation to the island environment from initial settlement to post-European contact.</td>
<td>Marsden Fund</td>
<td>$127,313</td>
</tr>
</tbody>
</table>
2004 Dr Ping Liu  Contribution of nitric oxide synthase, arginase and cycooxygenase to age related memory impairments  NZ Neurological Foundation  $106,543

2004 Dr Joanna Williams Dr Aaron Jeffs  Equipment for gene expression profiling  Lottery Health Research  $80,000

2004 Dr Marilyn J Duxson  Control of myelination in the peripheral nervous system  Lottery Health Research  $60,071

2004 Professor Jeffery Wickens  Adenosine A2A receptor regulation of inhibitory interactions in the rat striatum: a novel target for drug treatment of Parkinson's disease  NZ Neurological Foundation  $59,971

2004 Dr Peter R Hurst  Laser Capture Microdissection system  Lottery Health Research  $50,000

2003 A/Professor David R Grattan  Pregnancy as a model for leptin-resistant obesity  Marsden Fund  $509,335

2003 Dr Greg M Anderson  Prolactin signaling in the brain: uncovering new roles for an old hormone  Marsden Fund  $88,798

2003 Professor Jean S Fleming  Studies on the cellular origin of ovarian inclusion cysts  Lottery Health Research  $75,284

2002 Dr Joanna Williams, Professor Jeffrey Wickens, Professor Warren Tate, Professor Cliff Abraham  Cellular mechanisms of learning and memory in the brain  HRC Programme  $1,213,530

2002 Professor David P L Green  Designer DNA chips for reproductive health and wellness  FRST:NERF  $666,668

2002 Dr Stephen J Bunn  Do cytokines regulate the activity of the adrenal medulla?  Lottery Health Research  $109,106

2002 Professor Jeffery Wickens, Dr John NJ Reynolds  A cellular mechanism for learning in the brain  Marsden Fund  $533,333

2002 Professor Helen Nicholson Dr Steve Assinder  Oxytocin and benign prostate disease  Lottery Health Research  $110,806

2002 Miss Toni Pitcher  Cellular mechanisms of dopamine function in the brain  NZ Neurological Foundation Postgraduate Scholarship  $72,710

2002 Mr Lance Graham Nash  Deep cervical fascia  Tuapapa Putaiao Māori  $58,333

Total  $18,512,638

Combined 2002-2006 income for all grants ≤ $50,000  $825,436

Grand Total  $19,338,074
Research Contracts

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Contractors</th>
<th>Organisations</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003-06</td>
<td>A/Professor Ian McLennan Dr George Dias Dr Kyoko Koishi Mr Allan Mitchell</td>
<td>Otago Innovation Limited Keratec Limited Ministry of Research Science and Technology Keratec Limited Otago DHB</td>
<td>$411,049</td>
</tr>
</tbody>
</table>

Combined 2002-2006 income for all contracts ≤ $20,000 $16,517

Grand Total $427,566

Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>32</td>
<td>35</td>
<td>32</td>
<td>30</td>
<td>32</td>
</tr>
<tr>
<td>Masters</td>
<td>18</td>
<td>17</td>
<td>25</td>
<td>28</td>
<td>30</td>
</tr>
</tbody>
</table>

'as at 1 June each year

Awards and Scholarships

<table>
<thead>
<tr>
<th>Year</th>
<th>Researcher</th>
<th>Award/Scholarship</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Mr Pei-Yu Wang</td>
<td>Winner of the Advancing Human Health category of the McDiarmid Young Scientist of the Year awards</td>
</tr>
<tr>
<td>2006</td>
<td>Ms M Barry</td>
<td>Miller Scholarship, Neurological Foundation</td>
</tr>
<tr>
<td>2005</td>
<td>Dr JNJ Reynolds</td>
<td>University of Otago Early Career Award for Distinction in Research</td>
</tr>
<tr>
<td>2005</td>
<td>A/P DR Grattan</td>
<td>Physiological Society of New Zealand's Triennial Medal for distinguished physiological research over the past 5 years</td>
</tr>
<tr>
<td>2004</td>
<td>Dr JNJ Reynolds</td>
<td>Brain Research Young Investigator Award, awarded by Elsevier Science and Editors of Brain Research</td>
</tr>
<tr>
<td>2003</td>
<td>Ms T Pitcher</td>
<td>Miller Scholarship, Neurological Foundation</td>
</tr>
<tr>
<td>2002</td>
<td>Ms S Halcrow</td>
<td>Bright Futures Scholarship</td>
</tr>
<tr>
<td>2002</td>
<td>Mr L Nash</td>
<td>Tuapapa Putaiao Māori Fellowship</td>
</tr>
</tbody>
</table>

Publications

Book
Chapter in Book


RESEARCH REPORT 2002–2006

Journal Article

38


Mahoney, P. M., Hurst, P. R., McLeod, B. J., McConnell, M. A., & Thompson, E. G. (2003). Effect of oestradiol treatment on mast cell populations and microflora in the vaginal cul-de-sac of seasonally anoestrous brush-tailed possums (*Trichosurus vulpecula*). *Reproduction*, 125, 733-741.

Mahoney, P. M., Hurst, P. R., McLeod, B., & McConnell, M. A. (2002). Quantification of mast cells and microflora in the vaginal cul-de-sac of the brush-tailed possum (*Trichosurus vulpecula*). *Reproduction* 124:399-408.


Intellectual Property

Software

Commissioned Report for External Body


DEPARTMENT OF BIOCHEMISTRY
Research in the Department of Biochemistry is largely concerned with fundamental processes associated with a number of significant biomedical and biological problems: vision and deafness; heart disease; cancer; diabetes; memory and neurological disease; pathogenic viruses, micro-organisms and fungi; flowering, senescence, photosynthesis, nitrogen utilization in plants, symbiosis; mammalian preimplantation embryo development; cold adaptation; eukaryotic retroelements; body weight and cell signalling; molecular evolution; apoptosis; biodiversity. The Department houses the Otago Genomics Facility, The Centre for Protein Research, and a new X-Ray Crystallography suite.

http://biochem.otago.ac.nz/

Cancer Genetics Laboratory
The Cancer Genetics Laboratory was established in 1980, and is one of the largest medical research groups in New Zealand, consisting of 24 personnel. The major focus of the Cancer Genetics Laboratory is to determine the genetic changes associated with neoplasia. Research in the laboratory involves four major research projects which straddle the broad areas of embryology, cell biology, genetics, molecular biology and tumourigenesis. The overall aim of the group is to elucidate the genetic events leading to cancer, in order to improve diagnostic methods and assist in the design of better therapies.

http://cancer.otago.ac.nz/

Staff
A/P John Cutfield  Associate Professor and Head of Department
Professor Kurt Krause  Professor
Professor George Petersen  Emeritus Professor
Professor Tony Reeve  Professor
Professor Warren Tate  Professor
A/P Julian Eaton-Rye  Associate Professor
A/P Kevin Farnden  Associate Professor
Dr Parry Guilford  Research Associate Professor
A/P Iain Lamont  Associate Professor
A/P Mike Legge  Associate Professor
A/P Sally McCormick  Associate Professor
A/P Russell Poulter  Associate Professor
Dr Milk Black  Senior Lecturer
Dr Judy Broom  Senior Research Fellow
Dr Chris Brown  Senior Lecturer
Dr Alan Carne  Senior Lecturer
Dr Susan Cutfield  Senior Research Fellow
Dr Catherine Day  Senior Lecturer
Dr Peter Dearden  Senior Lecturer
Dr Liz Ledgerwood  Senior Research Fellow
Dr Richard Macknight  Senior Lecturer
Dr Craig Marshall  Senior Lecturer
Dr Marion Maw  Senior Research Fellow
Dr Tony Merriman  Senior Research Fellow
Dr Ian Morison  Senior Research Fellow
Dr Elizabeth Poole  Senior Research Fellow
Dr Mary Thompson  Senior Lecturer
Dr Sigurd Wilbanks  Senior Lecturer
Dr Margi Butler  Research Fellow
Dr Ryuji Fukuzawa  Research Fellow
Dr Tim Goodwin  Research Fellow
Dr Bostjan Humar  Research Fellow
Dr Becky Laurie  Research Fellow
Dr Fabienne Lecomte  Research Fellow
Dr Yu-Hsin Lin  Research Fellow
Dr Cushla McKinney  Research Fellow
Dr Peter Stockwell  Research Fellow
Dr Paul Turner  Research Fellow
Mr Rob Weeks  Research Fellow
Dr Megan Wilson  Research Fellow
Dr Jade Hollis-Moffatt  Postdoctoral Fellow
Dr Katrin Linke  Postdoctoral Fellow
Dr Peter Mace  Postdoctoral Fellow
Dr Matthew Shirley  Postdoctoral Fellow
Dr James Smith  Postdoctoral Fellow
Dr Callum Smits  Postdoctoral Fellow

External Research Grants

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Professor Anthony E Reeve</td>
<td>Genetics and Epigenetics of Cancer</td>
<td>HRC Programme</td>
<td>$5,913,598</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Peter Dearden</td>
<td>The Evolution of Animals: A new model system for animal developmental genetics</td>
<td>Marsden Fund</td>
<td>$693,332</td>
</tr>
<tr>
<td>2006</td>
<td>A/Prof Sally P A McCormick</td>
<td>Regulation of HDL level</td>
<td>HRC – Project</td>
<td>$665,679</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Anthony Reeve Dr Ian Morison</td>
<td>NRCGD CORE – MTHRF Gene Polymorphisms and Epigenetic regulation</td>
<td>Auckland University Subcontract</td>
<td>$586,266</td>
</tr>
<tr>
<td>2006</td>
<td>A/Prof Russell Poulter</td>
<td>Microbial models of the human L1 retrotransposon</td>
<td>HRC International Investment Opportunities Fund</td>
<td>$457,000</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Tony R Merriman</td>
<td>Whole genome association scanning for common autoimmunity genes</td>
<td>HRC International Investment Opportunities Fund</td>
<td>$418,874</td>
</tr>
<tr>
<td>Year</td>
<td>Name</td>
<td>Project Title</td>
<td>Funding Body</td>
<td>Funding Amount</td>
</tr>
<tr>
<td>------</td>
<td>-----------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>---------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Judith E Broom</td>
<td>Taxonomy of macroalgae (Schedule two)</td>
<td>National Institute for Water and Atmosphere</td>
<td>$293,301</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Richard C Macknight</td>
<td>Comparative genetics of flowering in legumes</td>
<td>AGMARDT Postdoctoral Fellowship</td>
<td>$135,556</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Michael A Black</td>
<td>Bayesian Models for Personalized Medicine</td>
<td>Marsden Fund Project</td>
<td>$128,374</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Judith E Broom</td>
<td>Assessment and definition of the biodiversity of coralline algae in northern New Zealand (Schedule 1)</td>
<td>National Institute for Water and Atmosphere</td>
<td>$112,640</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Tony Merriman</td>
<td>Identification of multi-copy genes associated with type 1 diabetes</td>
<td>Child Health Research Foundation (NZ)</td>
<td>$100,000</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Tony R Merriman</td>
<td>Testing for association of multi-copy genes with rheumatoid arthritis</td>
<td>Arthritis NZ Project Grant</td>
<td>$91,383</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Bostjan Humar</td>
<td>Validation of drug targets for the prevention and treatment of lobular breast cancer (Martine Elizabeth Cuff Breast Cancer Bequest)</td>
<td>Faculty of Medicine Trust</td>
<td>$82,654</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Catherine L Day</td>
<td>RING-RING interactions: a key to regulating protein degradation?</td>
<td>Lottery Health Research</td>
<td>$70,000</td>
</tr>
<tr>
<td>2006</td>
<td>A/Prof Russell Tony Poulter</td>
<td>Diagnosis of infections caused by the fungal pathogen Aspergillus fumigatus</td>
<td>HS &amp; JC Anderson</td>
<td>$64,757</td>
</tr>
<tr>
<td>2005</td>
<td>Professor Warren Tate</td>
<td>Post-transcriptional processes as drug targets for HIV and Hepatitis B and C viruses</td>
<td>HRC – Project</td>
<td>$1,302,420</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Elizabeth C Ledgerwood</td>
<td>Functional analysis of ERp29, a protein folding assistant upregulated in cancer</td>
<td>HRC – Project</td>
<td>$912,452</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Catherine L Day</td>
<td>Regulation of degradation by RING domain-mediated interactions</td>
<td>Marsden Fund</td>
<td>$646,586</td>
</tr>
<tr>
<td>2005</td>
<td>A/Prof Iain L Lamont</td>
<td>Control of gene expression by regulated degradation of a transcription factor</td>
<td>Marsden Fund</td>
<td>$576,890</td>
</tr>
<tr>
<td>2005</td>
<td>A/Prof Iain L Lamont</td>
<td>Iron, Pseudomonas aeruginosa and lung disease in cystic fibrosis</td>
<td>University of Tasmania – subcontract</td>
<td>$165,755</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Elizabeth C Ledgerwood</td>
<td>Utility for a cell-death mutation from a healthy family?</td>
<td>HRC Strategic Development</td>
<td>$121,205</td>
</tr>
<tr>
<td>2005</td>
<td>Professor Warren P Tate</td>
<td>Shared equipment for protein purification</td>
<td>Lottery Health Research</td>
<td>$96,113</td>
</tr>
<tr>
<td>Year</td>
<td>Name</td>
<td>Title</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>------</td>
<td>-------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>Dr Marion A Maw</td>
<td>Characterization of a mouse models for an inherited eye disorder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>Dr Tony R Merriman</td>
<td>Comparative mapping in human and mouse to characterise the IDDM6 autoimmune disease locus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>Professor Warren Tate</td>
<td>Mechanisms of synaptic plasticity failure in Alzheimer’s Disease</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>Professor Warren Tate</td>
<td>Regulation of synaptic plasticity across time: Mechanisms of metaplasticity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>Dr Peter Dearden</td>
<td>Shaping Animals: The Evolution of Developmental Pathways</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>Dr Catherine L Day</td>
<td>Bcl-w: A model pro-survival Bcl-2 family protein.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>Dr Elizabeth C Ledgerwood</td>
<td>Determining the role of ERp29 in lung physiology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>A/Prof Russell Tony Poulter</td>
<td>Inteins for diagnosis of the fungal pathogens Aspergillus and Cryptococcus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>Dr Sigurd Wilbanks</td>
<td>Does a shape-change modulate tumour suppressor WT1’s DNA and RNA binding behaviour</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>A/Prof Sally P A McCormick</td>
<td>Postgraduate Scholarship – Euan Rodger</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>Professor Anthony E Reeve</td>
<td>Genetics and Epigenetics of Cancer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>Professor Anthony E Reeve</td>
<td>Centre of Research Excellence – National Research Centre for Growth and Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>Professor Warren P Tate</td>
<td>Can a linear sequence impart three-dimensional information for decoding stop signals in protein synthesis?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>A/Prof I L Lamont</td>
<td>How do bacteria stick to metals?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2003</td>
<td>A/Prof Julian J Eaton-Rye</td>
<td>The contribution of the protein environment of the oxygen-evolving complex of photosynthesis in the stabilisation of biological water-splitting and oxygen production.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>Name</td>
<td>Project Description</td>
<td>Funding Agency/Program</td>
<td>Funding Amount</td>
</tr>
<tr>
<td>------</td>
<td>----------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>2003</td>
<td>Dr Shannon Clarke</td>
<td>The role of reactive oxygen species and jasmonic acid in thermotolerance</td>
<td>NZ Science &amp; Technology Postdoctoral Fellowship</td>
<td>$212,667</td>
</tr>
<tr>
<td>2003</td>
<td>Andrew Firth</td>
<td>New computational algorithms for gene-finding</td>
<td>NZ Science &amp; Technology Postdoctoral Fellowship</td>
<td>$199,368</td>
</tr>
<tr>
<td>2003</td>
<td>A/Prof Sally P A McCormick</td>
<td>Testing a novel strategy for lipoprotein(a) lowering</td>
<td>National Heart Foundation Project</td>
<td>$183,026</td>
</tr>
<tr>
<td>2003</td>
<td>A/Prof John Cutfield</td>
<td>Structure-based inhibition of the enzyme uridine phosphorylase</td>
<td>Lottery Health Research</td>
<td>$133,332</td>
</tr>
<tr>
<td>2003</td>
<td>Dr Tony R Merriman</td>
<td>Fine-mapping the mouse ldd21.2 autoimmune diabetes susceptibility locus</td>
<td>Lottery Health Research</td>
<td>$87,407</td>
</tr>
<tr>
<td>2003</td>
<td>A/Prof Russell Tony Poulter</td>
<td>HIV/AIDS therapy; targeting an intein in the pathogenic yeast Cryptococcus neoformans.</td>
<td>Lottery Health Research</td>
<td>$77,170</td>
</tr>
<tr>
<td>2003</td>
<td>Dr Tony R Merriman</td>
<td>The BCL-2 gene and susceptibility to rheumatoid arthritis</td>
<td>Arthritis NZ</td>
<td>$60,947</td>
</tr>
<tr>
<td>2003</td>
<td>Dr Catherine L Day</td>
<td>Analysis of the folded and unfolded states of proteins</td>
<td>Lottery Health Research</td>
<td>$60,000</td>
</tr>
<tr>
<td>2002</td>
<td>Professor Tony Reeve, H-S Yoon, Parry Guilford, J McCall, N Kasabov, M W Thompson-Fawcett, A Merrie</td>
<td>Predicting colorectal cancer outcome using gene expression profiling</td>
<td>HRC Project</td>
<td>$1,446,807</td>
</tr>
<tr>
<td>2002</td>
<td>Professor Warren Tate</td>
<td>Cellular mechanisms of learning and memory in the brain</td>
<td>HRC Programme</td>
<td>$1,213,530</td>
</tr>
<tr>
<td>2002</td>
<td>Professor Warren Tate</td>
<td>Can a linear Sequence impart three-dimensional information for decoding stop signals in protein synthesis</td>
<td>Marsden Fund Fund</td>
<td>$720,000</td>
</tr>
<tr>
<td>2002</td>
<td>Professor Warren Tate</td>
<td>Mechanisms of nervous system dysfunction early in Alzheimer's Disease</td>
<td>HRC Project</td>
<td>$597,441</td>
</tr>
<tr>
<td>2002</td>
<td>Dr Richard C Macknight</td>
<td>Proteomic approaches to elucidate the regulation of flowering time</td>
<td>Marsden Fund Project</td>
<td>$586,667</td>
</tr>
<tr>
<td>2002</td>
<td></td>
<td>Preventing ryegrass flowering</td>
<td>AGMARDT Postdoctoral Fellowship</td>
<td>$205,556</td>
</tr>
<tr>
<td>2002</td>
<td>Dr Judith E Broom</td>
<td>Taxonomic and systematic research on New Zealand non-geniculate coralline algae</td>
<td>National Institute for Water and Atmosphere</td>
<td>$205,001</td>
</tr>
<tr>
<td>2002</td>
<td>Dr Judith E Broom</td>
<td>Marine algal systematics and life histories. Objective2 Molecular analysis of marine macroalgae</td>
<td>Museum of New Zealand Project</td>
<td>$188,445</td>
</tr>
</tbody>
</table>
2002  Dr Mike Sullivan and Professor Tony Reeve  Intelligent data tools and microarray gene expression analysis for clinical decision making in neuroblastoma  Child Cancer Foundation  $165,989

2002  Dr Elizabeth C Ledgerwood  Mitochondrial involvement in tumour necrosis factor cytotoxicity: a proteomic approach.  Lottery Health Research  $128,332

2002  Emma Wyeth  Genetics of diabetes and gout in New Zealand Māori  HRC Fellowships and Scholarships  $110,000

2002  Dr Peter Dearden  Estimating the risk of horizontal gene transfer from genetically modified crops  Marsden Fund  $88,891

2002  Miss Kylie Drake  Genomic imprinting of p14ARF may contribute to childhood ALL  Child Health Research Foundation  $70,000

Total  $31,520,887

Combined 2002-2006 income for all grants ≤ $50,000  $1,426,361

Grand Total  $32,947,248

Research Contracts

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Contractor</th>
<th>Organisation</th>
<th>Total $</th>
</tr>
</thead>
</table>
| 2002-05       | Dr Chris Brown  
|               | Dr Susan M Cutfield  
|               | A/Professor John Cutfield  
|               | Professor Anthony E Reeve  
|               | A/Prof Julian J Eaton-Rye | AgResearch  
|               | Ovita  
|               | Global Technologies  
|               | Foundation for Research, Science and Technology  
|               | Pacific Edge Biotechnology  
|               | HortResearch | $470,417 |

Combined 2002-2006 income for all contracts ≤ $20,000  $83,046

Grand Total  $553,463

Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD’</td>
<td>27</td>
<td>40</td>
<td>44</td>
<td>46</td>
<td>50</td>
</tr>
<tr>
<td>Masters</td>
<td>13</td>
<td>12</td>
<td>17</td>
<td>17</td>
<td>9</td>
</tr>
</tbody>
</table>

‘as at 1 June each year
Awards and Scholarships

<table>
<thead>
<tr>
<th>Year</th>
<th>Researcher</th>
<th>Award/Scholarship</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Professor Warren Tate</td>
<td>University of Otago Distinguished Research Medal and Prize</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Peter Dearden</td>
<td>University of Otago Early Career Award for Distinction in Research</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Peter Dearden</td>
<td>Promising Research Award, Queenstown Molecular Biology Meeting</td>
</tr>
<tr>
<td>2006</td>
<td>A/Prof Julian Eaton-Rye</td>
<td>NZSBMB Applied Biosystems Award for Excellence in Research</td>
</tr>
<tr>
<td>2006</td>
<td>Daniel Garama (PhD student)</td>
<td>FoRST Scholarship</td>
</tr>
<tr>
<td>2005</td>
<td>Professor Tony Reeve</td>
<td>University of Otago Distinguished Research Medal</td>
</tr>
<tr>
<td>2005</td>
<td>Professor Warren Tate</td>
<td>OSMS Research Prize</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Catherine Day</td>
<td>Rowheath Award/Carl Smith Medal</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Peter Dearden</td>
<td>OSMS Highly Commended Research Paper of the Year</td>
</tr>
<tr>
<td>2005</td>
<td>A/Professor Julian Eaton-Rye</td>
<td>Outstanding Plant Physiologist Award: New Zealand Society of Plant Physiologists</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Tony Merriman</td>
<td>Tom Highton Award for most Meritorious Paper; 2004 New Zealand Rheumatology Association</td>
</tr>
<tr>
<td>2004</td>
<td>A/Professor Iain Lamont</td>
<td>Applied Biosystems/NZSBMB Award for Research Excellence</td>
</tr>
<tr>
<td>2003</td>
<td>A/Professor Iain Lamont</td>
<td>International Research Fellow of the Society for General Microbiology (UK)</td>
</tr>
<tr>
<td>2003</td>
<td>A/Professor Julian Eaton-Rye</td>
<td>Otago University Students' Association Award for Excellence in Postgraduate Supervision</td>
</tr>
<tr>
<td>2002</td>
<td>Professor Tony Reeve</td>
<td>Officer of the New Zealand Order of Merit (for Services to Medical Science)</td>
</tr>
</tbody>
</table>

Publications

Chapter in Book


Journal Article


Davis, G. H., et al. (2006). Investigation of the Boorooloo (FecB) and Inverdale (FecX(1)) mutations in 21 prolific breeds and strains of sheep sampled in 13 countries. Animal Reproductive Science, 92(1-2): 87-96.


Polson, D., & Thompson, M. P. (2003). Adiponutrin mRNA expression in white adipose tissue is rapidly induced by meal-feeding a high-sucrose diet. *Biochemical and Biophysical Research Communications*, 301, 261–266.


Intellectual Property


Commissioned Report for External Body

DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY

The main research interests of staff in the Department of Microbiology and Immunology lie in the areas of agricultural microbiology, biotechnology, clinical microbiology and infectious diseases, microbial genetics, immunology and vaccine technology. Research is carried out in the following key areas: antibiotic resistance in bacteria, clostridial genetics, dendritic cells and their function, environmental microbiology and bioremediation, insect viruses and the biological control of insect pests, intestinal microflora, milk products, mycobacterial diseases of animals, microbial genomics, nitrogen fixing bacteria and improving plant growth, streptococci and the biological control of streptococcal diseases, vaccine development and delivery systems, viruses and viral vaccines.

http://microbiology.otago.ac.nz/dept/

Virus Research Unit
The work of the Virus Research Unit is focused on understanding viruses at the molecular level and exploiting this information in the development of vaccines against viral diseases of humans and agriculturally important animals. The Unit is currently working with two viruses, the human papilloma virus and the orf virus.

http://www.otago.ac.nz/research/centres/res_cen_virus.html
<table>
<thead>
<tr>
<th>Staff</th>
<th>Professor and Head of Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor Frank Griffin</td>
<td>Professor</td>
</tr>
<tr>
<td>Professor David Jones</td>
<td></td>
</tr>
<tr>
<td>Professor Andrew Mercer</td>
<td>Research Professor</td>
</tr>
<tr>
<td>Professor Clive Ronson</td>
<td>Professor</td>
</tr>
<tr>
<td>Professor Sandy Smith*</td>
<td>Professor</td>
</tr>
<tr>
<td>Professor John Tagg</td>
<td>Professor</td>
</tr>
<tr>
<td>Professor Gerald Tannock</td>
<td>Professor</td>
</tr>
<tr>
<td>A/P Margaret Baird</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>A/P Glenn Buchan</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>A/P Gregory Cook</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>A/P James Kalmakoff</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>A/P Vernon Ward</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Dr Stephen Fleming</td>
<td>Senior Research Fellow</td>
</tr>
<tr>
<td>Dr Merilyn Hibma</td>
<td>Senior Research Fellow</td>
</tr>
<tr>
<td>Dr Ralph Jack</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Alex McLellan</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Michelle McConnell</td>
<td>Senior Research Fellow</td>
</tr>
<tr>
<td>Dr Robin Simmonds</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Norihito Ueda</td>
<td>Senior Research Fellow</td>
</tr>
<tr>
<td>Dr Nicholas Heng</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Dr Stefanie Keis</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Dr Rory O’Brien</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Dr John Sullivan</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Dr Lyn Wise</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Dr Sarah Young</td>
<td>Research Fellow</td>
</tr>
</tbody>
</table>

* Professor Smith was a staff member during the review period. Sadly he died mid-2007.
## External Research Grants

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Dr Merilyn H Hibma</td>
<td>Regulation of host defences in the skin by a tumour-causing virus</td>
<td>HRC – Project</td>
<td>$981,216</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Gerald W Tannock, Dr Paul O'Toole</td>
<td>Lactobacillus dialogues: the impact of cell signaling on gene expression and ecological behaviour of a gut commensal</td>
<td>Marsden Fund</td>
<td>$669,324</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Merilyn H Hibma</td>
<td>Regulation of the host defences in the skin by a tumour-causing virus</td>
<td>Cancer Society</td>
<td>$499,849</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Sarah L Young</td>
<td>A virus-like particle (VLP) vaccine against Chlamydia</td>
<td>Lottery Health Research</td>
<td>$159,605</td>
</tr>
<tr>
<td>2006</td>
<td>A/Prof Gregory Murray Cook</td>
<td>Unravelling Mycobacterial Energetics – a new area for drug discovery</td>
<td>Lottery Health Research</td>
<td>$133,582</td>
</tr>
<tr>
<td>2006</td>
<td>Prof J Francis Thomas Griffin</td>
<td>AGMARDT Scholarship (Mark Robinson)</td>
<td>Scholarship – AGMARDT</td>
<td>$89,222</td>
</tr>
<tr>
<td>2006</td>
<td>A/Prof Gregory Cook Professor Edward N Baker</td>
<td>A targeted application of structural genomics to TB biology and drug development</td>
<td>Auckland University Subcontract</td>
<td>$86,205</td>
</tr>
<tr>
<td>2005</td>
<td>A/Prof Gregory Murray Cook</td>
<td>A Novel Regulatory Protein used by Bacteria to Sense and Resist Antibiotics</td>
<td>Marsden Fund</td>
<td>$613,335</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Muriel Dufour</td>
<td>Potential use of antisense constructs in the prevention of dental caries</td>
<td>NZ Science &amp; Technology Postdoctoral Fellowship</td>
<td>$227,005</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Alexander Donald McLellan</td>
<td>Development of a non-invasive test for predicting renal transplant rejection</td>
<td>Lottery Health Research</td>
<td>$129,364</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Sarah L Young</td>
<td>Virus-like particles to deliver a ‘wipe on’ vaccine against Chlamydia</td>
<td>HRC Strategic Development</td>
<td>$102,711</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Merilyn H Hibma</td>
<td>Is regulation of cell adhesion by papillomaviruses associated with persistence?</td>
<td>Lottery Health Research</td>
<td>$96,470</td>
</tr>
<tr>
<td>2005</td>
<td>A/Professor Margaret A Baird</td>
<td>AutoMACs cell separation system</td>
<td>Lottery Health Research</td>
<td>$67,000</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Andrew Allan Mercer</td>
<td>Viral virulence and pathogenicity: multi-component manipulation of host physiology</td>
<td>HRC – Project</td>
<td>$3,290,556</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Gerald W Tannock</td>
<td>Detection and identification of bacterial substances that activate the adaptive immune response in pouchitis</td>
<td>Crohn’s and Colitis Foundation of America</td>
<td>$445,780</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Sarah L Young</td>
<td>Examining DNA vaccines</td>
<td>Lottery Health Research</td>
<td>$80,000</td>
</tr>
<tr>
<td>Year</td>
<td>Principal Investigator</td>
<td>Project Description</td>
<td>Funding Source</td>
<td>Funding Amount</td>
</tr>
<tr>
<td>------</td>
<td>------------------------</td>
<td>---------------------</td>
<td>----------------</td>
<td>----------------</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Stephen B Fleming</td>
<td>In vivo characterisation of Orf virus chemokine-binding protein in murine models</td>
<td>HRC Fellowships and Scholarships</td>
<td>$75,000</td>
</tr>
<tr>
<td>2004</td>
<td>Marie Inder</td>
<td>Functional analysis of a unique viral vascular endothelial growth factor</td>
<td>HRC Fellowships and Scholarships</td>
<td>$75,000</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Gerald W Tannock</td>
<td>Immunological influences of gut bacteria in early life: bifidobacteria and allergies</td>
<td>Child Health Research Foundation</td>
<td>$72,158</td>
</tr>
<tr>
<td>2004</td>
<td>A/Prof GM Cook</td>
<td>Benchtop Fermentation System</td>
<td>Lottery Health Research</td>
<td>$70,000</td>
</tr>
<tr>
<td>2004</td>
<td>A/Prof Vernon K Ward</td>
<td>Structural and functional analysis of a new class of RNA-dependent RNA polymerases</td>
<td>Marsden Fund</td>
<td>$599,112</td>
</tr>
<tr>
<td>2004</td>
<td>A/Prof Gregory Murray Cook</td>
<td>Understanding how a biological turbine controls its direction of rotation: forward or reverse</td>
<td>Marsden Fund</td>
<td>$551,112</td>
</tr>
<tr>
<td>2003</td>
<td>Professor Andrew Mercer</td>
<td>New generation viral vaccines</td>
<td>FRST: NERF</td>
<td>$468,848</td>
</tr>
<tr>
<td>2003</td>
<td>Professor Clive W Ronson</td>
<td>Horizontal transfer of genomic islands in the lab and the environment</td>
<td>Marsden Fund</td>
<td>$453,335</td>
</tr>
<tr>
<td>2003</td>
<td>Dr John T Sullivan</td>
<td>Defining the minimal microsymbiont complement and novel plant genes required to build a root nodule</td>
<td>Marsden Fund</td>
<td>$426,667</td>
</tr>
<tr>
<td>2003</td>
<td>Professor Gerald W Tannock</td>
<td>Cloning the gut metagenome: a strategy to detect pro-inflammatory substances produced by intestinal bacteria</td>
<td>Broad Medical Research Program – Inflammatory Bowel Disease Grants</td>
<td>$142,750</td>
</tr>
<tr>
<td>2003</td>
<td>A/Prof Vernon K Ward</td>
<td>Characterisation of EppomNPV genes – NERF/HortResearch subcontract</td>
<td>HortResearch</td>
<td>$106,665</td>
</tr>
<tr>
<td>2003</td>
<td>Dr Alexander Donald McLellan</td>
<td>Presentation of auto-antigens by gut dendritic cells</td>
<td>Lottery Health Research</td>
<td>$100,000</td>
</tr>
<tr>
<td>2003</td>
<td>Dr Alexander Donald McLellan</td>
<td>Soluble-major histocompatibility class II molecules in blood and their interactions with bacterial superantigens</td>
<td>Marsden Fund</td>
<td>$88,889</td>
</tr>
<tr>
<td>2003</td>
<td>Professor John R Tagg</td>
<td>Scholarship – Kara Swanson</td>
<td>Scholarship – AGMARDT</td>
<td>$88,778</td>
</tr>
<tr>
<td>2003</td>
<td>A/Prof Gregory Murray Cook</td>
<td>Proteomics Analysis of Mycobacteria: Response to Acid pH Stress.</td>
<td>Lottery Health Research</td>
<td>$77,088</td>
</tr>
<tr>
<td>2003</td>
<td>A/Prof Glenn S Buchan</td>
<td>Purchase of Biobubble Clean Room technology for animal facility</td>
<td>Lottery Health Research</td>
<td>$60,000</td>
</tr>
</tbody>
</table>
2003  Dr Ralph Wilson Jack
        High-pressure liquid chromatography system (HPLC) Lottery Health Research $60,000
2002  Professor Clive W Ronson
        Rhizobia and sustainable agriculture FRST: PGST $175,823
2002  Prof J Francis Thomas Griffin
        Diagnostic and preventive methods for Johne’s disease FRST: PGST $106,667
2002  Dr Vernon K Ward
        Indovirus-based photonic crystals US Air Force $51,619

Total $11,520,735
Combined 2002-2006 income for all grants ≤ $50,000 $605,689
Grand Total $12,126,424

Research Contracts

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Contractor</th>
<th>Organisation</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-06</td>
<td>Dr Frank Aldwell</td>
<td>Animal Health Board</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A/Prof Glenn S Buchan</td>
<td>AroTech Diagnostics Ltd</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Prof J Francis Griffin</td>
<td>Auckland University</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dr Michelle A McConnell</td>
<td>DEEResearch</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Professor Andrew Mercer</td>
<td>Fonterra Cooperative Dairy Company Ltd</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Professor Clive W Ronson</td>
<td>Fonterra Research Centre Ltd</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Professor John R Tagg</td>
<td>Foundation for Research, Science and Technology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Professor Gerald W Tannock</td>
<td>Immune Solutions Ltd</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dr Vernon K Ward</td>
<td>LactoPharma</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>New Zealand Dairy Research Institute</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>NZ Milk Products</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ovita</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Te Runanga o Ngai Tahu</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Technology New Zealand</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tiense Suikerraffinaderij</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Zenith Technology Corp Ltd</td>
<td></td>
</tr>
</tbody>
</table>

Grand Total $6,635,433

Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>29</td>
<td>29</td>
<td>29</td>
<td>32</td>
<td>36</td>
</tr>
<tr>
<td>Masters†</td>
<td>28</td>
<td>17</td>
<td>18</td>
<td>17</td>
<td>15</td>
</tr>
</tbody>
</table>

* as at 1 June each year
† head count is for thesis year students only and includes MSc (BITE) and MSc (GENE) students
Publications

Book


Chapter in Book


Journal Article


Begg, D., Kemp, R., & Griffin, F. (2004). Normal levels of immunocompetence in possums (_Trichosurus vulpecula_) exposed to different laboratory housing conditions post capture. _Immunology and Cell Biology_, 82, 253-256.


Lim, C. C., Ferguson, L. R., & Tannock, G. W. (2005). Dietary fibres as 'prebiotics': Implications for colorectal cancer. 
Molecular Nutrition and Food Research, 49(6), 609-619.


Mahoney, P. M., Hurst, P. R., McLeod, B. J., McConnell, M. A., & Thompson, E. G. (2003). Effect of oestradiol treatment on mast cell populations and microflora in the vaginal cul-de-sac of seasonally anoestrous brushtail possums (Trichosurus vulpecula). Reproduction, 125, 733-741.

Mahoney, P. M., Hurst, P. R., McLeod, B., & McConnell, M. A. Quantification of mast cells and microflora in the vaginal cul-de-sac of the brushtail possum (Trichosurus vulpecula). Reproduction 124:399-408 (2002).


Young, S. L., O’Donnell, M., & Buchan, G. S. IL-2-secreting recombinant bacillus Calmette Guerin can overcome a Type 2 immune response and corticosteroid-induced immunosuppression to elicit a Type 1 immune response. *International Immunology 14*(7):793-800 (2002).


**Intellectual Property**


**DEPARTMENT OF PHARMACOLOGY AND TOXICOLOGY**

The Department of Pharmacology and Toxicology engages in high quality, internationally-recognised research focused on the following themes of cellular and molecular neuropharmacology and neurotoxicology: cardiovascular signalling and cardioprotection; drug resistant cancer and drug metabolism; inflammation (dermatology and CNS stroke models) and wound healing; pharmacovigilance/pharmacogenetics; toxicology and neuroprotection, and vestibular pharmacology. State-of-the-art technologies, including *in vivo* disease models, are used to undertake integrative, cellular and molecular investigations aimed at understanding animal and human pathophysiology (and to delineate targets for novel drugs).

http://phal.otago.ac.nz/

**Staff**

**Professor George Lees**

Professor Richard Laverty
Professor Paul Smith
A/P David Clark
A/P Cynthia Darlington
Dr Ian Appleton*
Dr John Ashton
Dr Joanne Harrison
Dr Steven Kerr
Dr Rhonda Rosengren
Dr Ivan Sammut
Dr Yiwen Zheng
Dr Amy Benians

**Professor and Head of Department**

Emeritus Professor
Professor
Associate Professor
Associate Professor
Senior Lecturer
Senior Lecturer
Senior Research Fellow
Senior Lecturer
Senior Lecturer
Senior Research Fellow
Research Fellow

* Dr Appleton died suddenly in mid 2007, but his research was integral to the Department in the 2002-6 period.*
<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Dr Yiwen Zheng</td>
<td>Searching for answers to cognitive deficits following vestibular damage</td>
<td>HRC Sir Charles Hercus Research Fellowship</td>
<td>$500,000</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Rhonda J Rosengren</td>
<td>Development of novel therapies for ERα – breast cancer</td>
<td>The Breast Cancer Research Trust</td>
<td>$132,769</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Paul F Smith</td>
<td>Novel drug treatments for tinnitus</td>
<td>Garnett Passe and Rodney Williams Memorial Foundation</td>
<td>$92,020</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Rhonda J Rosengren</td>
<td>The combination of raloxifene and epigallocatechin gallate as a drug therapy for the prevention of breast cancer</td>
<td>Bequest-Martime Elizabeth Cuff Breast Cancer</td>
<td>$85,240</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Yiwen Zheng</td>
<td>Cannabinoid treatment for tinnitus</td>
<td>Deafness Research Foundation</td>
<td>$76,558</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Ivan A Sammut</td>
<td>Improvement of Ischaemic Cardiac Outcomes by Carbon Monoxide Treatment</td>
<td>National Heart Foundation</td>
<td>$118,632</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Andrew Neil Clarkson</td>
<td>Are we only a MIS away from treating ALS?</td>
<td>Neurological Foundation Philip Wrightson Postdoctoral Fellowship</td>
<td>$115,588</td>
</tr>
<tr>
<td>2005</td>
<td>Professor George Lees</td>
<td>Physiological roles and therapeutic potential for histamine H3 receptors in the basal ganglia</td>
<td>NZ Neurological Foundation</td>
<td>$98,307</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Ian Appleton</td>
<td>Autoimmunity in the keloid scar: HRC Māori PhD Scholarship</td>
<td>HRC Fellowships and Scholarships</td>
<td>$85,000</td>
</tr>
<tr>
<td>2005</td>
<td>Professor Paul F Smith</td>
<td>Effects of vestibular damage on hippocampal morphology</td>
<td>NZ Neurological Foundation</td>
<td>$70,387</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Yiwen Zheng</td>
<td>Treatment of tinnitus with NMDA receptor antagonists</td>
<td>NZ Neurological Foundation</td>
<td>$290,869</td>
</tr>
<tr>
<td>2004</td>
<td>Professor George Lees</td>
<td>Mode of Action of Novel Anti-Convulsants</td>
<td>Schwarz Biosciences</td>
<td>$94,700</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Ping Liu</td>
<td>Contribution of arginase to learning and memory – whether and how?</td>
<td>NZ Neurological Foundation</td>
<td>$78,689</td>
</tr>
<tr>
<td>2003</td>
<td>Professor Paul F Smith</td>
<td>Central nervous system mechanisms of tinnitus: the contribution of GABA</td>
<td>Guardian Trust</td>
<td>$315,865</td>
</tr>
<tr>
<td>2003</td>
<td>Dr Steve Kerr</td>
<td>A proposal to examine the therapeutic potential of isomeric forms of domoic acid</td>
<td>Cawthron Institute</td>
<td>$200,002</td>
</tr>
<tr>
<td>2003</td>
<td>Dr Ping Liu</td>
<td>Contribution of nitric oxide synthase, arginase and cycooxygenase to age-related memory.</td>
<td>NZ Neurological Foundation Project</td>
<td>$106,543</td>
</tr>
</tbody>
</table>
2003  Professor Paul F Smith  Vestibular rehabilitation therapy for treatment of spatial memory deficits.  NZ Neurological Foundation Project  $65,919
2003  Dr Ivan A Sammut  Fluorescence Microplate reader and its hard/software for shared use  Lottery Health Research  $50,000
2002  Dr Steve Kerr  In vivo and in vitro investigations of CNS tolerance to excitotoxins  NZ Neurological Foundation Project  $101,146
2002  Dr Ivan A Sammut  Scintillation Counter and its hard/soft ware for shared use  Lottery Health Research  $50,000

Total  $2,728,234

Combined 2002-2006 income for all grants ≤ $50,000  $567,495

Grand Total  $3,295,729

Research Contracts

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Contractor</th>
<th>Organisation</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-06</td>
<td>Dr Ian Appleton</td>
<td>Accident Compensation Corporation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dr Karabi Ghose</td>
<td>AgResearch</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dr Steve Kerr</td>
<td>Cawthron Institute</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Professor George Lees</td>
<td>Foundation for Research, Science and Technology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dr Rhonda J Rosengren</td>
<td>Neuren Pharmaceuticals</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dr Nerida A Smith</td>
<td>Otago Innovation Limited</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sanofi-Synthelabo Australia Pty Ltd</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Seperex Limited</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>VARNZ Ltd</td>
<td></td>
</tr>
</tbody>
</table>

Total  $233,713

Combined 2002-2006 income for all contracts ≤ $20,000  $40,228

Grand Total  $273,941

Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>9</td>
<td>10</td>
<td>16</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Masters</td>
<td>-</td>
<td>-</td>
<td>7</td>
<td>8</td>
<td>5</td>
</tr>
</tbody>
</table>

*as at 1 June each year
**Awards and Scholarships**

<table>
<thead>
<tr>
<th>Year</th>
<th>Researcher</th>
<th>Award/Scholarship</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Dr Rosanna Rahman</td>
<td>Bright Futures Top Achievers Doctoral Scholarship</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Rosanna Rahman</td>
<td>New Zealand Fulbright Scholarship</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Steve Kerr</td>
<td>Otago University Student's Association “Top Ten Supervisors Award”</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Yiwen Zheng</td>
<td>Sir Charles Hercus HRC Research Fellowship</td>
</tr>
<tr>
<td>2006</td>
<td>Dr IC Winburn</td>
<td>Health Research Council of New Zealand Clinical Research Training Fellowship</td>
</tr>
<tr>
<td>2005</td>
<td>Ms Wendy Imlach</td>
<td>McDiarmid Young Scientist of the Year Co-Finalist</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Steve Kerr</td>
<td>Otago University Student's Association “Top Ten Teachers Award”</td>
</tr>
<tr>
<td>2005</td>
<td>Dr IC Winburn</td>
<td>Tony Hocken Scholarship</td>
</tr>
</tbody>
</table>

**Publications**

**Book**

**Chapter in Book**

**Journal Article**


Current Anaesthesia and Critical Care, 16, 88-93.


**Commissioned Report for External Body**


**DEPARTMENT OF PHYSIOLOGY**

The Department of Physiology is engaged in high quality, internationally-recognised physiological research focused on the three themes of membrane and ion transport, cellular and molecular neuroscience and circulation, and integrative physiology and inflammation. State-of-the-art technologies, such as transgenic mouse models, are used to undertake integrative, cellular and molecular investigations aimed at understanding animal and human physiology.

http://phsl.otago.ac.nz/

<table>
<thead>
<tr>
<th>Staff</th>
<th>Head of Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Patricia Cragg (Pat)</td>
<td>Head of Department</td>
</tr>
<tr>
<td>Professor Allan Herbison</td>
<td>Research Professor</td>
</tr>
<tr>
<td>Professor Tony Macknight</td>
<td>Emeritus Professor</td>
</tr>
<tr>
<td>Professor Tony Wheatley</td>
<td>Professor</td>
</tr>
<tr>
<td>A/P John Harris</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>A/P Brian Hyland</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>A/P John Leader</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Dr Jennifer Bedford</td>
<td>Senior Research Fellow</td>
</tr>
<tr>
<td>Dr Chris Bolter</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Colin Brown</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Grant Butt</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Gerard Davis (Ged)</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Kirk Hamilton</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Paul Hessian</td>
<td>Senior Research Fellow</td>
</tr>
<tr>
<td>Dr Fiona McDonald</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Roly Mills</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Bernhard Schmitt</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Phil Sheard</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Phil Ainslie</td>
<td>Lecturer</td>
</tr>
<tr>
<td>Dr Rebecca Campbell</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Dr Phil Heyward</td>
<td>Lecturer</td>
</tr>
<tr>
<td>Dr Christine Jasoni</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Dr Ayako Mabuchi</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Dr Charles McLaughlin</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Dr Weixing Pan</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Dr Hitomi Watanabe</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Dr Kristy Demmers</td>
<td>Postdoctoral Fellow</td>
</tr>
<tr>
<td>Dr Kiho Lee</td>
<td>Postdoctoral Fellow</td>
</tr>
<tr>
<td>Dr Xinhui Liu</td>
<td>Postdoctoral Fellow</td>
</tr>
<tr>
<td>Dr Victoria Scott</td>
<td>Postdoctoral Fellow</td>
</tr>
<tr>
<td>Dr Aaron Sheerin</td>
<td>Postdoctoral Fellow</td>
</tr>
<tr>
<td>Dr Daryl Schwenke</td>
<td>Postdoctoral Fellow</td>
</tr>
<tr>
<td>Dr Bernhard McLeod</td>
<td>Honorary Fellow</td>
</tr>
<tr>
<td>Dr Peter Wilson</td>
<td>Honorary Fellow</td>
</tr>
<tr>
<td>Year Approved</td>
<td>Principal Investigator</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Allan E Herbison</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Allan E Herbison</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Allan E Herbison</td>
</tr>
<tr>
<td>2006</td>
<td>A/Prof Brian I Hyland</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Bernhard Schmitt</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Philip Ainslie</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Philip Ainslie</td>
</tr>
<tr>
<td>2006</td>
<td>A/Prof Brian I Hyland</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Allan E Herbison</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Antony Michael Wheatley</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Paul A Hessian</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Ayako Mabuchi</td>
</tr>
<tr>
<td>2005</td>
<td>Professor Allan E Herbison</td>
</tr>
<tr>
<td>2005</td>
<td>Rebecca E Campbell</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Weixing Pan</td>
</tr>
<tr>
<td>2005</td>
<td>Professor Allan E Herbison</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Colin H Brown</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Philip M Heyward</td>
</tr>
<tr>
<td>Year</td>
<td>Contractor</td>
</tr>
<tr>
<td>--------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Fiona J McDonald</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Anthony Dunstan MacKnight</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Anthony Dunstan MacKnight</td>
</tr>
<tr>
<td>2004</td>
<td>A/Prof Brian I Hyland</td>
</tr>
<tr>
<td>2004</td>
<td>A/Prof A John Harris</td>
</tr>
<tr>
<td>2003</td>
<td>A/Prof Brian I Hyland</td>
</tr>
<tr>
<td>2003</td>
<td>Dr Paul Donohoe</td>
</tr>
<tr>
<td>2002</td>
<td>Professor Allan Herbison</td>
</tr>
<tr>
<td>2002</td>
<td>Professor Allan E Herbison</td>
</tr>
<tr>
<td>2002</td>
<td>Dr Fiona J McDonald</td>
</tr>
<tr>
<td>2002</td>
<td>Dr Paul A Hessian</td>
</tr>
<tr>
<td>2002</td>
<td>Professor Antony Michael Wheatley</td>
</tr>
</tbody>
</table>

Total $12,028,853

Combined 2002-2006 income for all grants ≤ $50,000 $1,066,641

Grand Total $13,094,494

Research Contracts

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Contractor</th>
<th>Organisation</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>Dr Adrian Grant Butt</td>
<td>AgResearch Foundation for Research, Science and Technology</td>
<td>$424,720</td>
</tr>
<tr>
<td></td>
<td>Professor Antony Wheatley</td>
<td>Minophagen Pharmaceuticals Company Limited</td>
<td></td>
</tr>
</tbody>
</table>

Grand Total $424,720
Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>15</td>
<td>9</td>
<td>11</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>Masters</td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>4</td>
<td>8</td>
</tr>
</tbody>
</table>

*as at 1 June each year
¥ these figures include students who are co-supervised by Physiology and another department(s)

Awards and Scholarships

<table>
<thead>
<tr>
<th>Year</th>
<th>Researcher</th>
<th>Award/Scholarship</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Dr Phil Ainslie</td>
<td>Emerging Research First Grant Award, Health Research Council</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Phil Sheard</td>
<td>Fulbright Senior Scholar Award</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Phil Donohoe</td>
<td>Emerging Research First Grant Award, Marsden Fund</td>
</tr>
</tbody>
</table>

Publications

Chapter in Book


Journal Article


The Department of Anaesthesia has a small but active research programme. Current areas of interest include volatile anaesthetic uptake and distribution.

http://www.chmeds.ac.nz/departments/anaesthesia/index.htm

**Staff**

**Professor Edward Shipton**
Professor and Head of Department

Dr Seton Henderson
Clinical Senior Lecturer

Dr Ross Kennedy
Clinical Senior Lecturer

Dr Sharon King
Clinical Senior Lecturer

**External Research Grants**

Combined 2002-2006 income for all grants ≤ $50,000 $62,155

**Postgraduate Students**

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>

*as at 1 June each year

**Publications**

**Chapter in Book**


**Journal Article**


DEPARTMENT OF MEDICINE

The Department of Medicine hosts a number of very productive research groups, including:

Canterbury Respiratory Research Group
Despite high-tech medicine and a battery of new pharmaceuticals, the prevalence of asthma in New Zealand continues to increase. The Canterbury Respiratory Research Group is investigating the risk factors which might cause asthma and atopy, or inherited allergies in infants.

http://www.chmeds.ac.nz/research/crrg/index.htm

Christchurch Cardioendocrine Research Group (CCERG)
The CCERG is a multidisciplinary research unit (endocrinology, physiology, cardiology, biochemistry and molecular biology) focusing on neurohumoral factors involved in the regulation of blood pressure and salt/water balance, particularly with respect to their role in the pathophysiology of heart failure.

http://www.chmeds.ac.nz/research/cardioen/index.htm

Clinical Pharmacology Research Group
The main research focus for the group is the clinical application of pharmacology knowledge. It includes staff from the Clinical Pharmacology Department at Christchurch Hospital, the Drug Information Service and the Drug Utilisation Review Service.

http://www.chmeds.ac.nz/research/pharmacology/index.htm

Lipid and Diabetes Research Group
An independently funded research group, established in 1985, and based at Christchurch Hospital and the University of Otago, Christchurch. Research interests include: clinical and genetic aspects of adiponectin, vascular function in diabetes and insulin resistance, the metabolic syndrome and cardiovascular disease, the diabetes 2002 registry, morbidity and mortality in diabetes mellitus, and renal disease and diabetes.

**Staff**

**Professor Zoltan Endre**  Professor and Head of Department

Professor Timothy Anderson  Professor
Professor Evan Begg  Professor
Professor M. Gary Nicholls  Professor
Professor Mark Richards  Professor
Professor Russell Scott  Clinical Professor
Professor Douglas Sellman  Professor
Professor Tim Wilkinson  Professor
Professor Timothy Yandle  Research Associate Professor
A/P Murray Barclay  Clinical Associate Professor
A/P Vicky Cameron  Research Associate Professor
A/P John Elliott  Associate Professor
A/P Chris Frampton  Associate Professor
A/P Richard Jones  Research Associate Professor
A/P Miriam Rademaker  Research Associate Professor
A/P Bridget Robinson  Associate Professor
A/P Bruce Taylor  Associate Professor
Dr Lutz Beckert  Senior Lecturer
Dr Christopher Charles  Senior Research Fellow
Dr Michael Epton  Senior Lecturer
Dr John Fink  Senior Lecturer
Dr Penny Hunt  Senior Lecturer
Dr David Jardine  Clinical Senior Lecturer
Dr Sally Keeling  Senior Lecturer
Dr Steven Soule  Clinical Senior Lecturer
Dr Lisa Stamp  Senior Lecturer
Dr Richard Troughton  Senior Lecturer
Dr Leigh Ellmers  Research Fellow
Dr Martin Jarvis  Research Fellow
Dr Lynley Lewis  Research Fellow
Dr Michael MacAskill  Research Fellow
Dr Barry Palmer  Research Fellow
Dr Chris Pemberton  Research Fellow
Dr Mei Zhang  Research Fellow

**External Research Grants**

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Professor Timothy Yandle</td>
<td>Variable structure and activity of B-type natriuretic peptides in heart disease</td>
<td>HRC – Project</td>
<td>$673,899</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Lisa Stamp</td>
<td>Pharmacokinetics and pharmacogenetics of methotrexate in rheumatoid arthritis</td>
<td>HRC – Project</td>
<td>$605,543</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Christopher Pemberton</td>
<td>BNP signal peptide: a novel, specific marker of acute cardiac injury</td>
<td>HRC Sir Charles Hercus Research Fellowship</td>
<td>$499,999</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Anna Pilbrow</td>
<td>Genes and hormones hold hope for heart</td>
<td>NZ Science &amp; Technology Postdoctoral Fellowship</td>
<td>$261,000</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Claire Heppenstall</td>
<td>Maintaining independence: predicting and preventing residential home care</td>
<td>HRC Clinical Research Training Fellowship</td>
<td>$227,962</td>
</tr>
<tr>
<td>Year</td>
<td>Investigator</td>
<td>Project Title</td>
<td>Funding Body</td>
<td>Funding Amount</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td>---------------</td>
<td>--------------</td>
<td>---------------</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Jay Ritzema-Carter</td>
<td>Left atrial pressure and function in heart failure</td>
<td>National Heart Foundation</td>
<td>$165,000</td>
</tr>
<tr>
<td>2006</td>
<td>Professor A Mark Richards</td>
<td>Renal impairment in decompensated heart failure</td>
<td>National Heart Foundation</td>
<td>$150,791</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Zoltan Endre</td>
<td>Monitoring progression of diabetic kidney and cardiac disease</td>
<td>National Heart Foundation</td>
<td>$109,342</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Timothy Anderson</td>
<td>iView eye tracking system and scientific grade plasma screen</td>
<td>Lottery Health Research</td>
<td>$105,465</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Anna Pilbrow</td>
<td>Genotype and gene expression in heart failure</td>
<td>National Heart Foundation</td>
<td>$99,781</td>
</tr>
<tr>
<td>2006</td>
<td>A/Prof BA Robinson</td>
<td>Markers of venous thromboembolism in cancer</td>
<td>Lottery Health Research</td>
<td>$86,903</td>
</tr>
<tr>
<td>2006</td>
<td>A/Professor Vicky Cameron</td>
<td>Candidate genes for predicting clinical outcome in patients with acute coronary syndromes</td>
<td>National Heart Foundation Postgraduate</td>
<td>$78,000</td>
</tr>
<tr>
<td>2006</td>
<td>Professor A Mark Richards</td>
<td>Renal impairment in decompensated heart failure</td>
<td>Canterbury Medical Research Foundation</td>
<td>$66,876</td>
</tr>
<tr>
<td>2005</td>
<td>Professor A Mark Richards</td>
<td>Humoral, Ultrasonographic &amp; Genetic Prediction and Protection in Heart Disease</td>
<td>HRC Programme Extension</td>
<td>$3,672,281</td>
</tr>
<tr>
<td>2005</td>
<td>Professor Zoltan Endre</td>
<td>Early Intervention in Acute Renal Failure</td>
<td>HRC – Project</td>
<td>$899,319</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Christopher Pemberton</td>
<td>C-Ghrelin: a novel link between metabolic dysfunction and cardiovascular disease</td>
<td>HRC – Project</td>
<td>$855,366</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Christopher Charles</td>
<td>Adrenomedullin 2: a new effector in pressure/volume homeostasis?</td>
<td>HRC – Project</td>
<td>$699,191</td>
</tr>
<tr>
<td>2005</td>
<td>A/Prof Bruce Taylor</td>
<td>A national prevalence study of multiple sclerosis in New Zealand</td>
<td>HRC</td>
<td>$384,964</td>
</tr>
<tr>
<td>2005</td>
<td>Dr John Irvine</td>
<td>Genes of the renin-angiotensin system: risk factors for renal impairment and heart disease</td>
<td>HRC Clinical Research Training Fellowship</td>
<td>$206,080</td>
</tr>
<tr>
<td>2005</td>
<td>Suetonia C Palmer</td>
<td>Vasoactive peptides in kidney disease</td>
<td>HRC Clinical Research Training Fellowship</td>
<td>$206,080</td>
</tr>
<tr>
<td>2005</td>
<td>A/Prof Miriam Rademaker</td>
<td>The role of urocortin II in heart failure and interactions with existing therapeutic strategies</td>
<td>National Heart Foundation</td>
<td>$131,870</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Lisa Stamp</td>
<td>Targeting T cells in rheumatoid arthritis through the novel cytokine interleukin-17</td>
<td>Lottery Health Research</td>
<td>$100,000</td>
</tr>
<tr>
<td>2005</td>
<td>Professor Timothy Anderson</td>
<td>Parkinson’s disease – cognitive impairment, eye movements and brain imaging</td>
<td>NZ Neurological Foundation</td>
<td>$82,881</td>
</tr>
<tr>
<td>2005</td>
<td>A/Prof J Elisabeth Wells</td>
<td>New Zealand survey of mental health and well being</td>
<td>Lottery Health Research</td>
<td>$76,675</td>
</tr>
<tr>
<td>Year</td>
<td>Name</td>
<td>Title</td>
<td>Funding Body</td>
<td>Amount</td>
</tr>
<tr>
<td>------</td>
<td>-----------------------</td>
<td>----------------------------------------------------------------------</td>
<td>-------------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Christopher Pemberton</td>
<td>C-ghrelin links metabolism and heart disease?</td>
<td>National Heart Foundation</td>
<td>$72,786</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Martin Jarvis</td>
<td>The interaction of smoking and genotype in heart disease</td>
<td>Lottery Health Research</td>
<td>$66,999</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Lisa Stamp</td>
<td>A pilot study of high dose allopurinol in the management of gout</td>
<td>Canterbury Medical Research Foundation</td>
<td>$61,361</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Marcus H Heitger</td>
<td>Mild head injury – use of early oculomotor assessment to predict outcome</td>
<td>Canterbury Medical Research Foundation</td>
<td>$57,185</td>
</tr>
<tr>
<td>2005</td>
<td>A/Prof Vicky Anne Cameron</td>
<td>The role of natriuretic peptides and TGF-beta in ventricular remodelling</td>
<td>National Heart Foundation</td>
<td>$53,593</td>
</tr>
<tr>
<td>2004</td>
<td>Professor A Mark Richards</td>
<td>Urocortins II and III: physiology and therapeutic potential</td>
<td>HRC – Project</td>
<td>$893,360</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Richard W Troughton</td>
<td>Hormone-guided heart failure therapy</td>
<td>HRC – Project</td>
<td>$772,663</td>
</tr>
<tr>
<td>2004</td>
<td>A/Prof Timothy J Wilkinson</td>
<td>Function, falls and quality of life: the PIRC trial (subcontract with University of Auckland)</td>
<td>Auckland University</td>
<td>$397,902</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Christopher Charles</td>
<td>Cardiac sympathetic nerve activity: effects of myocardial infarction, sympatholysis and novel hormones</td>
<td>National Heart Foundation</td>
<td>$189,999</td>
</tr>
<tr>
<td>2004</td>
<td>Professor A Mark Richards</td>
<td>Clinical and neurohormonal predictors of outcome post-DC cardioversion for atrial fibrillation</td>
<td>National Heart Foundation</td>
<td>$172,256</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Zoltan Endre</td>
<td>Renal endothelial function in models of chronic renal failure</td>
<td>New Zealand Kidney Foundation</td>
<td>$130,668</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Timothy Prickett</td>
<td>Predicting endochondral growth in neonates: role of plasma NT-proCNP</td>
<td>Canterbury Medical Research Foundation</td>
<td>$74,933</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Zoltan Endre</td>
<td>Markers of progression in diabetic renal disease: new treatment targets</td>
<td>Lottery Health Research</td>
<td>$60,002</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Timothy Anderson</td>
<td>Advanced MR imaging after mild closed head injury</td>
<td>Canterbury Medical Research Foundation</td>
<td>$59,988</td>
</tr>
<tr>
<td>2004</td>
<td>Dr John Fink</td>
<td>Haemodynamic models of cerebral blood flow and prediction of cerebral infarct geometry</td>
<td>NZ Neurological Foundation</td>
<td>$58,197</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Sarah Rothwell</td>
<td>Resistin: A link between obesity and cardiovascular disease</td>
<td>Canterbury Medical Research Foundation</td>
<td>$53,722</td>
</tr>
<tr>
<td>2003</td>
<td>Dr Michael MacAskill</td>
<td>Investigating and improving motor control in Parkinson's disease</td>
<td>NZ Science &amp; Technology Postdoctoral Fellowship</td>
<td>$218,755</td>
</tr>
<tr>
<td>2003</td>
<td>Michael J Epton</td>
<td>Genetic epidemiology of COPD</td>
<td>Auckland University Subcontract</td>
<td>$197,245</td>
</tr>
<tr>
<td>2003</td>
<td>Dr Vicky Cameron</td>
<td>Postgraduate scholarship from the National Heart Foundation. The role of natriuretic peptides in cardiac development and organogenesis</td>
<td>National Heart Foundation Postgraduate</td>
<td>$78,000</td>
</tr>
</tbody>
</table>
2002  A/Prof Richard Jones  Neuroengineering technology and procedures for investigation of the human brain and neurological disorders  Canterbury District Health Board  $163,951

2002  Dr Mark Davis  Research fellowship Heart Foundation  National Heart Foundation Training Fellowship  $150,000

2002  Dr Stephen Iles  Year 2 GlaxoSmithKline Respiratory Fellowship – Dr Stephen Iles  Glaxo Wellcome Research  $106,666

2002  A/Prof Miriam Rademaker  The roles of Urocortins II and III in heart failure  National Heart Foundation  $80,000

2002  Dr Michael MacAskill  Virtual training to improve arm control in motor disorders  Cas Van der Veer Parkinsons Research  $65,228

2002  A/Prof Richard Jones  Neuroengineering technology and procedures for investigation of the human brain and neurological disorders  Canterbury District Health Board  $59,838

2002  Dr Christopher Charles  Sympathetic nervous activity in circulatory disorders: Interactions with vasoactive hormones  National Heart Foundation  $50,000

Total $,0,66

Combined 2002-2006 income for all grants ≤ $50,000 $724,761

Grand Total $15,515,327

Research Contracts

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Contractor</th>
<th>Organisation</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003-06</td>
<td>Professor Timothy Anderson</td>
<td>Baxter Healthcare, Quintiles Pty Limited</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dr Michael J Epton</td>
<td>Boehringer-Ingelheim Pty Ltd Australia</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Professor Zoltan Endre</td>
<td>GlaxoSmithKline New Zealand</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Merck Sharp &amp; Dohme (NZ) Limited</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Monitoring Force USA Inc</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trident Clinical Research</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>National Institute for Water and Atmospheric Res Pharmacia</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Roche Products (NZ) Ltd</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pharmaceutical Research Associates Proprietary Limited</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Schwarz Biosciences-Quintiles Pty Limited</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Syft Limited</td>
<td></td>
</tr>
</tbody>
</table>

Grand Total $1,928,646
Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>8</td>
<td>13</td>
<td>14</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>Masters†</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>4</td>
</tr>
</tbody>
</table>

* as at 1 June each year
† thesis or dissertation students only

Publications

**Authored Book**


**Edited Book**


**Chapter in Book**


Journal Article


Denic, S., & Nicholls, M.G. (2006). Malaria and Alexander the Great: how important is family history?


Medical Hypotheses, 66:52-58.


dynamics in the minimal cardiac model. Computer Methods and Programs in Biomedicine, 80, 65-74.


Heitger, M. H., Jones, R. D., & Jones, T. J. Saccade sequences as markers for cerebral dysfunction following mild closed head

Heitger, M. H., Anderson, T. J., & Jones, R. D. Saccade sequences as markers for cerebral dysfunction following mild closed head


Intellectual Property


**Software**

**Commissioned Report for External Body**


**DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY**
The Department of Obstetrics and Gynaecology has a number of established research projects in progress which are funded from a variety of sources. The main themes are maternal and fetal medicine, gynaecological cancer and endocrine regulation of reproduction.

**Laboratory for Cell and Protein Regulation**
The theme of this laboratory’s research is the characterisation of the communities of chemical factors that make up physiological systems and to describe the dynamic interactions that occur. The laboratory studies the development of uterine cancer, modulation of blood vessel activity, and hormones of the ovulatory cycle and very early pregnancy.

http://www.chmeds.ac.nz/departments/obstetrics/research.htm

**Staff**
**Professor Phillipa Kyle**
A/P John Evans
Dr Peter Sykes
Dr Peter Benny
Dr Rosemary Reid
Dr Iris Sin

**Professor and Head of Department**
Professorial Research Fellow
Senior Lecturer
Senior Lecturer
Senior Lecturer
Research Fellow
### External Research Grants

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>A/Prof John J Evans</td>
<td>Why do males die younger? Sex steroids and vasoactive peptides.</td>
<td>Canterbury Medical Research Foundation</td>
<td>$54,651</td>
</tr>
<tr>
<td>2003</td>
<td>A/Prof John J Evans</td>
<td>Influence of sex steroids on endothelial cell secretion of vasoactive peptides</td>
<td>National Heart Foundation</td>
<td>$103,300</td>
</tr>
<tr>
<td>2003</td>
<td>Dr Peter Sykes</td>
<td>The stimulation and suppression of angiogenic factors in cultured endometrial cancers</td>
<td>Canterbury Medical Research Foundation</td>
<td>$59,932</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$217,883</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Combined 2002-2006 income for all grants ≤ $50,000</td>
<td></td>
<td>$157,906</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grand Total</td>
<td></td>
<td>$375,789</td>
</tr>
</tbody>
</table>

### Research Contracts

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Contractor</th>
<th>Project Title</th>
<th>Organisation</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>Professor Pippa Kyle</td>
<td>University of British Columbia</td>
<td></td>
<td>$68,936</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$68,936</td>
</tr>
</tbody>
</table>

### Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*as at 1 June each year

### Publications

#### Chapter in Book


#### Journal Article


Evans, J. J. The anterior pituitary gland is mysterious, alluring and useful. *Archives of Physiology and Biochemistry* 110:3-8 (2002).


**DEPARTMENT OF ORTHOPAEDIC SURGERY AND MUSCULOSKELETAL MEDICINE**

There are two major research themes within the Department:

- **Prospective clinical outcome studies** – long-term prospective outcome studies on various types of total joint replacements
- **Reconstructive upper limb surgery for tetraplegia** – changes in tendon length during postsurgical rehabilitation, development of a device for accurate measurement of joint torque, patterns of shoulder motion, wheelchair kinematics.

http://www.chmeds.ac.nz/departments/orthopaedics/research.htm

**Staff**

**Professor Alastair Rothwell**
Emeritus Professor and Head of Department

**Dr John McKie**
Senior Clinical Lecturer

**External Research Grants**

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Dr Tim Woodfield</td>
<td>Spinal cord tissue engineering: combining olfactory cells with novel nerve guide conduits.</td>
<td>Canterbury Medical Research Foundation</td>
<td>$67,626</td>
</tr>
</tbody>
</table>

**Total**

$67,626

**Combined 2002-2006 income for all grants ≤ $50,000**

$16,500

**Grand Total**

$84,126

**Postgraduate Students**

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD¹</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Masters¹</td>
<td>2</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

¹as at 1 June each year

¹thesis or dissertation students only
Publications

Journal Article


Commissioned Report for External Body

DEPARTMENT OF PAEDIATRICS
The Department of Paediatrics has an active research programme. Long-established research interests include paediatric urology especially reflux, community child health, sudden infant death syndrome, and neonatal research. More recently the Department has developed major research interests in free radicals, respiratory medicine and cancer genetics.

Children’s Cancer Research Group
The Children’s Cancer Research Group is a collaboration between research teams in the Departments of Paediatrics and Paediatric Surgery and the Children’s Haematology Oncology Centre. It is interested in the biology and genetics of developmental disorders, particularly in major surgical conditions.

http://www.chmeds.ac.nz/research/dgrp/index.htm

Staff
Professor Brian Darlow
Professor Spencer Beasley
A/P Philip Pattemore
Dr Susan Bagshaw
Dr Robin Corbett
Dr Maureen-Anne Meates-Dennis
Dr Mike Sullivan

Professor and Head of Department
Clinical Professor
Associate Professor
Senior Lecturer
Clinical Senior Lecturer
Senior Lecturer
Senior Lecturer
### External Research Grants

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Dr Michael J Sullivan</td>
<td>Epigenetic mechanisms in the pathogenesis of childhood cancer: neuroblastoma as a model</td>
<td>Child Cancer Foundation</td>
<td>$102,882</td>
</tr>
<tr>
<td>2005</td>
<td>Professor Brian Darlow</td>
<td>What oxygen saturation level should we target in preterm infants? – a RCT</td>
<td>HRC – Project</td>
<td>$592,271</td>
</tr>
<tr>
<td>2005</td>
<td>Professor Brian Darlow</td>
<td>NZ Freemasons Postgraduate Fellowship in Paediatrics</td>
<td>Freemason's Postgraduate Fellowship</td>
<td>$61,114</td>
</tr>
<tr>
<td>2004</td>
<td>Professor B Darlow</td>
<td>Infection, neutrophil oxidants and chronic lung disease in preterm infants</td>
<td>Child Health Research Foundation</td>
<td>$94,177</td>
</tr>
<tr>
<td>2003</td>
<td>Professor Brian Darlow</td>
<td>International neonatal immunotherapy study (INIS): a RCT of intravenous immunoglobulin</td>
<td>HRC – Project</td>
<td>$529,534</td>
</tr>
<tr>
<td>2003</td>
<td>Dr Michael J Sullivan</td>
<td>Donations towards research into Childhood Cancer</td>
<td></td>
<td>$58,300</td>
</tr>
<tr>
<td>2002</td>
<td>Dr Mike Sullivan and Professor Tony Reeve</td>
<td>Intelligent data tools and microarray gene expression analysis for clinical decision making in neuroblastoma</td>
<td>Child Cancer Foundation</td>
<td>$165,989</td>
</tr>
</tbody>
</table>

**Total** | $1,859,655

**Combined 2002-2006 income for all grants ≤ $50,000** | $92,232

**Grand Total** | $1,951,887

### Research Contracts

<table>
<thead>
<tr>
<th></th>
<th>Total $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined 2002-2006 income for all contracts ≤ $20,000</td>
<td>$5,000</td>
</tr>
</tbody>
</table>

### Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Masters†</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

*as at 1 June each year

† thesis or dissertation students only


**Intellectual Property**


**DEPARTMENT OF PATHOLOGY**

Research Groups with the Department of Pathology include:

**Angiogenesis Research Group (ARG)**

The ARG is investigating the biology of human tumours. Its research focuses on the molecular regulation of blood (angiogenesis) and lymphatic (lymphangiogenesis) vessel formation and function during human tumour growth and metastasis.

[http://www.chmeds.ac.nz/research/angiogenesis/index.htm](http://www.chmeds.ac.nz/research/angiogenesis/index.htm)

**Cancer Genetics Research Group**

The focus of research is the cytogenetic and molecular genetic basis of human cancer. The aims of the Group are to identify new gene alterations which are relevant to the cause and/or progression of cancer, to develop a better understanding of the molecular mechanisms that determine gene rearrangements in cancer cells and to actively translate current research knowledge in these fields to clinical diagnosis.


**Christchurch Haematology Research Group**

The Christchurch Haematology Research Group is developing better methods for the diagnosis and treatment of malignancy, auto-immunity and infectious diseases. It is supported by the departments of Haematology, Immunology, and Surgery.


**Free Radical Research Group (FRRG)**

Free radical research is one of the Pathology Department’s major research interests. The FRRG consists of biochemists and cell biologists undertaking a range of interrelated research projects on aspects of oxidative stress and antioxidant action.

[http://www.chmeds.ac.nz/research/freerad/aboutus.htm](http://www.chmeds.ac.nz/research/freerad/aboutus.htm)
Gene Structure and Function Laboratory
Much of the current research centres on the areas of psychiatric genetics and pharmacogenetics (the impact of genetic variation on responses to drugs). The laboratory’s psychiatric genetics research is a collaboration with Professor Peter Joyce in the Department of Psychological Medicine.

http://www.chmeds.ac.nz/research/gsfl/index.htm

Liver Sieve Research Group
This research team is interested in the fine vessels of the liver and the role these may play in human disease.

http://www.chmeds.ac.nz/research/liversieve/index.htm

Staff

<table>
<thead>
<tr>
<th>Professor David Murdoch</th>
<th>Professor and Head of Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor Stephen Brennan</td>
<td>Clinical Professor</td>
</tr>
<tr>
<td>Professor Peter George</td>
<td>Clinical Professor</td>
</tr>
<tr>
<td>Professor Christine Winterbourn</td>
<td>Professor</td>
</tr>
<tr>
<td>Professor Stephen Chambers</td>
<td>Professor</td>
</tr>
<tr>
<td>Emeritus Professor Robin Fraser</td>
<td>Emeritus Professor</td>
</tr>
<tr>
<td>A/P Martin Kennedy</td>
<td>Research Associate Professor</td>
</tr>
<tr>
<td>A/P Tony Kettle</td>
<td>Research Associate Professor</td>
</tr>
<tr>
<td>A/P Christine Morris</td>
<td>Research Associate Professor</td>
</tr>
<tr>
<td>Dr Christopher Florkowski</td>
<td>Clinical Senior Lecturer</td>
</tr>
<tr>
<td>Dr Stephen Fox</td>
<td>Clinical Senior Lecturer</td>
</tr>
<tr>
<td>Dr Peter Ganly</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Mark Hampton</td>
<td>Senior Research Fellow</td>
</tr>
<tr>
<td>Dr Lance Jennings</td>
<td>Clinical Senior Lecturer</td>
</tr>
<tr>
<td>Dr Andrew Miller</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr John O’Donnell</td>
<td>Clinical Senior Lecturer</td>
</tr>
<tr>
<td>Dr Nigel Patton</td>
<td>Clinical Senior Lecturer</td>
</tr>
<tr>
<td>Dr Margret Vissers</td>
<td>Senior Research Fellow</td>
</tr>
<tr>
<td>Dr Suzanne Benjes</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Dr Margaret Currie</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Dr Sheryl Gough</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Dr Alexander Peskin</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Dr Juliet Pullar</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Dr Rebecca Roberts</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Dr Revathy Senthilmoohan</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Dr Peter Elder</td>
<td>Honorary Research Fellow</td>
</tr>
<tr>
<td>Dr Barry Hock</td>
<td>Honorary Research Fellow</td>
</tr>
<tr>
<td>Dr John Lewis</td>
<td>Honorary Research Fellow</td>
</tr>
<tr>
<td>Dr Judith McKenzie</td>
<td>Honorary Research Fellow</td>
</tr>
<tr>
<td>Dr Ursula Jewel</td>
<td>Postdoctoral Fellow</td>
</tr>
<tr>
<td>Dr Patrick McHugh</td>
<td>Postdoctoral Fellow</td>
</tr>
<tr>
<td>Dr Grant McKenzie</td>
<td>Postdoctoral Fellow</td>
</tr>
</tbody>
</table>
## External Research Grants

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>A/ Prof Martin A Kennedy</td>
<td>Pharmacogenomics of antidepressant drugs</td>
<td>HRC – Project</td>
<td>$682,555</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Stephen Chambers</td>
<td>Breath test for aspergillus: role of 2-pentylfuran</td>
<td>HRC – Project</td>
<td>$645,850</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Christine C Winterbourn</td>
<td>Turning within cardiac excitation-contraction coupling and nitrosative/oxidative effects</td>
<td>Auckland Uniservices Ltd</td>
<td>$96,000</td>
</tr>
<tr>
<td>2006</td>
<td>A/ Prof Martin A Kennedy</td>
<td>Neurogenomics of drug exposure: Focus on methamphetamines and benzylpiperazines</td>
<td>ESR Scholarship</td>
<td>$75,000</td>
</tr>
<tr>
<td>2006</td>
<td>A/Prof CM Morris</td>
<td>Cancer Genetics Research Group</td>
<td>Cancer Society West Coast Division</td>
<td>$68,250</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Rebecca L Roberts</td>
<td>GLI Genes as risk factors for susceptibility to ulcerative colitis</td>
<td>Lottery Health Research</td>
<td>$57,772</td>
</tr>
<tr>
<td>2006</td>
<td>A/Prof Anthony James Kettle</td>
<td>Vacuum Concentrator System for Biomedical Research</td>
<td>Lottery Health Research</td>
<td>$53,960</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Stephen Chambers</td>
<td>Breath testing for infection and lung injury</td>
<td>Lottery Health Research</td>
<td>$50,000</td>
</tr>
<tr>
<td>2005</td>
<td>Associate Professor Martin A Kennedy</td>
<td>Novel protein markers of antidepressant effects</td>
<td>HRC – Project</td>
<td>$521,505</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Gabi Dachs</td>
<td>Horseradish peroxidase-activated Paracetamol as gene therapy of cancer</td>
<td>Cancer Society</td>
<td>$291,779</td>
</tr>
<tr>
<td>Year</td>
<td>Name</td>
<td>Title</td>
<td>Funding Body &amp; Description</td>
<td>Funding Amount</td>
</tr>
<tr>
<td>------</td>
<td>-----------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>2005</td>
<td>Sarah Cuddihy</td>
<td>Identifying cellular sensors of oxidative stress</td>
<td>NZ Science &amp; Technology Postdoctoral Fellowship</td>
<td>$230,667</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Margaret Currie</td>
<td>Tie2 receptor tyrosine kinase: a potential target for the anti-vascular agent DMXAA</td>
<td>Cancer Society</td>
<td>$199,785</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Judy McKenzie</td>
<td>Grant-in-aid toward purchase of analytical flow cytometer</td>
<td>Lottery Health Research</td>
<td>$165,000</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Sheryl M Gough</td>
<td>Characterisation of novel gene rearrangements in leukaemia</td>
<td>Canterbury Medical Research Foundation Fellowship</td>
<td>$159,999</td>
</tr>
<tr>
<td>2005</td>
<td>AvProf Christine Morris</td>
<td>Exploring associations of chromosome 8q gain with breast cancer pathogenesis</td>
<td>Cancer Society</td>
<td>$144,850</td>
</tr>
<tr>
<td>2005</td>
<td>Professor Stephen Chambers</td>
<td>Detection of volatiles in breath for the diagnosis of Pseudomonas and Aspergillus infections</td>
<td>National Child Health Research Foundation</td>
<td>$133,638</td>
</tr>
<tr>
<td>2005</td>
<td>Av Prof Martin A Kennedy</td>
<td>Pharmacogenetics of antidepressant response: a novel candidate gene</td>
<td>Canterbury Medical Research Foundation Project</td>
<td>$68,635</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Christine Winterbourn</td>
<td>Oxidant, antioxidant and inflammatory disease</td>
<td>HRC – Project</td>
<td>$2,791,000</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Rebecca L Roberts</td>
<td>Pharmacogenomics of thioepipine drug metabolism</td>
<td>NZ Science &amp; Technology Postdoctoral Fellowship</td>
<td>$224,667</td>
</tr>
<tr>
<td>2004</td>
<td>Av Prof Christine Morris</td>
<td>Breast cancer genetics: aetiology and clinical application</td>
<td>Cancer Society</td>
<td>$167,929</td>
</tr>
<tr>
<td>2004</td>
<td>Av Prof Christine Morris</td>
<td>The Diagnostic Potential of a Novel Chromosomal Imbalance Associated with Breast Cancer</td>
<td>Lottery Health Research</td>
<td>$100,000</td>
</tr>
<tr>
<td>2004</td>
<td>Professor C Winterbourn</td>
<td>Infection, neutrophil oxidants and chronic lung disease in preterm infants</td>
<td>Child Health Research Foundation</td>
<td>$94,177</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Margaret Jane Curie</td>
<td>Doctoral Scholarship - Yu-Jen Chen</td>
<td>Scholarship – AGMARDT</td>
<td>$88,778</td>
</tr>
<tr>
<td>2004</td>
<td>Sarah P Gunningham</td>
<td>The role of neuropilin-1, a novel vascular endothelial growth factor receptor, in cancer</td>
<td>Genesis Oncology Trust</td>
<td>$60,920</td>
</tr>
<tr>
<td>2004</td>
<td>Sarah P Gunningham</td>
<td>Neuropilin as an indicator of colorectal disease</td>
<td>Canterbury Medical Research Foundation</td>
<td>$60,000</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Sheryl M Gough</td>
<td>Novel chromosome breakpoints, leukaemia genes and their clinical significance</td>
<td>Genesis Oncology Trust</td>
<td>$55,908</td>
</tr>
<tr>
<td>2003</td>
<td>Dr Margret Vissers</td>
<td>Myeloperoxidase-derived oxidants and apoptosis</td>
<td>HRC – Project</td>
<td>$836,470</td>
</tr>
<tr>
<td>2003</td>
<td>Dr Mark B Hampton</td>
<td>Thiol proteomics &amp; the regulation of cell death</td>
<td>HRC Sir Charles Hercus Research Fellowship</td>
<td>$400,000</td>
</tr>
<tr>
<td>Year</td>
<td>Contractor</td>
<td>Project Description</td>
<td>Organisation</td>
<td>Total $ Approved</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>2002-06</td>
<td>Professor Stephen Chambers, Dr Mark B Hampton, Dr Judy McKenzie, A/Prof Anthony Kettle</td>
<td>Genetic profiling of breast cancer, Thiol proteomics and the regulation of cell death, Array detection of genomic deletions associated with BCR-ABL1 leukaemia, Allevic expression patterns of genes implicated in mental illness, Ken &amp; Lucia Scarlett Postgraduate Scholarship in Cancer Research, Neurophil oxidant and chronic lung disease in preterm infants, Postgraduate scholarship, A vaccine for the treatment of bowel cancer</td>
<td>Cancer Society Project, HRC Sir Charles Hercus Research Fellowship, Canterbury Medical Research Foundation Project, NZ Lottery Grants Board PhD Scholarship, Ken &amp; Lucia Scarlett Postgraduate Scholarship in Cancer Research, Lottery Health Research, National Heart Foundation Postgraduate, Bowel Cancer Project Canterbury Medical Research Foundation</td>
<td>$773,147</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Combined 2002-2006 income for all grants ≤ $50,000</td>
<td></td>
<td>$919,252</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grand Total</td>
<td></td>
<td>$10,300,976</td>
</tr>
</tbody>
</table>

**Research Contracts**

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Contractor</th>
<th>Organisation</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-06</td>
<td>Professor Stephen Chambers, Dr Mark B Hampton, Dr Judy McKenzie, A/Prof Anthony Kettle</td>
<td>A vaccine for the treatment of bowel cancer</td>
<td>$70,071</td>
</tr>
</tbody>
</table>

Combined 2002-2006 income for all contracts ≤ $20,000 $30,000

Grand Total $803,147
Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>16</td>
<td>15</td>
<td>16</td>
<td>21</td>
<td>21</td>
</tr>
<tr>
<td>Masters†</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

* as at 1 June each year
† thesis or dissertation students only

Publications

**Authored Book**


**Edited Book**


**Chapter in Book**


**Journal Article**


Murdoch, D. R. (2003). Hematospermia due to schistosome infection in travelers [Correspondence]. *Clinical Infectious Diseases*, 36, 1086.


Upston, J., Niu, X., Brown, A., Mashima, R., Wang, H., Senthilmohan, R., Kettle, A. J., Dean, R., & Stocker, R. Disease stage-


Sundram, S., Joyce, P. R., & Kennedy, M. A. (2003). Schizophrenia and bipolar affective disorder: Perspectives for the
dependent accumulation of lipid and protein oxidation products in human atherosclerosis.


does not affect plasma homocysteine concentrations in pre-dialysis chronic renal failure patients. Clinical Biochemistry, 37, 974-976.


**Commissioned Report for External Body**


---

**DEPARTMENT OF PSYCHOLOGICAL MEDICINE**

Within the Department of Psychological Medicine there are a number of very active research groups. These include:

- **Canterbury Suicide Project**
  A research project into suicidal behaviour in people of all ages. The project was initiated in 1991 and major research interests include: youth, adult and older adult suicide, risk and protective factors in suicidal behaviour, suicide prevention, the impact of suicide on close family members, national suicide prevention strategies, restriction of access to methods of suicide.
  

- **Christchurch Health and Development Study (CHDS)**
  The CHDS has been in existence for more than a quarter of a century. During this time it has followed the health, education and life progress of a group of 1,265 children born in the Christchurch urban region during mid 1977. This cohort has now been studied from infancy into childhood, adolescence and adulthood.
  
  [http://www.chmeds.ac.nz/research/chds/index.htm](http://www.chmeds.ac.nz/research/chds/index.htm)

- **Mental Health Clinical Research Unit (MHCRU)**
  This Unit is involved in studies on depression, bipolar affective disorder (manic depression), bulimia nervosa and anorexia nervosa. Future studies are also likely on social anxiety disorders.
  
  [http://www.chmeds.ac.nz/departments/psychmed/clinical.htm](http://www.chmeds.ac.nz/departments/psychmed/clinical.htm)

- **National Addiction Centre (NAC)**
  This national centre is dedicated to developing and promoting effective interventions for people with alcohol, drug and addiction related problems in Aotearoa New Zealand.
  

---

**Staff**

<table>
<thead>
<tr>
<th>Professor Roger Mulder</th>
<th>Professor and Head of Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor David Fergusson</td>
<td>Professor</td>
</tr>
<tr>
<td>Professor Douglas Sellman</td>
<td>Professor</td>
</tr>
<tr>
<td>Professor Peter Joyce</td>
<td>Professor</td>
</tr>
<tr>
<td>A/P Annette Beautrais</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>A/P Philip Brinded</td>
<td>Clinical Associate Professor</td>
</tr>
<tr>
<td>A/P Marie Crowe</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>A/P Chris Frampton</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>A/P Suzanne Luty</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>A/P Richard Porter</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Dr Simon Adamson</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Caroline Bell</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Paul Edgar</td>
<td>Senior Research Fellow</td>
</tr>
<tr>
<td>Mr John Horwood</td>
<td>Senior Research Fellow</td>
</tr>
<tr>
<td>Dr Dominic Lim</td>
<td>Clinical Senior Lecturer</td>
</tr>
<tr>
<td>Dr Janice McKenzie</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Stephanie Moor</td>
<td>Senior Lecturer</td>
</tr>
</tbody>
</table>
### External Research Grants

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Professor Peter R Joyce</td>
<td>The extent and determinants of burden in caregivers of patients diagnosed with bipolar affective disorder – Gama Fellowship</td>
<td>Gama Research Fellowship</td>
<td>$142,100</td>
</tr>
<tr>
<td>2006</td>
<td>Professor David Fergusson</td>
<td>Childhood exposure to family violence and later parenting risk</td>
<td>University of Canterbury</td>
<td>$72,921</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Janet D Carter</td>
<td>Psychotherapy factors related to outcome in depression.</td>
<td>HRC – Project</td>
<td>$399,592</td>
</tr>
<tr>
<td>2005</td>
<td>A/ Prof Richard Porter</td>
<td>Efficacy of Mifepristone (RU-486) in the treatment of bipolar depression</td>
<td>University of Newcastle Upon Tyne Sub-contract</td>
<td>$127,138</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Caroline Bell</td>
<td>Randomised controlled trial of computerised CBT for anxiety</td>
<td>Canterbury Medical Research Foundation</td>
<td>$74,537</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Mark Wallace-Bell</td>
<td>Pre-Quit nicotine replacement therapy (PQNIQ)</td>
<td>Auckland Uniservices Ltd Subcontract</td>
<td>$52,316</td>
</tr>
<tr>
<td>2004</td>
<td>Professor David Fergusson</td>
<td>Longitudinal studies of mental health and psychosocial wellbeing</td>
<td>HRC Programme</td>
<td>$2,564,999</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Peter R Joyce</td>
<td>Mental health clinical research</td>
<td>HRC Programme</td>
<td>$1,536,000</td>
</tr>
<tr>
<td>2004</td>
<td>Ms Nicola Poa</td>
<td>The role of antipsychotic medication in the prevalence of type 2 diabetes in New Zealand Māori</td>
<td>HRC – Project</td>
<td>$545,780</td>
</tr>
<tr>
<td>2004</td>
<td>Professor David Fergusson</td>
<td>Consortium of longitudinal studies of substance abuse and substance abuse disorders</td>
<td>Duke University Sub-contract</td>
<td>$67,797</td>
</tr>
<tr>
<td>2003</td>
<td>Professor Peter R Joyce</td>
<td>The molecular genetics and pharmacogenetics of depression</td>
<td>HRC – Project</td>
<td>$1,146,490</td>
</tr>
<tr>
<td>2003</td>
<td>Professor Peter R Joyce</td>
<td>A randomised clinical trial of interpersonal social rhythms psychotherapy in young people with bipolar disorder</td>
<td>HRC – Project</td>
<td>$925,091</td>
</tr>
<tr>
<td>2003</td>
<td>A/Prof Annette Beutrais</td>
<td>Analysis of study of impact of suicide on close family members</td>
<td>HRC – Project</td>
<td>$55,822</td>
</tr>
<tr>
<td>2003</td>
<td>A/Prof Annette Beutrais</td>
<td>Putting up the barriers: evaluation of the Grafton Bridge &quot;experiment&quot;</td>
<td>HRC – Project</td>
<td>$40,304</td>
</tr>
</tbody>
</table>
2002  Ms Nicola Poa  The genetic basis of diabetes in New Zealand Māori  HRC Eru Pomare Fellowship  $150,000
2002  Dr Janet D Carter  Psychotherapy for depression: a comparison of two cognitive treatments  Lottery Health Research  $125,390

Total  $8,026,277
Combined 2002-2006 income for all grants ≤ $50,000  $357,774
Grand Total  $8,384,051

Research Contracts

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Contractor</th>
<th>Organisation</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-06</td>
<td>Professor Timothy Anderson</td>
<td>Alcohol Advisory Council of New Zealand</td>
<td>$3,727,540</td>
</tr>
<tr>
<td></td>
<td>Mr Paul James Robertson</td>
<td>Antipodean Biotechnology Ltd</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Professor Douglas Sellman</td>
<td>Ministry of Health</td>
<td></td>
</tr>
</tbody>
</table>

Combined 2002-2006 income for all contracts ≤ $20,000  $25,666
Grand Total  $3,753,206

Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>15</td>
<td>20</td>
<td>17</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Masters†</td>
<td>9</td>
<td>8</td>
<td>14</td>
<td>13</td>
<td>13</td>
</tr>
</tbody>
</table>

*as at 1 June each year
† thesis or dissertation students only

Publications

Authorised Book

Edited Book

Chapter in Book


Journal Article


Carter, F. A., Bulik, C. M., McIntosh, V. V., & Joyce, P. R. Cue reactivity as a predictor of outcome with bulimia nervosa. *International Journal of Eating Disorders* 31:240-250 (2002).


Mulder, R. T., & Joyce, P. R. Relationship of temperament and behaviour measures to the prolactin response to fenfluramine in depressed men. *Psychiatry Research* 109:221-228 (2002).


Porter, R. J., Mulder, R. T., Joyce, P. R., & Luty, S. E. (2005). Tryptophan and tyrosine availability and response to antidepressant treatment in major depression. *Journal of Affective Disorders*, 86, 129-134.


Roberts, R., Begg, E. J., Joyce, P. R., & Kennedy, M. A. How the pharmacogenetics of cytochrome P450 enzymes may affect prescribing. New Zealand Medical Journal 115(1150):137-140 (2002).


Wood, J. G., Joyce, P. R., Miller, A., Mulder, R. T., & Kennedy, M. A. A polymorphism in the dopamine β-hydroxylase gene is associated with "paranoid ideation" in patients with major depression. *Biological Psychiatry 51*, 365-369 (2002).


**Commissioned Report for External Body**


DEPARTMENT OF PUBLIC HEALTH AND GENERAL PRACTICE

Research Groups within the Department of Public Health and General Practice include:

General Practice Group
The group is involved in undergraduate and postgraduate teaching, and in research into many areas of primary health care in New Zealand.

http://www.chmeds.ac.nz/departments/genprac/index.htm

Māori/Indigenous Health Institute (MiHI)
The opening of this Institute represents a major milestone in the development of Māori focused teaching and research. Research interests include: the undergraduate medical curriculum, the Community Cardiac Study, resilient indigenous health workforce networks, quality and health outcomes for Māori, addiction and Māori health.

http://www.chmeds.ac.nz/departments/pubhealth/mihi.htm

New Zealand Health Technology Assessment (NZHTA)
The NZHTA assists health and disability services through the production and dissemination of evidence-based information. This facilitates better decisions on health policy and purchasing, service management, and clinical practice.

http://nzhta.chmeds.ac.nz/

Public Health Group
Public Health is the study and practice of preventing disease, prolonging life and promoting the health of the population through the organised efforts of society. Front line practitioners include health promoters and educators, public health doctors and nurses, and staff working in occupational health and environmental protection. Other public health practitioners are involved in research, co-ordination and management of services, and the formation and evaluation of health policy.

http://www.chmeds.ac.nz/departments/pubhealth/index.htm

Staff
Professor Leslie Toop  Professor and Head of Department
Professor Ann Richardson  Professor
A/P Pauline Barnett  Associate Professor
A/P Elisabeth Wells  Research Associate Professor
Dr Cheryl Brunton  Senior Lecturer
Dr Claire Dowson  Senior Research Fellow
Dr Matea Gillies  Clinical Senior Lecturer
Dr Patrick Graham  Senior Research Fellow
Dr Philip Hider  Senior Lecturer
Dr Derelie Mangin  Senior Lecturer
Dr Ian Sheerin  Senior Lecturer
Dr Rob Weir  Senior Research Fellow
Ms Gillian Abel  Lecturer
Ms Marita Broadstock  Research Fellow
Dr Carolyn Doughty  Research Fellow
Dr Liza Fitzgerald  Lecturer
Ms Tania Huria  Lecturer
Ms Suzanne Pitama  Lecturer
Dr Paul Robertson  Lecturer
## External Research Grants

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Ms Suzanne Pitama</td>
<td>The Māori Community Heart Study</td>
<td>HRC – Project</td>
<td>$1,919,504</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Derelie Mangin</td>
<td>Stable primary care depression: maintenance vs gradual withdrawal of fluoxetine</td>
<td>HRC – Project</td>
<td>$1,703,116</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Patrick Graham</td>
<td>Hospital Outcomes Project</td>
<td>Research Trust of Victoria University of Wellington</td>
<td>$458,696</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Juliet Rumball-Smith</td>
<td>Quality of public hospital care for Māori and NZ Europeans in Christchurch, New Zealand</td>
<td>HRC Clinical Research Training Fellowship</td>
<td>$235,311</td>
</tr>
<tr>
<td>2006</td>
<td>Mr Richard Smaill</td>
<td>The implications of having a disability and ageing</td>
<td>HRC Disability Research Placement Programme</td>
<td>$85,000</td>
</tr>
<tr>
<td>2006</td>
<td>Ms Gillian Abel</td>
<td>The Impact of the PRA on the health and safety practices of sex workers</td>
<td>Ministry of Justice</td>
<td>$81,095</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Robert Weir</td>
<td>Provision of evidence-based reports to support policy decisions</td>
<td>Ministry of Health</td>
<td>$1,494,915</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Robert Weir</td>
<td>National Serosurvey of vaccine preventable diseases</td>
<td>Ministry of Health</td>
<td>$1,229,786</td>
</tr>
<tr>
<td>2005</td>
<td>Mr Paul Robertson</td>
<td>Resilient indigenous health workforce networks: constructing an international framework</td>
<td>HRC Partnership Programme</td>
<td>$893,962</td>
</tr>
<tr>
<td>2005</td>
<td>Ms Gillian Abel</td>
<td>The impact of PRA on the health and safety practices of sex workers</td>
<td>HRC – Project</td>
<td>$584,511</td>
</tr>
<tr>
<td>2005</td>
<td>Ms Suzanne Pitama</td>
<td>Feasibility Study to Determine Cardiovascular Health in Māori Communities</td>
<td>HRC – Project</td>
<td>$132,876</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Patrick Graham</td>
<td>Improved Methodology for Constructing, Evaluating and Analysing synthetic datasets</td>
<td>Statistics New Zealand</td>
<td>$81,149</td>
</tr>
<tr>
<td>2005</td>
<td>A/Prof Elizabeth Wells</td>
<td>New Zealand survey of mental health</td>
<td>Lottery Health</td>
<td>$76,675</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Derelie Mangin (nee Richards)</td>
<td>Investigation of antibiotic resistance in women with urinary tract infection</td>
<td>Lottery Health Research</td>
<td>$62,683</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Robert Weir</td>
<td>Screening review for colorectal cancer review</td>
<td>Ministry of Health</td>
<td>$57,886</td>
</tr>
<tr>
<td>2003</td>
<td>Dr Elizabeth W Plumridge</td>
<td>Building attachment in communities affected by transience and residential mobility</td>
<td>Centre for Research, Evaluation and Social Assessment Project Grant</td>
<td>$149,993</td>
</tr>
<tr>
<td>2002</td>
<td>Ms Suzanne Pitama</td>
<td>Development &amp; pilot of the Ngāi Tahu needs and ambitions tool</td>
<td>Ngāi Tahu</td>
<td>$62,129</td>
</tr>
</tbody>
</table>

Total $9,309,288

Combined 2002-2006 income for all grants ≤ $50,000 $306,052

Grand Total $9,615,340
Research Contracts

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Contractor</th>
<th>Organisation</th>
<th>Total $ Approved</th>
</tr>
</thead>
</table>
| 2003-06       | Dr Patrick Graham  
Dr Raymond Kirk  
Dr Robert Weir  
A/Professor J Elisabeth Wells | Accident Compensation Corporation  
Auckland Uniservices  
Commonwealth of Australia  
Foundation for Research, Science and Technology  
Health Research Council of NZ  
Ministry of Health  
New Zealand Institute of Crop & Food Research  
University of Auckland | $1,444,666 |

Grand Total $1,444,666

Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Masters†</td>
<td>8</td>
<td>6</td>
<td>8</td>
<td>9</td>
<td>16</td>
</tr>
</tbody>
</table>

*as at 1 June each year  
†thesis or dissertation students only

Awards and Scholarships

<table>
<thead>
<tr>
<th>Year</th>
<th>Researcher</th>
<th>Award/Scholarship</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Dr Ian Sheerin</td>
<td>Te Amorangi National Māori Health Award for Academic Excellence</td>
</tr>
</tbody>
</table>

Publications

Edited Book

Chapter in Book


Journal Article


Ardagh, M. W., Wells, J. E., Cooper, K., Lyons, R., Patterson, R., & O’Donovan, P. Effect of a rapid assessment clinic on the waiting time to be seen by a doctor and the time spent in the department, for patients presenting to an urban emergency department: A controlled prospective trial. The New Zealand Medical Journal 115(1157):U28 (2002).


**Commissioned Report for External Body**

Broadstock, M. I. *Suicide Prevention Topic 14: Are there any Crisis Containment Drug Treatments that have been shown to be Useful for Reducing Suicidality in Short-Term Crises? A critical appraisal of the literature*. Commissioned by The Suicide Working Group of the New Zealand Guidelines Group. NZHTA, Christchurch. (2002) 27p.
Broadstock, M. I., & Doughty, C. J. *Suicide Prevention Topic 10: Are there drug treatments that have been shown to Increase the risk of suicide? A critical appraisal of the literature*. Commissioned by The Suicide Working Group of the New Zealand Guidelines Group. NZHTA, Christchurch. (2002) 33p.


Toop, L. J., Richards, D. A., Dowell, A. C., Tilyard, M., Fraser, T., & Arroll, B. (2003). Direct to consumer advertising of prescription drugs in New Zealand: For health or for profit? Report to the Minister of Health supporting the case for a ban on DTCA. (pp. 1-61).

Peer Reviewed Report
The Department of Radiology has a small but active research programme. Recent research projects include: the development of a national thoracic stent database to collect and assess data from all implants performed in New Zealand; the development of new detectors that have applications in medical imaging; and investigations of clinical outcomes in infants with renal pelvis dilatation.

http://www.chmeds.ac.nz/departments/radiology/index.htm

Staff
Professor Timothy Buckenham  Clinical Professor and Head of Department

Awards and Scholarships

<table>
<thead>
<tr>
<th>Year</th>
<th>Researcher</th>
<th>Award/Scholarship</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Dr Anthony Butler</td>
<td>The RHT Bates Postgraduate Scholarship awarded by the Royal Society of New Zealand</td>
</tr>
</tbody>
</table>

Publications

Journal Article


DEPARTMENT OF SURGERY

The major research interest in the Department of Surgery is Helicobacter research. Other research interests in the Department include SIFT technology, colorectal research and laparoscopic surgery, dendritic cell research, and vascular research.

Helicobacter Research Group
Research centres on the gastric pathogen *Helicobacter pylori* and the role it may play in gastric cancer and inflammatory bowel disease. Investigations of *Mycobacterium avium* subsp. paratuberculosis in the aetiology and pathogenesis of Crohn's disease are also underway.

http://www.chmeds.ac.nz/research/helicobacter/index.htm

Staff
Professor Frank Frizelle  Professor and Head of Department
Professor Michael Ardagh  Professor
Professor Spencer Beasley  Clinical Professor
Professor Justin Roake  Professor
A/P Philip Bagshaw  Associate Professor
Dr Randall Allardyce  Senior Lecturer
Dr Jacqui Keenan  Senior Research Fellow
Dr John McKie  Clinical Senior Lecturer

External Research Grants

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>Dr Jacqui Keenan</td>
<td>Host iron levels and <em>H. pylori</em> pathogenesis: what is the link?</td>
<td>Cancer Society</td>
<td>$56,759</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Dejan Arsic</td>
<td>Developmental gene expression in the pathogenesis and treatment of childhood cancer</td>
<td>NZ Science &amp; Technology Postdoctoral Fellowship</td>
<td>$222,667</td>
</tr>
<tr>
<td>2004</td>
<td>A/Prof Philip Bagshaw</td>
<td>Prospective, randomised, clinical study comparing laparoscopic &amp; open surgery for colon cancer</td>
<td>HRC – Project</td>
<td>$188,323</td>
</tr>
<tr>
<td>2003</td>
<td>Dr Jacqui I Keenan</td>
<td>Vesicle-associated DNA: a novel signaling mechanism between <em>Helicobacter pylori</em> and gastric epithelium</td>
<td>Marsden Fund</td>
<td>$88,888</td>
</tr>
<tr>
<td>2002</td>
<td>Dr Jacqui Keenan</td>
<td>Non- pylori Helicobacters, IBD and colon cancer</td>
<td>Bowel Cancer Project Canterbury Medical Research Foundation</td>
<td>$87,023</td>
</tr>
</tbody>
</table>

Total $643,660

Combined 2002-2006 income for all grants ≤ $50,000 $94,476

Grand Total $738,136
Research Contracts

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Contractor</th>
<th>Organisation</th>
<th>Total $ Approved</th>
</tr>
</thead>
</table>
| 2004-05       | Dr Jacqui I Keenan  
Professor Justin Roake | Foundation for Research, Science and Technology  
Merck Sharp & Dohme (NZ) Limited  
New Zealand Institute of Crop & Food Research  
Syft Limited | $267,476 |

Combined 2002-2006 income for all contracts ≤ $20,000 | $38,606
Grand Total | $306,082

Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Masters†</td>
<td>-</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

*as at 1 June each year  
†thesis or dissertation students only

Publications

Edited Book

Chapter in Book


Commissioned Report for External Body


CENTRE FOR POSTGRADUATE NURSING STUDIES

The Centre for postgraduate Nursing Studies has three major research groups.

Health Status and Health Outcomes over the Life Course

This group studies the distribution of disease, causes and outcome of illness, and risk factors. Research addresses prevalence and incidence of symptoms, epidemiology of ill-health, aetiology and innovative management of chronic disease, lay efforts to reduce health inequalities, evaluation of prevention programmes, health of vulnerable groups in urban and rural areas, and impact assessments by health professionals.

Service Delivery and Health

The aims of this group are to evaluate the comparative safety, effectiveness, cost effectiveness and acceptability of methods of providing health and social care, with the intention of improving outcomes or experiences for patients or clients.

Management of Long-Term Conditions

The focus of this research group is the development of evidence-based healthcare to minimise the impact of chronic health needs on people's lives. Research explores symptom experience, risk assessment, preventive care and symptom control issues, with particular emphasis on the enhancement of patient self-management strategies.

http://www.chmeds.ac.nz/departments/pgradnursing/index.htm

Staff

Ms Beverley Burrell Senior Lecturer and Director
A/P Marie Crowe Research Associate Professor
Angela Bradley Senior Lecturer
Dr Shelagh Dawson Senior Lecturer
Dr Mary-Jo Gagan Senior Lecturer
Gill Halksworth-Smith Senior Lecturer
Dr Lisa Whitehead Senior Lecturer
Lorraine Ritchie Lecturer
External Research Grants

<table>
<thead>
<tr>
<th>Total 2002-2006 income for all grants ≤ $50,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>$37,660</td>
</tr>
</tbody>
</table>

Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Masters†</td>
<td>6</td>
<td>6</td>
<td>11</td>
<td>15</td>
<td>15</td>
</tr>
</tbody>
</table>

*as at 1 June each year
†thesis or dissertation students only

Publications

Journal Article

Commissioned Report for External Body
DUNEDIN SCHOOL OF MEDICINE

DEPARTMENT OF GENERAL PRACTICE

The Department co-ordinates the Royal New Zealand College of General Practitioners Research Group, a group of international standing and one that is renowned for its general practice research in areas such as asthma, diabetes, acute infections, and health service utilisation. The Department also has an extensive programme of clinical research in osteoporosis, occupational health, geo-informatics, research databases, health economics, health services research and research design.

http://dnmeds.otago.ac.nz/departments/gp/index.html

Staff
A/P Jim Reid Associate Professor and Head of Department
Professor Murray Tilyard Professor
A/P Susan Dovey Research Associate Professor
Dr Wayne Cunningham Senior Lecturer
Dr Patrick Farrey Senior Lecturer
Dr Martyn Williamson Senior Lecturer
Dr Hamish Wilson Senior Lecturer
Dr Chrystal Jaye Senior Lecturer
Dr Peter Cardon Professional Practice Fellow

External Research Grants

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>Dr Chrystal Jaye</td>
<td>Spiritual wellbeing in Aotearoa (New Zealand) palliative cancer care</td>
<td>Genesis Oncology Trust</td>
<td>$91,380</td>
</tr>
<tr>
<td>2002</td>
<td>Dr Isobel Martin</td>
<td>RNZCGP Research Unit</td>
<td>NZ Health Information Services</td>
<td>$278,994</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td>$370,374</td>
</tr>
<tr>
<td>Combined 2002-2006 income for all grants ≤ $50,000</td>
<td></td>
<td></td>
<td></td>
<td>$120,331</td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td></td>
<td></td>
<td>$490,705</td>
</tr>
</tbody>
</table>

Research Contracts

| Combined 2002-2006 income for all contracts ≤ $20,000 | $20,599 |

Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Masters</td>
<td>7</td>
<td>8</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

*as at 1 June each year
Publications

Book


Chapter in Book


Journal Article


Martin, I. R., & Crane, J. To skin prick test or not to skin prick test - this is the question. *New Zealand Medical Journal 115*(1161):U166 (2002).


**Software**


**Commissioned Report for External Body**


188


Toop, L. J., Richards, D. A., Dowell, A. C., Tilyard, M., Fraser, T., & Arroll, B. (2003). *Direct to consumer advertising of prescription drugs in New Zealand: For health or for profit?* Report to the Minister of Health supporting the case for a ban on DTCA. (pp. 1-61).

DEPARTMENT OF MEDICAL AND SURGICAL SCIENCES

The Department of Medical and Surgical Sciences was established in 1999 to facilitate multidisciplinary interactions by six specialities to enhance teaching and research output.

**Professor Robert Walker**  
Professor and Head of Department

**ANAESTHESIA AND INTENSIVE CARE**

Research activity in the Anaesthesia and Intensive Care Section relates mainly to the following topics: clinical pharmacology, clinical outcomes in the ICU, physiology of the critically ill and evidence-based practice.

http://dnmeds.otago.ac.nz/departments/mss/anaesthesia/index.html

**Staff**

**Dr Geoff Laney**  
Head of Section and Clinical Senior Lecturer

**Dr Matthew Zacharias**  
Clinical Senior Lecturer

*Plus 16 other Clinical Senior Lecturers*

**External Research Grants**

<table>
<thead>
<tr>
<th>Total</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined 2002-2006 income for all grants ≤ $50,000</td>
<td>$85,202</td>
</tr>
</tbody>
</table>

**Postgraduate Students**

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masters</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
</tbody>
</table>
Awards and Scholarships

<table>
<thead>
<tr>
<th>Year</th>
<th>Researcher</th>
<th>Award/Scholarship</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>Dr Mathew Zacharias</td>
<td>Rupert Hornabrook Prize for excellence in research in the field of Day Care Anaesthesia. Awarded by Australian and New Zealand College of Anaesthetists' Day Care Anaesthesia Group</td>
</tr>
</tbody>
</table>

Publications

Chapter in Book

Journal Article


BIOETHICS CENTRE

The Bioethics Centre was established in response to a growing awareness of new ethical issues relating to law, medicine and technology. The Centre, which has an international reputation, aims to encourage and co-ordinate teaching and research, to stimulate informed public debate, and to provide a consultation and resource service for health professionals and others in the community. Research interests in the Centre are diverse and include: medical ethics; ethics of emerging biotechnologies such as stem cell research, genetics and the new reproductive techniques; the ethical dimensions of resource allocation; cross-cultural and international ethics; philosophy of medicine, neuroscience and psychiatry; alternative medicine; animal ethics; clinical practice ethics; and research ethics. The Centre also plays a prominent role in national and international affairs in Bioethics.

http://dnmeds.otago.ac.nz/departments/mss/bioethics/index.html

Staff
Professor Donald Evans              Professor and Head of Section
Professor Grant Gillett
A/P Jing-Bao Nie          Associate Professor
Dr Neil Pickering             Senior Lecturer
Dr Lynley Anderson          Lecturer
Dr Sandy Elkin               Lecturer
Ms Claire Gallop             Lecturer
Dr Dana Wensley              Research Fellow
External Research Grants

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Dr Jing-Bao Nie</td>
<td>Predicaments of Social Engineering: The Ideology and Ethics of China’s Planned Reproduction Program</td>
<td>Marsden Fund</td>
<td>$474,624</td>
</tr>
<tr>
<td>2003</td>
<td>Professor Donald M Evans</td>
<td>Clarification and evaluation of Māori beliefs and perspectives concerning genetic biotechnologies: Ethical impacts of genetic technologies in New Zealand</td>
<td>FRST: PGST</td>
<td>$1,093,289</td>
</tr>
<tr>
<td>2003</td>
<td>Dr Jing-Bao Nie</td>
<td>The Forgotten Atrocities: Ethical Challenges and Socio-cultural Dimensions of Japanese Doctors’ (in)Human Experimentation in Wartime China</td>
<td>Marsden Fund</td>
<td>$88,889</td>
</tr>
</tbody>
</table>

Total $1,656,802

Combined 2002-2006 income for all grants ≤ $50,000 $19,445

Grand Total $1,676,247

Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Masters</td>
<td>18</td>
<td>12</td>
<td>16</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>

*as at 1 June each year

Publications

**Authored Book**

**Chapter in Book**


Journal Article


**Commissioned Report for External Body**


**Submissions**


**MEDICINE**

Collaborative research projects link the Section of Medicine with others in the University of Otago, including the Christchurch and Wellington Schools of Medicine, as well as other universities in New Zealand and around the world. Areas of particular research strength include: rheumatic diseases, gastroenterological diseases, endocrinology, kidney disease, diabetes research, bone fractures in children and obesity, cardiac disease, falls in the elderly, cancer and respiratory illnesses.


**Staff**

**Professor John Highton**

Professor John Campbell

Professor Terence Doyle

Professor Ailsa Goulding

Professor Jim Mann

Professor Robin Taylor

Professor Robert Walker

Professor Mike Lean

A/P David Gerrard

A/P David Perez

A/P Patrick Manning

A/P Clare Robertson

A/P Gerard Wilkins

A/P Michael Williams

A/P Cheuk-Kit Wong

Dr Kirsten Coppell

Dr Graeme Hammond-Tooke

Dr Hitoshi Nukada

Dr Martin Schlup

Dr Michael Schlutz

Dr Simon Stebbings

DR Wayne Sutherland

**Plus 11 clinical Senior Lecturers**
## External Research Grants

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Professor D Robin Taylor</td>
<td>Predicting Response to Corticosteroids in COPD using Exhaled Nitric Oxide</td>
<td>HRC – Project</td>
<td>$374,177</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Jim Mann</td>
<td>Karitane Senior Research Fellow</td>
<td>The Trustees of the University of Otago Foundation Trust</td>
<td>$371,614</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Robert J MacGinley</td>
<td>Does high salt diet lead to a rapid deterioration in vascular compliance?</td>
<td>National Heart Foundation Project</td>
<td>$105,482</td>
</tr>
<tr>
<td>2006</td>
<td>A/Prof Gerard T Wilkins</td>
<td>W &amp; GS Dick Fellowship – Dr Natalie van Havre</td>
<td>Southland Medical Foundation</td>
<td>$105,113</td>
</tr>
<tr>
<td>2006</td>
<td>Christopher Sean Booker</td>
<td>Lifestyle over and above drugs in diabetes (LOADD) study</td>
<td>National Heart Foundation Postgraduate</td>
<td>$78,000</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Nathalie van Havre</td>
<td>The effect of selenium supplementation on clinical outcome in high risk cardiac patients with coronary heart disease.</td>
<td>Anderson &amp; Telford Charitable Trust</td>
<td>$90,543</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Patrick Manning</td>
<td>Antioxidant treatment and the metabolic syndrome</td>
<td>HRC – Project</td>
<td>$569,692</td>
</tr>
<tr>
<td>2003</td>
<td>Professor Robert J Walker</td>
<td>Renal effects of lithium therapy in bipolar disorders</td>
<td>HRC – Project</td>
<td>$894,115</td>
</tr>
<tr>
<td>2003</td>
<td>Dr Wayne H F Sutherland</td>
<td>Effect of meals rich in saturated fat and canola oil on postprandial levels of pro-inflammatory cytokines and interleukin-8 in obese subjects</td>
<td>National Heart Foundation</td>
<td>$144,720</td>
</tr>
<tr>
<td>2003</td>
<td>Dr Michael J A Williams</td>
<td></td>
<td>Dunedin Heart Unit Trust</td>
<td>$60,000</td>
</tr>
<tr>
<td>2003</td>
<td>Dr Hitoshi Nukada</td>
<td>Neurological Research</td>
<td>Nukada Medical and Biological Institute</td>
<td>$59,412</td>
</tr>
<tr>
<td>2003</td>
<td>Professor A John Campbell</td>
<td>Masonic Postgraduate Fellowships: Dr Philippa Carter</td>
<td>Freemason’s Postgraduate Fellowship</td>
<td>$58,513</td>
</tr>
<tr>
<td>2003</td>
<td>Professor Ailsa Goulding</td>
<td>Bone Health Research</td>
<td>K.L. Stewart Bequest</td>
<td>$55,000</td>
</tr>
</tbody>
</table>

**Total** $2,966,381

**Combined 2002-2006 income for all grants ≤ $50,000** $572,504

**Grand Total** $3,538,885
Research Contracts

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Contractor</th>
<th>Organisation</th>
<th>Total $ Funded</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-06</td>
<td>Professor Ailsa Goulding</td>
<td>Accident Compensation Corporation</td>
<td>$2,258,048</td>
</tr>
<tr>
<td>2002-06</td>
<td>Professor Anthony B Molteno</td>
<td>Cardiology Research Fund</td>
<td></td>
</tr>
<tr>
<td>2002-06</td>
<td>Professor D Robin Taylor</td>
<td>CG Surgical</td>
<td></td>
</tr>
<tr>
<td>2002-06</td>
<td>Professor Andre M van Rij</td>
<td>Healthcare Otago Charitable Trust</td>
<td></td>
</tr>
<tr>
<td>2002-06</td>
<td>Dr Mark H Walton</td>
<td>Kognition Consulting Limited</td>
<td></td>
</tr>
<tr>
<td>2002-06</td>
<td>A/Professor Gerard T Wilkins</td>
<td>National Institute of Health</td>
<td></td>
</tr>
<tr>
<td>2002-06</td>
<td></td>
<td>Seattle Institute of Cardiac Research</td>
<td></td>
</tr>
<tr>
<td>2002-06</td>
<td></td>
<td>Smith &amp; Nephew Endoscopy Inc (Acufex Microsurgical)</td>
<td></td>
</tr>
<tr>
<td>2002-06</td>
<td></td>
<td>Southland Medical Foundation</td>
<td></td>
</tr>
</tbody>
</table>

Combined 2002-2006 income for all contracts ≤ $20,000 $41,138
Grand Total $2,299,186

Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*as at 1 June each year

Publications

**Authorised Book**

**Chapter in a Book**

**Journal Article**


Goodin, M. G., Walker, R. J., & Rosengren, R. J. Renal PGE2 production in the human and rat following phenactin, acetaminophen, and p-aminophenol. Research Communications in Molecular Pathology and Pharmacology 111:153-166 (2002).


201
The image contains a list of references, each starting with author names followed by titles and publication details. Here is the text converted into a plain text format:


Commissioned Report for External Body


OPHTHALMOLOGY
The Ophthalmology Section has a very active research focus. Major research areas include: The Otago Glaucoma Surgery Outcome Study, Internet based medical education, and UV photography of the cornea, and long-term follow-up of orbital implants.

http://dnmeds.otago.ac.nz/departments/mss/ophthalmology/index.html

Staff
Professor Anthony Molteno
Mr Gordon Sanderson
Dr Rodney Keillor
Dr David Peart
Dr Mylan van Newkirk
Plus 5 Clinical Lecturers

Professor and Head of Section
Senior Lecturer
Clinical Senior Lecturer
Clinical Senior Lecturer
Clinical Senior Lecturer

Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masters</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Creative Work

ORTHOPAEDIC SURGERY

Research interests in the Orthopaedic Surgery Section include: orthopaedic surgery and joint replacement, spinal and scoliosis surgery, paediatric surgery, joint arthroplasty, hand and upper limb surgery, cartilage repair, and the development of bioabsorbable orthopaedic implants. There are also two commercially funded units within the Department, both of which have as their prime interests, the reactions of tissues to surgical implants.

http://dnmeds.otago.ac.nz/departments/mss/orthopaedic/index.html

Staff
A/P Jean-Claude Theis  Associate Professor and Head of Section
A/P Anthony Poole  Associate Professor
Mr Michael Chin  Clinical Senior Lecturer
Mr John Dunbar  Clinical Senior Lecturer
Mr David Gwynne-Jones  Senior Lecturer
Mr Bruce Hodgson  Clinical Senior Lecturer
Mr John Matheson  Clinical Senior Lecturer
Mr Simon McMahon  Clinical Senior Lecturer
Dr Mark Walton  Senior Research Fellow
External Research Grants

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>A/Professor C. Anthony Poole</td>
<td>Development of mesenchymal stem cell therapies in a cartilage repair model</td>
<td>HRC – Project</td>
<td>$1,381,312</td>
</tr>
<tr>
<td>2002</td>
<td>A/Professor C. Anthony Poole</td>
<td>HRC Fellow Support</td>
<td>HRC</td>
<td>$74,784</td>
</tr>
</tbody>
</table>

Total $1,456,096

Combined 2002-2006 income for all grants ≤ $50,000 $74,867

Grand Total $1,530,963

Postgraduate Students

<table>
<thead>
<tr>
<th>Year</th>
<th>Head Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>1</td>
</tr>
<tr>
<td>2003</td>
<td>-</td>
</tr>
<tr>
<td>2004</td>
<td>-</td>
</tr>
<tr>
<td>2005</td>
<td>-</td>
</tr>
<tr>
<td>2006</td>
<td>1</td>
</tr>
</tbody>
</table>

*as at 1 June each year

Publications

Journal Article


SURGERY

The Section of Surgery has two major research units:

The Otago Clinical Audit and Outcomes Research Group
The Unit promotes the development of clinical audit within the surgical profession and develops systems for evaluating longer term outcomes in clinical practice. Developing and enhancing software to support these processes has also been a dominant role of the Unit. The Unit has produced significant research focusing on the process of surgical audit including risk stratification in outcome assessment.

http://dnmeds.otago.ac.nz/departments/mss/surgery/research.html#audit

The Vascular Research Group

Primary research interests include the genetic basis of different forms of vascular disease, elucidation of the early processes in the formation of atherosclerosis, identification of circulating markers of vascular susceptibility and/or post-interventional outcome, novel (non-surgical) approaches to the treatment of aneurysm disease, and the pathophysiology of venous disease.

http://www.otago.ac.nz/ouaudit/

Staff

General Surgery
Professor Andre van Rij  Professor and Head of Section
Dr Michael Hunter  Senior Lecturer
Dr Greg Jones  Senior Research Fellow
Mr Michael Landmann  Senior Lecturer
Mr Mark Thompson-Fawcett  Senior Lecturer
Mr Julian Hayes  Senior Lecturer
Mr Thomas Elliott  Clinical Senior Lecturer
Dr Ross Pettigrew  Clinical Senior Lecturer
Mr Ian Thomson  Clinical Senior Lecturer
Mr Alastair Yule  Clinical Senior Lecturer
Dr Stephen Packer  Clinical Reader

Cardiothoracic Surgery
Dr Richard Bunton  Clinical Senior Lecturer
Dr Ivor Galvin  Clinical Senior Lecturer

Neurosurgery
Professor Grant Gillett  Professor
Dr Suzanne Jackson  Clinical Senior Lecturer
Dr David McDowell  Clinical Senior Lecturer

Otolaryngology and Head and Neck Surgery
Dr Patrick Dawes  Senior Lecturer
Mr Martyn Fields  Clinical Senior Lecturer
Mr Dean Ruske  Clinical Senior Lecturer
Mr Jamie Ryan  Clinical Senior Lecturer

Urology
Mr Kampta Samalia  Clinical Senior Lecturer
Mr Narayanan Sampangi  Clinical Senior Lecturer
### External Research Grants

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>Dr Ian Winburn</td>
<td>Protective effects of carbon monoxide following renal transplant ischaemic injury</td>
<td>HRC Clinical Research Training Fellowship</td>
<td>$135,076</td>
</tr>
</tbody>
</table>

Total $135,076

Combined 2002-2006 income for all grants ≤ $50,000 $167,567

Grand Total $302,643

### Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Masters</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

*as at 1 June each year

### Publications

**Authored Book**


**Chapter in Book**


**Journal Article**


**DEPARTMENT OF PATHOLOGY**

Areas of current research activity in the Department include: cancer biology, with particular emphasis on the molecular genetics of embryonic renal tumours, tumour suppressor gene function, in particularly p53, cancer vaccine development, mitotic spindle checkpoint control and the role of mismatch repair genes, developmental biology with emphasis on the development of the kidney and renal diseases, the genetics of bipolar disorder and the effects of mood stabilising drugs. Much of the research is multidisciplinary in approach, is clinically relevant, and involves collaboration with clinical and scientific colleagues in other Departments within the School, University or elsewhere in New Zealand, as well as international links.

The Department houses six research groups: the Molecular Genetics Laboratory, the Molecular Pathology Group, the Cancer Research Laboratory, the Cell Transformation Group, the Developmental Genetics Group and the Clinical Genetics Group.

http://dnmeds.otago.ac.nz/departments/pathology/research.html

**Staff**

<table>
<thead>
<tr>
<th>A/P Dave Loten</th>
<th>Associate Professor and Head of Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor Antony Braithwaite</td>
<td>Professor</td>
</tr>
<tr>
<td>Professor Michael Eccles</td>
<td>Research Professor</td>
</tr>
<tr>
<td>Professor Han-Seung Yoon</td>
<td>Professor</td>
</tr>
<tr>
<td>A/P Peter Schwartz</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>Dr Jim Faed</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Julia Horsfield</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Noelyn Hung</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr David Markie</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Janice Royds</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Antje van der Linden</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Gail Williams</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Alison Fitches</td>
<td>Lecturer</td>
</tr>
</tbody>
</table>
### External Research Grants

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Professor Antony Braithwaite</td>
<td>Live or let die: importance of cell death for tumour prevention by p53</td>
<td>Marsden Fund</td>
<td>$773,335</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Janice A Royds</td>
<td>Telomere maintenance and the improved management of gliomas</td>
<td>Cancer Society</td>
<td>$65,500</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Janice A Royds</td>
<td>Gliomas – from concept to clinic</td>
<td>Cancer Society</td>
<td>$65,226</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Antony Braithwaite</td>
<td>Therapeutics and diagnostic markers of cancer: from bench to clinic</td>
<td>HRC Programme</td>
<td>$4,042,999</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Michael R Eccles</td>
<td>Novel therapeutic targets for polycystic kidney disease</td>
<td>HRC – Project</td>
<td>$829,754</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Robin J Olds</td>
<td>Following leads to bipolar disorder susceptibility</td>
<td>Lottery Health Research</td>
<td>$116,173</td>
</tr>
<tr>
<td>2003</td>
<td>Professor Michael R Eccles</td>
<td>Cancer Research</td>
<td>Cancer Research Fund</td>
<td>$166,500</td>
</tr>
<tr>
<td>2003</td>
<td>Dr Aaron Jeffs</td>
<td>Shared equipment for gene expression profiling</td>
<td>Lottery Health Research</td>
<td>$80,000</td>
</tr>
<tr>
<td>2002</td>
<td>Professor Tony Reeve, H-S Yoon, Parry Guilford, J McCall, N Kasabov, M W Thompson-Fawcett, A Merrie</td>
<td>Predicting colorectal cancer outcome using gene expression profiling</td>
<td>HRC – Project</td>
<td>$1,446,807</td>
</tr>
<tr>
<td>2002</td>
<td>Professor Michael R Eccles</td>
<td>Genetic linkage analysis of a Southland family with glomerulonephritis</td>
<td>Healthcare Otago</td>
<td>$72,306</td>
</tr>
</tbody>
</table>

**Total** $7,874,678

**Combined 2002-2006 income for all grants ≤ $50,000** $359,972

**Grand Total** $8,234,650
**Research Contracts**

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Contractor</th>
<th>Organisation</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003-04</td>
<td>Professor Michael R Eccles, Dr Janice A Royds</td>
<td>Otago Innovation Limited, University of Waikato</td>
<td>$344,039</td>
</tr>
</tbody>
</table>

Grand Total $344,039

**Postgraduate Students**

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Masters</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

*as at 1 June each year

**Publications**

**Edited Book**


**Chapter in Book**


**Journal Article**


The Department of Preventive and Social Medicine constitutes one of the leading centres for public health research in Australasia. There are a number of major research groups within the Department including:

Injury Prevention Research Unit
The Department's research on injury prevention is focused in the Injury Prevention Research Unit (IPRU). Several projects within IPRU's programme of work involve departmental staff (i.e. non-IPRU staff) performing co-investigator roles.

The IPRU, established in 1990, was initially funded by the Health Research Council (HRC) of New Zealand and the Accident Compensation Corporation (ACC). The goal of the IPRU is to undertake research that will contribute to reducing the incidence, severity, and consequences of injury in New Zealand.

HRC and ACC have continued to provide "core" support for the IPRU throughout its history. Support from HRC has been obtained via a competitive peer reviewed programme grant. IPRU is entirely reliant on research ("soft") funding money for its existence. IPRU has recently (2007) secured a new HRC programme grant and new core contract from ACC. For the period 2004-2006 inclusive, IPRU had 44 research contracts, involving 25 clients, worth over $8m in income.

The current staffing levels are: 1 Professor, 2 Associate Professors, 3 Senior Research Fellows, 8 Research Fellows, 13 Assistant Research Fellows, 22 Research Assistants (mainly part-time in the field). Disciplines covered by these staff include: epidemiology, biostatistics, data management and programming, behavioural science, biomechanics, disability, and health services.

http://www.otago.ac.nz/ipru/

Dunedin Multidisciplinary Health and Development Research Unit
The Dunedin Multidisciplinary Health and Development Study (DMHDS) began when 1037 babies born between 1 April 1972 and 31 March 1973 were followed up at the age of three. Since then, they have been assessed at 5, 7, 9, 11, 13, 15, 18, 21, 26, and most recently in 2003-5 at the age of 32. During an assessment phase, Study Members come back to Dunedin from all over the world and participate in a variety of tests, surveys, and interviews.

The main research focus of the DMHDRU is human development over the life course. Other studies include parents of the original Study Members (Family Health History Study), parenting behaviours of Study Members (Parenting Study), and will include children of Study Members (Next Generation Study). The research will provide ground-breaking information across three generations of the same families.

The HRC has provided core support for the DMHDS throughout its history. In addition, various assessment phases of the DMHDS have also received funds from multiple branches of the National Institutes of Health (USA), and more recently from the British Medical Research Council.

In the last five years, income from competitive programme grants has totaled approximately NZ $10 million. DMHDRU has most recently been awarded new grants from the British Medical Research Council for Phase 38, and the American National Institute of Mental Health for a collaborative project to discover "gene x environment interactions" involving the DMHDRU, Christchurch Health and Development Studies, and two British cohorts. In addition, the American National Institute for Dental and Craniofacial Research appears likely to award Professor Murray Thomson new money for oral health work.

Approximately a dozen researchers currently work within DMHDRU and approximately 20 investigators are located off-site, both within New Zealand and internationally. Areas of expertise beyond those mentioned above include longitudinal research methodology, epidemiology, psychology, science communication and translational research, and project management. At any one time, approximately 6 PhD students are being trained by DMHDRU investigators, with two to three times that number of Masters (or equivalent) students.

http://dunedinstudy.otago.ac.nz/
Hugh Adam Cancer Epidemiology Unit
The Hugh Adam Cancer Epidemiology Unit has been based in the Department of Preventive and Social Medicine since 1987.

The goal of the Hugh Adam Cancer Epidemiology Unit is to conduct high quality research into the causes, impact, burden and consequences of cancer with a particular focus on the causes and consequences of cancer in New Zealand. The HACEU is involved in several national and international studies of the causes, impact, burden and consequences of cancer as well as assessments of cancer incidence, mortality and survival in New Zealand. Many projects involve other members of staff of the department and unit staff are also co-investigators for cancer research initiated by other members of the Department.

The current staffing levels are: 1 Associate Professor (medical), 1 Research Fellow (medical), 1 Study Administrator, 1 Interviewer, and 1 Secretary. Professor Ann Richardson of the Department of General Practice and Public Health, Otago University Christchurch is an honorary member of the Unit. Staff of the Unit also currently supervise 2 PhD students and 2 Masters students. The disciplines covered by the staff include: medical epidemiology, biostatistics, public health medicine and cancer screening.

http://www.otago.ac.nz/research/centres/res_cen_hughadam.html

Hauora Māori – The Ngāi Tahu Māori Health Research Unit
Rangahau hauora Māori (Māori health research) has been a very important part of the research portfolio of the Department. It has occurred in the main in two distinct thrusts: firstly, that research undertaken by the Ngāi Tahu Māori Health Research Unit which is a research unit within the Department; and secondly, as an aspect of research undertaken by other research units or researchers within the Department.

The Ngāi Tahu Māori Health Research Unit was established in 1995 as result of a partnership between the Faculty of Medicine and the then Ngāi Tahu Development Corporation. The Ngā Tahu Development Corporation provided funding for the new research unit to support the position of a Māori health research fellow for 6 years. The Department provided the office facilities. An establishment grant of $250,000 was provided by the HRC, which provided for the establishment of a further research fellow for three years. The Director of the Unit was a full-time academic staff member. The goal of the Ngā Tahu Māori Health Research Unit is to contribute to the body of knowledge on Māori health that will lead to positive health outcomes for Māori and their whānau.

The current staffing levels are: 1 Associate Professor and 2 Senior Research Fellows. Disciplines covered by these staff include: epidemiology, mental health, injury prevention, oral health and the Māori health component of the Dunedin Multidisciplinary Health and Development Study.

http://www.otago.ac.nz/research/centres/res_cen_maorihealth.html

AIDS Epidemiology Group
The AIDS Epidemiology Group was established within the Department in 1989 by Professors David Skegg and Charlotte Paul. Since that time it has been funded through the Ministry of Health to undertake national surveillance of HIV infection and AIDS. Dr Nigel Dickson has worked with the Group since 1990 and in recent years has been the Director. Other members of the Group are Ms Sue McAllister (Research Assistant), Professor Charlotte Paul (Epidemiologist) and Dr Katrina Sharples (Biostatistician).

The main role of the Group has been to develop, and when appropriate continue to apply, appropriate methods to monitor the epidemic of HIV/AIDS in New Zealand. Consequently, over the years it has had a dual role in surveillance research and service in the area of HIV/AIDS.
Social and Behavioural Research Cancer Unit

The Department’s research on social and behavioural aspects of cancer is focused in the Social and Behavioural Research in Cancer Unit (SBRCU).

The SBRCU was established in 1990 (Professor Ellwood and A/Prof McGee) through funding from the Cancer Society of New Zealand Inc. (CSNZ). Since 1998, Dr Tony Reeder has been responsible for day-to-day leadership, with Associate Professor McGee as co-investigator. A 2007 external review produced very positive findings about research quality and productivity relative to staff size.

The Cancer Society has provided core support since 1990, supplemented by commissioned research and researcher-initiated competitive grant applications. The SBRCU depends entirely on grant funding for its survival. SBRCU research has been funded by a range of agencies including the CSNZ, HRC, Health Sponsorship Council, Ministry of Health and Lottery Health. As stated in the Strategic Plan, the SBRCU goal is “to continue to be the leading group in social and behavioural research in cancer prevention and control in New Zealand.”

The current staffing is: 1 Associate Professor, 1 Senior Research Fellow, 2 Post-doctoral Fellows, 1 Assistant Research Fellow and 1 Research Support Staff. Projects also involve Departmental staff who are not SBRCU members, as well as postgraduate students and external collaborators. Disciplines covered by these staff include health promotion, behavioural science, cancer prevention, physical activity, tobacco control, solar ultraviolet radiation (UVR) research (including skin cancer control and vitamin D) and issues around spirituality. The current programme of research and a complete list of all staff and postgraduate students, publications and other outputs is available from:

http://www.otago.ac.nz/sbrcg

New Zealand Pharmacovigilance Centre (NZPhvC)

In 1965 New Zealand implemented a national medicines surveillance scheme based in the University of Otago, in the Department of Pharmacology. This centre became one of the founding members of the World Health Organisation (WHO) International Drug Monitoring Programme when it was established in 1968.

In 2002 the Centre for Adverse Reactions Monitoring (CARM), which is the national spontaneous reporting programme established in 1965, was renamed the New Zealand Pharmacovigilance Centre, in order to better reflect the type of work undertaken. The Intensive Vaccine Monitoring Programme (IVMP) was developed in 2003 to monitor the safety of the vaccine (MeNZB™) during roll out of the national Meningococcal B Immunisation Programme from 2004. All three programmes actively collect data relating to the usage and safety of medicines in NZ.

The NZPhvC receives the majority of its funding from the Ministry of Health and works under contract to Medsafe (the medicines regulator in NZ) primarily to provide pharmacosurveillance through the CARM programme and specific projects under the IMMP. The IMMP has received additional unconditional donations from various sources including pharmaceutical companies. The current staffing levels in the NZPhvC are 3 Senior Research Fellows, 3 Research Fellows, 8 General staff.

http://carm.otago.ac.nz/index.asp?link=carm

National Poisons Centre

The National Poisons Centre (NPC) was established at the University of Otago in 1964. Funded under contracts with the Ministry of Health and the ACC, it delivers an important national health service. The NPC operates a 24 hour free phone advice line for the management of poisonings. Currently it handles about 32,000 calls per year. The centre also maintains web based databases for the management of poisonings (TOXINZ www.toxinz.com), an antidote database (NZOAD www.antidote.co.nz) and a poisoning prevention website (www.poisons.co.nz) which was launched last year by the Minister of Health.

The NPC provides NZ specific advice to government agencies including the Prime Minister’s office, Ministry of Health, ERMA, Police, Department of Labour, Fire Service, Commerce Commission, Defence Force, Civil Defence, Coroner’s office and Food Safety Authority. Locally staff of the NPC are members of the Hazardous Substances Technical Liaison Committee and Emergency Services Executive Coordinating Committee.
Internationally, the NPC is a participant in the WHO International Programme on Chemical Safety INTOX programme. INTOX is a network of global poison centres. The primary role of this group is to contribute relevant expertise and experience in the preparation and review of poisons information monographs (PIMs), the establishment of methodologies for recording case data and compiling files on local products and the strengthening of poison information centres worldwide. There are currently 14 staff in the NPC.


New development: Centre for International Health

A McAuley Chair in International Health has just been established through the Leading Thinkers Initiative and the Sisters of Mercy. A steering group and reference group have been set up to support the Chair and the Centre. The Ministry of Health has contracted with the Department to establish a fixed-term position to provide advice to the Ministry during the term of New Zealand’s membership of the Executive Board of the World Health Organization (until 2010).

Staff

<table>
<thead>
<tr>
<th>A/P Rob McGee</th>
<th>Associate Professor and Head of Department</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor John Langley</td>
<td>Professor</td>
</tr>
<tr>
<td>Professor Margaret McCredie</td>
<td>Research Associate Professor</td>
</tr>
<tr>
<td>Professor Charlotte Paul</td>
<td>Professor</td>
</tr>
<tr>
<td>Professor Richie Poulton</td>
<td>Research Professor</td>
</tr>
<tr>
<td>A/P John Broughton</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>A/P David Chalmers</td>
<td>Research Associate Professor</td>
</tr>
<tr>
<td>A/P Colin Cryer</td>
<td>Research Associate Professor</td>
</tr>
<tr>
<td>A/P Brian Cox</td>
<td>Research Associate Professor</td>
</tr>
<tr>
<td>A/P Robin Gauld</td>
<td>Associate Professor</td>
</tr>
<tr>
<td>A/P Peter Herbison</td>
<td>Research Associate Professor</td>
</tr>
<tr>
<td>A/P Sheila Williams</td>
<td>Research Associate Professor</td>
</tr>
<tr>
<td>Dr Jo Baxter</td>
<td>Senior Research Fellow</td>
</tr>
<tr>
<td>Dr Dorothy Begg</td>
<td>Senior Research Fellow</td>
</tr>
<tr>
<td>Dr Melanie Bell</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Nigel Dickson</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr John Dockerty</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Hilda Firth</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Bob Hancox</td>
<td>Senior Research Fellow</td>
</tr>
<tr>
<td>Dr Mira Harrison-Woollych</td>
<td>Senior Research Fellow</td>
</tr>
<tr>
<td>Dr Geraldine Hill</td>
<td>Senior Research Fellow</td>
</tr>
<tr>
<td>Dr Rachael MacLean</td>
<td>Senior Research Fellow</td>
</tr>
<tr>
<td>Dr David McBride</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Shyamala Nada-Raja</td>
<td>Senior Research Fellow</td>
</tr>
<tr>
<td>Dr Martin Pollock</td>
<td>Senior Research Fellow</td>
</tr>
<tr>
<td>Dr Patricia Priest</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Tony Reeder</td>
<td>Senior Research Fellow</td>
</tr>
<tr>
<td>Dr Ruth Savage</td>
<td>Senior Research Fellow</td>
</tr>
<tr>
<td>Dr Katrina Sharples</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Tai Sopoaga</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Michael Tatley</td>
<td>Senior Research Fellow</td>
</tr>
<tr>
<td>Dr Michael Beasley</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Dr Peter Davidson</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Dr Sarah Derrett</td>
<td>Lecturer</td>
</tr>
<tr>
<td>Mr Andrew Gray</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Dr Vicki Livingstone</td>
<td>Lecturer</td>
</tr>
<tr>
<td>Dr Lianne Parkin</td>
<td>Lecturer</td>
</tr>
<tr>
<td>Ms Jean Simpson</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Dr Mary Sneyd</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Dr David Welch</td>
<td>Research Fellow</td>
</tr>
<tr>
<td>Dr Heather Walker</td>
<td>Research Fellow</td>
</tr>
</tbody>
</table>
## External Research Grants

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Professor Richie Poulton</td>
<td>Development of risk for chronic diseases: A longitudinal multidisciplinary study</td>
<td>HRC Programme Extension</td>
<td>$3,890,261</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Shyamala Nada-Raja</td>
<td>An internet based CBT self-help for depression: a randomised controlled trial</td>
<td>HRC – Project</td>
<td>$1,222,946</td>
</tr>
<tr>
<td>2006</td>
<td>A/Prof Colin Cryer</td>
<td>Effective occupational health interventions in agriculture: Key characteristics of their development and implementation in New Zealand</td>
<td>HRC Partnership Programme</td>
<td>$392,884</td>
</tr>
<tr>
<td>2006</td>
<td>Ms Rebecca Lilley</td>
<td>Determinants of occupational injury and disease</td>
<td>HRC/ACC joint Ph.D Scholarship</td>
<td>$264,532</td>
</tr>
<tr>
<td>2006</td>
<td>Ms Jean C Simpson</td>
<td>A brief child safety intervention: Reducing Injury Among the Under 5s</td>
<td>ACC</td>
<td>$247,460</td>
</tr>
<tr>
<td>2006</td>
<td>Dr David I McBride</td>
<td>An international cross cultural survey of musculoskeletal disorders and causes of disability</td>
<td>HRC International Investment Opportunities Fund</td>
<td>$183,458</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Dorothy Begg</td>
<td>New Zealand Drivers Study: A follow-up study of newly licensed drivers</td>
<td>Road Safety Trust</td>
<td>$399,999</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Dorothy Begg</td>
<td>New Zealand Drivers Study: a follow-up of newly licensed drivers</td>
<td>HRC – Project</td>
<td>$365,107</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Shyamala Nada-Raja</td>
<td>A longitudinal study of risk and protective factors for gambling and pathological gambling: analyses and writing up phases</td>
<td>HRC Miscellaneous</td>
<td>$231,675</td>
</tr>
<tr>
<td>2005</td>
<td>Ms Gabrielle Davie</td>
<td>Improvements in the validity of ICD based Injury Severity Scores (ICISS) on which NZIPS official indicators are based</td>
<td>Statistics New Zealand Project</td>
<td>$70,537</td>
</tr>
<tr>
<td>2004</td>
<td>Professor John D Langley</td>
<td>Injury Prevention Research</td>
<td>HRC Programme Extension</td>
<td>$2,456,999</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Dorothy Begg</td>
<td>New Zealand Drivers Study: A follow-up study of newly licensed drivers</td>
<td>ACC</td>
<td>$599,990</td>
</tr>
<tr>
<td>2004</td>
<td>Dr David J Chalmers</td>
<td>Identification of risk factors for non-submersion swimming injury</td>
<td>ACC</td>
<td>$504,435</td>
</tr>
<tr>
<td>2004</td>
<td>Ms Jean C Simpson</td>
<td>A brief child safety intervention: reducing injury among under 5s</td>
<td>ACC</td>
<td>$439,707</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Anthony I Reeder</td>
<td>Measurement and mitigation of solar ultraviolet radiation exposure of school children</td>
<td>Cancer Society Project</td>
<td>$168,364</td>
</tr>
<tr>
<td>2004</td>
<td>Professor John D Langley</td>
<td>Prospective Injury Outcomes Study (PIOs): Development Phase</td>
<td>HRC Strategic Development</td>
<td>$121,107</td>
</tr>
<tr>
<td>Year</td>
<td>Name</td>
<td>Project Description</td>
<td>Funding Agency</td>
<td>Amount</td>
</tr>
<tr>
<td>------</td>
<td>-----------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>-------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>2004</td>
<td>Professor John D Langley</td>
<td>National all cause mortality and hospitalisation injury databases Programme</td>
<td>ACC</td>
<td>$115,942</td>
</tr>
<tr>
<td>2004</td>
<td>Professor John D Langley</td>
<td>Identification of modifiable environmental factors to reduce community alcohol-related harm</td>
<td>HRC/ACC joint Ph.D Scholarship</td>
<td>$85,000</td>
</tr>
<tr>
<td>2004</td>
<td>Dr David J Chalmers</td>
<td>Monitoring national sport and recreational injury data; especially aquatic injury data</td>
<td>ACC</td>
<td>$70,443</td>
</tr>
<tr>
<td>2004</td>
<td>Professor John D Langley</td>
<td>ACC emerging injury issues and strategic advice</td>
<td>ACC</td>
<td>$69,478</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Peter L Davidson</td>
<td>Biomechanical analysis of the rebound aspect of playground surfaces</td>
<td>HRC – Project</td>
<td>$67,838</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Richie Poulton</td>
<td>DNA Collection in the Christchurch Health &amp; Development Study</td>
<td>James Hume Bequest Fund</td>
<td>$55,249</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Hilda M Firth</td>
<td>Work-related determinants of health, safety and well-being of New Zealand workers</td>
<td>HRC/ACC joint Ph.D Scholarship</td>
<td>$55,000</td>
</tr>
<tr>
<td>2003</td>
<td>Professor Richie Poulton</td>
<td>Development of risk for chronic diseases: a longitudinal multidisciplinary study</td>
<td>HRC Programme</td>
<td>$3,536,601</td>
</tr>
<tr>
<td>2003</td>
<td>Dr Shyamala Nada-Raja</td>
<td>Protective factors for self-harm</td>
<td>HRC – Project</td>
<td>$548,030</td>
</tr>
<tr>
<td>2003</td>
<td>Professor John D Langley</td>
<td>Epidemiology of work-related slip, trip and fall injuries</td>
<td>HRC Tender</td>
<td>$100,434</td>
</tr>
<tr>
<td>2003</td>
<td>Professor John D Langley</td>
<td>Evaluating the impact of the FarmSafe Programme on the safety culture of Farming</td>
<td>ACC – Career Development Award</td>
<td>$50,000</td>
</tr>
<tr>
<td>2002</td>
<td>Dr Anthony I Reeder</td>
<td>Core funding Social and behavioural research in cancer group (SBG)</td>
<td>Cancer Society Project</td>
<td>$592,248</td>
</tr>
<tr>
<td>2002</td>
<td>Professor John D Langley</td>
<td>Hazardous drinking early intervention project (EIP)</td>
<td>Alcohol &amp; Liquor Advisory Council Research</td>
<td>$276,510</td>
</tr>
<tr>
<td>2002</td>
<td>Professor Richie Poulton</td>
<td>Dunedin Family Health Study (Lifecourse persistent antisocial behaviour)</td>
<td>Kings College London</td>
<td>$242,000</td>
</tr>
<tr>
<td>2002</td>
<td>Professor Richie Poulton</td>
<td>Dunedin Family Health Study (Major mental disorders from childhood to adulthood)</td>
<td>University of Wisconsin</td>
<td>$200,000</td>
</tr>
<tr>
<td>2002</td>
<td>Dr D Coulter</td>
<td>NZ adverse effect monitoring programme</td>
<td>Merck (USA)</td>
<td>$136,054</td>
</tr>
<tr>
<td>2002</td>
<td>Professor DCG Skegg</td>
<td>CJD Register</td>
<td>Ministry of Health</td>
<td>$69,954</td>
</tr>
</tbody>
</table>

Total: $18,334,678

Combined 2002-2006 income for all grants ≤ $50,000: $460,555

Grand Total: $18,795,223
## Research Contracts

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Contractor</th>
<th>Organisation</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-06</td>
<td>Dr Dorothy Jean Begg</td>
<td>Accident Compensation Corporation</td>
<td>$13,117,620</td>
</tr>
<tr>
<td></td>
<td>Dr David J Chalmers</td>
<td>Alcohol Advisory Council of New Zealand</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dr David Coulter</td>
<td>Dow Chemical Company</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Associate Professor Brian Cox</td>
<td>Hunter Area Health Service</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Associate Professor Colin Cryer</td>
<td>Ministry of Health</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dr Peter L Davidson</td>
<td>Health</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dr Nigel P Dickson</td>
<td>New Zealand Defence Force</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Professor John D Langley</td>
<td>New Zealand Rugby Football Union</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dr David I McBride</td>
<td>NZ Police</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Professor Charlotte Paul</td>
<td>Pacific Institute for Research and Evaluation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A/Professor Martin Pollock</td>
<td>Statistics New Zealand</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Professor Richie Poulton</td>
<td>University of Wisconsin</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ms Jean C Simpson</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dr Faafetia Sopoaga</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dr Michael Vincent Tatley</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dr Wayne A Temple</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Combined 2002-2006 income for all grants ≤ $50,000 $190,936
Grand Total $13,308,556

## Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>10</td>
<td>11</td>
<td>11</td>
<td>13</td>
<td>13</td>
</tr>
<tr>
<td>MHealSc (endorsed in OH)</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>MHealSc (endorsed in HM)</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Master of Public Health</td>
<td>9</td>
<td>5</td>
<td>7</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>Total Masters</td>
<td>12</td>
<td>7</td>
<td>9</td>
<td>12</td>
<td>16</td>
</tr>
</tbody>
</table>

* as at 1 June each year

## Publications

### Author Book


**Edited Book**

**Chapter in Book**

**Journal Article**


Hodson, L., Skeaff, C. M., & McKenzie, J. E. Maximal response to a plasma cholesterol-lowering diet is achieved within two weeks. Nutrition, Metabolism and Cardiovascular Diseases 12:291-295 (2002).


Jopson JA, Reeder AI. (2006). Are NZ Primary Schools SunSmart? A Baseline study prior to the implementation of the National SunSmart Schools Accreditation Programme. A report to the Cancer Society of New Zealand, (36p + appendices).


Video


Submissions


McGee R, Reeder AI. Submission to the Ministry of Health regarding pictorial warnings, 13 June 2006.


Fact Sheet

Stephenson, S. C. R., & Langley, J. D. Reliability of hospital inpatient injury coding [IPRU Fact Sheet 34].


Trotter, M. I., Casey, D. M. Self-harm by poisoning [IPRU, University of Otago: Dunedin, New Zealand, Fact Sheet 33].


DEPARTMENT OF PSYCHOLOGICAL MEDICINE

The Department of Psychological Medicine consists of the two main units of Clinical Psychiatry and Behavioural Science. Both units are involved in a variety of clinically relevant research areas, including self-harm and suicide, delusions, schizophrenia, community mental health epidemiology, anxiety and depression, substance misuse and addictions, sexual health and HIV, primary care interventions, communication and consultation skills, gender, religion and mental health, cognitive processes, behavioural aspects of physical health, child abuse, exploration of developmentally appropriate techniques for gathering information from children, and child therapies. The Department has close ties with the Dunedin Multidisciplinary Health and Development Research Unit.


Staff

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>A/P Oliver Davidson</td>
<td>Associate Professor and Head of Department</td>
</tr>
<tr>
<td>Dr Keren Skegg</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Gavin Cape</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Christopher Gale</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Richard Mullen</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Nicola Swain-Campbell</td>
<td>Senior Lecturer</td>
</tr>
<tr>
<td>Dr Annette Hannah</td>
<td>Lecturer</td>
</tr>
<tr>
<td>Dr Jane Millichamp</td>
<td>Lecturer</td>
</tr>
<tr>
<td>Dr Tess Patterson</td>
<td>Lecturer</td>
</tr>
<tr>
<td>Dr Judy Trevena</td>
<td>Lecturer</td>
</tr>
<tr>
<td>Plus 11 Clinical Lecturers</td>
<td></td>
</tr>
</tbody>
</table>

External Research Grants

<table>
<thead>
<tr>
<th>Total $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined 2002-2006 income for all grants ≤ $50,000 $9,777</td>
</tr>
</tbody>
</table>

Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Masters</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

*as at 1 June each year

Publications

Book

Edited Book

Chapter in Book


**Journal Article**


DEPARTMENT OF WOMEN’S AND CHILDREN’S HEALTH
The Department of Women’s and Children’s Health comprises the Section of Obstetrics and Gynaecology and the Section of Paediatrics.

The Section of Obstetrics and Gynaecology has a strong research focus, specifically, infertility, urogynaecology, diabetes in pregnancy, gynaecological oncology, laparoscopy and microsurgery audit, decision analysis, quality assurance, ovarian ultrastructure and biology, and management of high-risk pregnancy and prenatal diagnosis. In recent years funding has been received to co-ordinate national and international multi-centre studies, and staff members are involved with secondary research in urogynaecology, and with the Cochrane Urinary and Faecal Incontinence Review Group.

http://dnmeds.otago.ac.nz/departments/womens/obstetrics/index.html

The Section of Paediatrics also has a strong research focus, with areas of particular strength including sudden infant death syndrome, asthma, sleep related breathing disorders, the National Mortality Review for Children, genetics of congenital malformations, neonatal and paediatric endocrinology, and ethics and clinical genetics.

http://dnmeds.otago.ac.nz/departments/womens/paediatrics/index.html

Staff
Professor Barry Taylor
Professor and Head of Department

Obstetrics and Gynaecology
Professor Don Wilson
Professor and Head of Section
A/P Wayne Gillett
Associate Professor
Dr Dawn Miller
Senior Lecturer
Plus 7 Clinical Senior Lecturers

Paediatrics and Child Health
Professor Barry Taylor
Professor and Head of Section
Professor Stephen Robertson
Professor
Dr Roland Broadbent
Senior Lecturer
Dr Barbara Galland
Senior Research Fellow
Dr David Reith
Senior Lecturer
Dr Zandra Jenkins
Research Fellow
## External Research Grants

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Professor Stephen Robertson</td>
<td>Lessons from rarities: The role of filamins in human development</td>
<td>Marsden Fund</td>
<td>$763,553</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Barry Taylor</td>
<td>The FLAME Study (Family Lifestyle, Activity, Movement and Eating): Identifying modifiable factors in the development of childhood obesity</td>
<td>Child Health Research Foundation</td>
<td>$100,002</td>
</tr>
<tr>
<td>2006</td>
<td>Ms Catherine Sherwin</td>
<td>Investigation into the diagnosis of neonatal sepsis and improvement of treatment utilizing the pharmacokinosis</td>
<td>Freemason’s Postgraduate Fellowship (Grand Lodge)</td>
<td>$59,860</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Barry Taylor</td>
<td>FLAME Study (Family Lifestyle Activity Movement and Eating)</td>
<td>Caversham Foundation</td>
<td>$50,573</td>
</tr>
<tr>
<td>2005</td>
<td>Professor Stephen Robertson</td>
<td>Genes and malformations in children</td>
<td>Child Health Research Foundation</td>
<td>$210,000</td>
</tr>
<tr>
<td>2005</td>
<td>Professor Barry Taylor</td>
<td>The FLAME Study: identifying risk factors for obesity development in children</td>
<td>National Heart Foundation</td>
<td>$132,102</td>
</tr>
<tr>
<td>2005</td>
<td>Professor Stephen Robertson</td>
<td>How does the cytoskeleton regulate cell signalling during morphogenesis? (Marsden subcontract)</td>
<td>Massey University</td>
<td>$83,616</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Barry Taylor</td>
<td>The FLAME Study (Family Lifestyle Activity Movement and Eating)</td>
<td>Child Health Research Foundation</td>
<td>$97,079</td>
</tr>
<tr>
<td>2003</td>
<td>Professor Stephen Robertson</td>
<td>Chair of Child Health Research</td>
<td>National Child Health Research Foundation</td>
<td>$561,000</td>
</tr>
<tr>
<td>2002</td>
<td>Professor Stephen Robertson</td>
<td>Purchase of a WAVE Nucleic Acid Fragment Analysis System.</td>
<td>Lottery Health Research</td>
<td>$60,000</td>
</tr>
</tbody>
</table>

**Total** $2,117,785

**Combined 2002-2006 income for all grants ≤ $50,000** $215,568

**Grand Total** $2,333,353

## Research Contracts

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Contractor</th>
<th>Organisation</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-06</td>
<td>Professor Barry J Taylor&lt;br&gt;Professor P Donald Wilson</td>
<td>Melbourne Health, Royal Melbourne Hospital Ministry of Health Pharmacia</td>
<td>$1,426,260</td>
</tr>
</tbody>
</table>

**Grand Total** $1,426,260
Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td></td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Masters</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

*as at 1 June each year

Publications

*Obstetrics and Gynaecology*

**Chapter in Book**


**Journal Article**


**Paediatrics**

**Chapter in Book**


Journal Article


**Annual report**

UNIVERSITY OF OTAGO WELLINGTON

DEPARTMENT OF MEDICAL RADIATION THERAPY

The Department of Medical Radiation Therapy has one established research area in cancer cell biology involving development and testing of anti-cancer drugs in conjunction with the Malaghan Institute of Medical Research.

The Department is further developing research in the following areas:

- Psycho-oncology – investigations into the psychosocial impact of cancer and its treatments.
- Role extensions of radiation therapists
- Mentoring programmes for practitioners and students
- Effective communication for radiation therapists

http://www.wnmeds.ac.nz/academic/radiationtherapy/index.html

Staff

Ms Karen Coleman  Head of Department
Ms Gay Dungey  Lecturer
Dr Patries Herst  Lecturer
Ms Hazel Neser  Lecturer

Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*as at 1 June each year

Publications

Authored Book

Journal Article
Herst, P. M., & Berridge, M.V. (2006). Cell surface oxygen consumption; A major contributor to cellular oxygen consumption in glycolytic cancer cell lines. Biochimica et Biophysica Acta (Bioenergetics), epub, December, IF 4.3.
DEPARTMENT OF MEDICINE

The Department of Medicine is active in many areas of medical research including disease mechanisms, new treatments and clinical trials of treatments. The Department comprises three major research groups:

Bioactivity Investigation Group (BIG)
This Group provides specialist scientific expertise and methodologies to assist industry and researchers to identify, characterise, evaluate and develop natural health and pharmaceutical products for human and animal health.

http://www.wnmeds.ac.nz/academic/Med/Big/index.html

Rehabilitation, Teaching and Research Unit (RTRU)
The RTRU conducts research into the process and outcomes of rehabilitation. Specific interests of staff include rehabilitation research on various problems including continence, chronic pain, lower back pain, multiple sclerosis, rheumatic disorders, schizophrenia, stroke, spinal cord injury and Parkinson's Disease.


Wellington Asthma Research group (WARG)
WARG's research programme covers clinical, biomedical and public health aspects of asthma research, including studies to understand the causes of asthma and also the study of novel treatments. The objectives of the Group centre on identifying the causes of asthma, the factors that determine severity, and the development of strategies for prevention and improved management. Funding for WARG's research comes from a wide variety of sources, with core funding provided by the Health Research Council of New Zealand.


Staff
Professor Carl Burgess  Professor and Head of Department
Professor Julian Crane  Professor
A/P Stewart Mann  Associate Professor
A/P Richard Siegert  Associate Professor
A/P Mark Weatherall  Associate Professor
Dr David Abernethy  Senior Lecturer
Dr Angela Campbell  Senior Lecturer
Dr Paul Davis  Senior Research Fellow
Dr Sarah Dean  Senior Lecturer
Dr John Delahunt  Senior Lecturer
Dr Robin Griffiths  Senior Lecturer
Dr Andrew Harrison  Senior Lecturer
Dr Sam Islam  Senior Lecturer
Dr Lissa Judd  Senior Lecturer
Dr Jeremy Krebs  Clinical Senior Lecturer
Dr Joanna MacDonald  Senior Lecturer
Dr Alison Masters  Clinical Senior Lecturer
Dr Alister Neill  Senior Lecturer
Dr Michael Nowitz  Senior Lecturer
Dr Kate Scott  Senior Lecturer
Mr Robert Siebers  Senior Lecturer
Dr Nigel Stace  Senior Lecturer
Dr Iwona Stolarek  Senior Lecturer
Dr William Taylor  Senior Lecturer
Dr Michael Tweed  Senior Lecturer
Dr Kristin Wickens  Senior Lecturer
Ms Julie Burgess-Manning  Lecturer
Dr Nicholas Greenhill  Research Fellow
### External Research Grants

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Dr Jeremy Krebs</td>
<td>Diabetes Excess Weight Loss (DEWL) Trial: High-protein vs Low-fat Diets</td>
<td>HRC – Project</td>
<td>$1,461,280</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Julian Crane</td>
<td>A pilot study for a national environment intervention in childhood asthma</td>
<td>HRC – Project</td>
<td>$304,235</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Robert Siebers</td>
<td>Early Life fungi biomass exposure and development of allergic diseases</td>
<td>HRC – Project</td>
<td>$108,367</td>
</tr>
<tr>
<td>2005</td>
<td>Professor Julian Crane</td>
<td>A pilot study of inhaled nicotine delivery in smokers</td>
<td>HRC – Project</td>
<td>$85,798</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Julian Crane</td>
<td>Peptidoglycan exposure in the home and wheezing in the infant cohort study</td>
<td>HRC – Project</td>
<td>$113,010</td>
</tr>
<tr>
<td>2003</td>
<td>Professor Julian Crane</td>
<td>Exhaled Nitric oxide and the diagnosis of asthma at age 6 in the infant cohort study</td>
<td>Lottery Health Research</td>
<td>$69,719</td>
</tr>
<tr>
<td>2003</td>
<td>Ms Sue E Lord</td>
<td>Community ambulation following a stroke – a comparison of two exercise approaches</td>
<td>Lottery Health Research</td>
<td>$53,694</td>
</tr>
</tbody>
</table>

**Total** $2,196,103

**Combined 2002-2006 income for all grants ≤ $50,000** $397,679

**Grand Total** $2,593,782
Research Contracts

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Contractor</th>
<th>Organisation</th>
<th>Total $ Approved</th>
</tr>
</thead>
</table>
| 2002-06       | Professor Julian Crane  
                Dr Paul F Davis  
                Dr Alister McKenzie Neill  
                A/Professor Richard J Siegert | AgResearch  
                        American Biologics Japan Ltd  
                        Amino Up Chemical Co Ltd  
                        Aotea Pacific Ltd  
                        Bio-Mer Limited  
                        Capital & Coast District Health Disorders Unit  
                        Capital and Coast District Health Board  
                        Comvita New Zealand Ltd  
                        DWT Limited  
                        Fifeshire Marketing Co  
                        Fonterra Cooperative Dairy Company Ltd  
                        Fonterra Research Centre Ltd  
                        Forest Herbs Research Ltd  
                        Health Research Council of NZ  
                        HortResearch  
                        Immuno Research Ltd  
                        Industrial Research Ltd  
                        LactoPharma  
                        Meat Biologics Limited  
                        New Zealand Guidelines Group Inc  
                        Respironics Inc  
                        Sylvan Health Pty Ltd  
                        University of Waikato | $5,550,613 |

Combined 2002-2006 income for all contracts ≤ $20,000 $173,786
Grand Total $5,724,399

Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>4</td>
<td>5</td>
<td>7</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Masters†</td>
<td>20</td>
<td>19</td>
<td>14</td>
<td>14</td>
<td>9</td>
</tr>
</tbody>
</table>

*as at 1 June each year
†thesis or dissertation students only

Publications

Chapter in Book


Journal Article


Siebers, R. W. L. (2003). Citation of articles from the NZ Journal of Medical Laboratory Science in international biomedical journals. *New Zealand Journal of Medical Laboratory Science, 72*.


The FIELD Study Investigators, & including Mann, S. (2004). The need for a large-scale trial of fibrate therapy in diabetes: The rationale and design of the Fenofibrate Intervention and Event Lowering in Diabetes (FIELD) study. Cardiovascular Diabetology, 3(9). http://www.cardiab.com/content/3/1/9


**Commissioned Report for External Body**


**Submission to Ministry of Health**


---

276
DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY

Research interests in the Department of Obstetrics and Gynaecology are varied and include renal dysphagia, hydro nephrosis, prenatal diagnosis and therapy, endometriosis, incontinence following delivery, perinatal outcomes following caesarian, fertility, assisted reproductive techniques, perinatal pathology, and sudden infant death syndrome.

http://www.wnmeds.ac.nz/academic/OandG/index.html

Staff
Professor Kevin Pringle  Professor and Head of Department
Professor John Hutton  Professor
Dr Fali Langdana  Senior Lecturer
Dr Dean Maharaj  Senior Lecturer
Dr Andrew Murray Senior Research Fellow
Dr Hong Soo Wong  Senior Lecturer
Dr Jane Zuccollo  Senior Lecturer
Plus 3 Clinical Senior Lecturers

External Research Grants

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>Professor Kevin Pringle</td>
<td>Obstructive uropathy in fetal lambs</td>
<td>St Mariana University Japan</td>
<td>$69,267</td>
</tr>
</tbody>
</table>

Total $69,267

Combined 2002-2006 income for all grants ≤ $50,000

Grand Total $74,267

Publications

Chapter in Book


Journal Article


DEPARTMENT OF PAEDIATRICS AND CHILD HEALTH

The members of the Department of Paediatrics and Child Health are committed to conducting high quality research into common and important childhood diseases and to ensure the knowledge gained is translated into improved adolescent and child health outcomes.

Current research focuses on paediatric infectious disease, cystic fibrosis, bronchiectasis, vascular complications of diabetes, hypoglycaemia, sleep deprived EEGs and childhood epilepsy, respiratory control in newborn babies and preterm infants, sexual assault, childhood asthma and the influence of probiotics upon gut permeability and the development of eczema.

http://www.wnmeds.ac.nz/academic/paediatrics/index.html

Staff
Dr Thorsten Stanley  Senior Lecturer and Acting Head of Department
Professor Keith Grimwood  Professor
Dr Dawn Elder  Senior Lecturer
Dr Lynette Sadlier  Senior Lecturer
Dr Esko Wiltshire  Senior Lecturer

External Research Grants

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Prof Keith Grimwood</td>
<td>Regulation of immunity and immune-mediated diseases.</td>
<td>HRC Programme Extension</td>
<td>$3,493,763</td>
</tr>
<tr>
<td>2006</td>
<td>Prof Keith Grimwood</td>
<td>Risk-targeted study of avian influenza zoonosis.</td>
<td>Institute of Environmental Science and Research (ESR) and Ministry of Agriculture and Forestry (subcontract)</td>
<td>$314,000</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Thorsten V Stanley</td>
<td>A pilot study for a national environmental intervention in childhood asthma</td>
<td>HRC</td>
<td>$ 304,235</td>
</tr>
<tr>
<td>2006</td>
<td>Prof Keith Grimwood</td>
<td>Exploring serum antibodies for the early detection of P. aeruginosa in cystic fibrosis</td>
<td>Australian Cystic Fibrosis Research Trust</td>
<td>$90,190</td>
</tr>
<tr>
<td>2006</td>
<td>Prof Keith Grimwood</td>
<td>P. aeruginosa in cystic fibrosis: determinants of acquisition, virulence and persistence</td>
<td>Australian Cystic Fibrosis Research Trust</td>
<td>$89,386</td>
</tr>
<tr>
<td>2005</td>
<td>Prof Keith Grimwood</td>
<td>A multi-centre, randomised, controlled trial of BAL directed therapy in young children with cystic fibrosis</td>
<td>Australian National Health and Medical Research Council</td>
<td>$656,392</td>
</tr>
<tr>
<td>2005</td>
<td>Prof Keith Grimwood</td>
<td>Longitudinal, multicentre group A rotavirus strain surveillance within New Zealand</td>
<td>Merck Research Laboratories</td>
<td>$293,784</td>
</tr>
<tr>
<td>2004</td>
<td>Prof Keith Grimwood</td>
<td>Molecular epidemiology of respiratory syncytial virus infecting New Zealand infants</td>
<td>Lottery Grants Board</td>
<td>$187,202</td>
</tr>
</tbody>
</table>
2004 Dr Esko J Wiltshire Diagnosis of Cystic Fibrosis Related Diabetes: The Role of Continuous Glucose Monitoring National Child Health Research Foundation $77,823

2004 Prof Keith Grimwood Computer-assisted DNA fingerprinting of Pseudomonas aeruginosa in New Zealand CF clinics National Child Health Research Foundation $70,000

2003 Dr Esko J Wiltshire Effect of folate and B6 on endothelial function in children with type 1 diabetes WCH Research Foundation and Diabetes Australia $90,909

2002 Dr Thorsten V Stanley A trial of the effect of probiotics on the development of atopy and eczema in children HRC $993,961

2002 Dr Thorsten V Stanley The use of probiotic bacteria in the treatment of atopic eczema in children. HRC $150,000

2002 Prof Keith Grimwood Respiratory syncytial virus molecular epidemiology and strain-specific antibodies within New Zealand infants National Child Health Research Foundation $50,000

<table>
<thead>
<tr>
<th>Total</th>
<th>$6,861,645</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined 2002-2006 income for all grants ≤ $50,000</td>
<td>$291,839</td>
</tr>
<tr>
<td>Grand Total</td>
<td>$7,153,484</td>
</tr>
</tbody>
</table>

**Postgraduate Students**

<table>
<thead>
<tr>
<th>Year</th>
<th>Researcher</th>
<th>Award/Scholarship</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>Prof Keith Grimwood</td>
<td>RACP Montgomery Spencer Medal</td>
</tr>
<tr>
<td>2004</td>
<td>Prof Keith Grimwood</td>
<td>Officer of the New Zealand Order of Merit (ONZM)</td>
</tr>
</tbody>
</table>

**Awards and Scholarships**

**Publications**

**Authored Book**


**Edited Book**


Chapter in Book


Journal Article


Annual report
DEPARTMENT OF PATHOLOGY AND MOLECULAR MEDICINE

The Department of Pathology and Molecular Medicine is a multidisciplinary unit in which the subdisciplines of haematology, microbiology, chemical pathology, anatomical pathology and molecular pathology are represented.

http://www.wnmeds.ac.nz/academic/pathology/index.html

Staff
Professor Brett Delahunt  Professor and Head of Department
A/P John Carter  Associate Professor
A/P David Lamb  Clinical Associate Professor
A/P Christopher Sissons  Research Associate Professor
Dr Michael Humble  Senior Lecturer
Dr Diane Kenwright  Senior Lecturer
Dr J St John Wakefield  Senior Research Fellow
Ms Lidija Jovanovic  Research Fellow
Dr Catherine Koleda  Lecturer

External Research Grants

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>A/Prof Christopher H Sissons</td>
<td>Dental Caries and Cariogenic Plaques: The Sucrose, Fluoride and Oral Environment Nexus</td>
<td>HRC – Project</td>
<td>$1,658,872</td>
</tr>
<tr>
<td>2004</td>
<td>A/Prof David Lamb</td>
<td>Randomised androgen deprivation and radiotherapy (RADAR) trial</td>
<td>HRC – Project</td>
<td>$387,649</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Brett Delahunt</td>
<td>Studies in renal cancer pathogenesis</td>
<td>Wellington Medical Research Foundation</td>
<td>$145,771</td>
</tr>
<tr>
<td>2003</td>
<td>A/Prof Christopher H Sissons</td>
<td>New strategies for dental caries prevention</td>
<td>HRC – Project</td>
<td>$1,229,619</td>
</tr>
<tr>
<td>2003</td>
<td>A/Prof Christopher H Sissons</td>
<td>Stopping dental caries: Are natural ‘essential oils’ better than chlorhexidine?</td>
<td>Lottery Health Research</td>
<td>$99,100</td>
</tr>
<tr>
<td>2003</td>
<td>A/Prof Christopher H Sissons</td>
<td>Fluorescence and Luminescence analysis of Plaque metabolic structure and viability</td>
<td>Lottery Health Research</td>
<td>$50,000</td>
</tr>
</tbody>
</table>

Total $3,571,011

Combined 2002-2006 income for all grants ≤ $50,000 $208,111

Grand Total $3,779,122
Research Contracts

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Contractor</th>
<th>Organisation</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-05</td>
<td>A/Professor Christopher H Sissons, Professor Brett Delahunt</td>
<td>University of Indiana, Purdue University Trans-Tasman Radiation Oncology Group (TROG)</td>
<td>$49,599</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total $49,599</td>
</tr>
</tbody>
</table>

Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>10</td>
<td>11</td>
<td>9</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*as at 1 June each year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Publications

**Author Book**

**Edited Book**


**Chapter in Book**


Journal – Research Article


Roberts, J. M., Yang, J., & Ronchese, F. (2004). IL-4 deficiency does not impair the ability of dendritic cells to initiate CD4+ and CD8+ T cell responses in vivo. *International Immunology*, 16(10), 1451-1458.


**Intellectual Property**


**Commissioned Report for External Body**


Assessment Team, A. M. C., & including Delahunt, B. (2004). *Accreditation of the School of Medicine in the Faculty of Health Sciences and Medicine Bond University*. Commissioned by Medical School Accreditation Committee. Australia: Australian Medical Council.


Wellingon: Ministry of Health and the New Zealand Cancer Control Trust, 77p.


Film/Video/CD Rom


Medical image

DEPARTMENT OF PRIMARY HEALTH CARE AND GENERAL PRACTICE
The Department of Primary Health Care and General Practice has a number of research interests including: bioethics, general practice/primary care processes and management, guidelines in primary health care, health promotion, health services research, higher degrees and postgraduate programmes in Primary Health Care and General Practice, management of illness, men's health, undergraduate medical education, and women's health.

http://www.wnmeds.ac.nz/academic/gp/index.html

Women's Health Research Centre
Many diseases including osteoporosis, depression, breast cancer, menopause and Alzheimer's Disease differentially affect women. The University of Otago Women's Health Research Centre (WHRC) works collaboratively internationally and locally to explore important health challenges for New Zealand women. Key research areas include: mid-life health, diabetes and heart disease, sexual reproductive health, osteoporosis, and maternity and health of the newborn.

http://www.wnmeds.ac.nz/academic/gp/whrc/index.html

Staff
Professor Tony Dowell  Professor and Head of Department
Dr Juliet Broadmore  Senior Lecturer
Dr Beverley-Anne Lawton  Senior Research Fellow
Dr Lynn McBain  Senior Lecturer
Dr Helen Moriarty  Senior Lecturer
Dr Susan Pullon  Senior Lecturer
Dr Eileen McKinlay  Senior Lecturer
Dr Maria Stubbe  Senior Research Fellow
Ms Sue Garrett  Research Fellow
Ms Sonya Morgan  Research Fellow
Dr Sally Rose  Research Fellow
## External Research Grants

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Dr Sally B Rose</td>
<td>Assessing sustainability – two year follow up of Women's Lifestyle Study participants</td>
<td>Lottery Health Research</td>
<td>$91,183</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Raina Elley</td>
<td>Falls assessment clinical trial (FACT)</td>
<td>Lottery Health Research</td>
<td>$54,035</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Debbie McLeod</td>
<td>General Practice enrolment, utilisation and disease management 2001 &amp; 2005</td>
<td>HRC – Project</td>
<td>$412,724</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Raina Elley</td>
<td>Fall Assessment Clinical Trial (FACT)</td>
<td>ACC</td>
<td>$74,628</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Beverley Lawton</td>
<td>Women in Action (Women's Lifestyle Study)</td>
<td>National Heart Foundation</td>
<td>$326,869</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Debbie McLeod</td>
<td>Pathways – The Surgical Access Study: Investigation into access to elective surgery and subsequent outcomes for ACC claimants or potential claimants</td>
<td>ACC</td>
<td>$62,000</td>
</tr>
<tr>
<td>2003</td>
<td>Dr Debbie McLeod</td>
<td>Pathways to care and outcomes for elective surgery: a prospective cohort study</td>
<td>HRC – Project</td>
<td>$1,050,307</td>
</tr>
</tbody>
</table>

Total: $2,071,746

Combined 2002-2006 income for all grants ≤ $50,000: $312,589

Grand Total: $2,384,335

## Research Contracts

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Contractor</th>
<th>Organisation</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-06</td>
<td>Prof Anthony C Dowell</td>
<td>Health Services Research Centre</td>
<td>$532,377</td>
</tr>
<tr>
<td></td>
<td>Dr John A Durham</td>
<td>Hutt Valley District Health Board</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dr Beverley Lawton</td>
<td>Ministry of Health</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dr Debbie McLeod</td>
<td>National Health Committee</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Helen J Moriarty</td>
<td>New Zealand Guidelines Group Inc</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dr Louise Signal</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Combined 2002-2006 income for all contracts ≤ $20,000: $55,966

Grand Total: $588,343
Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Masters†</td>
<td>-</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

* as at 1 June each year
† thesis or dissertation students only

Publications

Authors Book

Chapter in Book

Journal Article


**Commissioned Report for External Body**


**Film/Video/CD Rom**


Toop, L. J., Richards, D. A., Dowell, A. C., Tilyard, M., Fraser, T., & Arroll, B. (2003). Direct to consumer advertising of prescription drugs in New Zealand: For health or for profit? Report to the Minister of Health supporting the case for a ban on DTCA. (pp. 1-61).


**Website**

DEPARTMENT OF PSYCHOLOGICAL MEDICINE

The Department of Psychological Medicine’s research is configured around several themes relevant to mental health practice in the New Zealand setting. These include mental health service delivery and evaluation, the interface between psychological and physical health, social psychiatry, psychiatric epidemiology, suicide, and education in the clinical professions. Current major research projects include:

- Treatment of Cognitive Impairment in Early Phase Schizophrenia (the ORCA study)
- The New Zealand Mental Health Survey (NZMHS)
- Treatment Outcome Measures for New Zealand General Adult Mental Health Services

http://www.wnmeds.ac.nz/academic/psych/index.html

Staff

Professor Peter Ellis  Professor and Head of Department
Dr Sunny Collings* Senior Lecturer
Dr Joanna MacDonald  Senior Lecturer
Dr Kate Scott  Senior Lecturer
Dr Tai Kake Research Fellow
Ms Julie Burgess-Manning  Lecturer
Ms Fiona Mathieson  Lecturer

*moved departments 2007

External Research Grants

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>Professor Peter M Ellis</td>
<td>Cognition and Psychopathology in Māori Diagnosed with Schizophrenia: 18 month follow-up</td>
<td>HRC/FRST Māori Knowledge and Development</td>
<td>$766,596</td>
</tr>
<tr>
<td>2003</td>
<td>Professor Peter M Ellis</td>
<td>Cognition and psychopathology in Māori diagnosed with schizophrenia</td>
<td>HRC Strategic Development</td>
<td>$61,191</td>
</tr>
</tbody>
</table>

Total $827,787

Combined 2002-2006 income for all grants ≤ $50,000 $44,992

Grand Total $872,779

Research Contracts

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Contractor</th>
<th>Organisation</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-06</td>
<td>Professor Peter M Ellis</td>
<td>Case Consulting Ltd, Department of Child, Youth &amp; Family Services, The Mental Health Commission</td>
<td>$2,465,826</td>
</tr>
</tbody>
</table>

Combined 2002-2006 income for all contracts ≤ $20,000 $10,000

Grand Total $2,475,826
Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Masters†</td>
<td>4</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

*as at 1 June each year
† thesis or dissertation students only

Awards and Scholarships

<table>
<thead>
<tr>
<th>Year</th>
<th>Researcher</th>
<th>Award/Scholarship</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>Jane Perrot</td>
<td>Bright Futures Scholarship</td>
</tr>
</tbody>
</table>

Publications

**Authored Book**

**Edited Book**

**Chapter in Book**

**Journal Article**


Commissioned Report for External Body


DEPARTMENT OF PUBLIC HEALTH

For about fifteen years the main focus of work of the Department has been monitoring, understanding and mitigating inequalities in health. There are also strengths in understanding professional interactions linked to resource and clinical decisions and social processes, smoking and the tobacco industry, obesity and the food industry, ecology and health, infectious diseases and population mental health.

There are two recent and/or current HRC Programme grants housed in the Department: He Kainga Oranga/The Housing and Health Research Programme (HHRP), which is in the process of seeking funding renewal, and The Health Inequalities Research Programme (HIRP).

http://www.wnmeds.ac.nz/academic/dph/index.html

The Housing and Health Research Programme
He Kainga Oranga, the Housing and Health Research Programme, is an HRC funded programme that seeks to examine and elucidate the links between Housing and Health. The aim is to identify and then evaluate housing-related interventions to improve individual, family and community health. Major studies include the Housing, Heating and Health Study; the Housing, Crowding and Health Study; the Tokelau Extended Family Housing Study; and the Housing, Insulation and Health Study.

Te Röpü Rangahau Hauora a Eru Pömare
The Centre was one of two Māori health research centres established in July 1992, originally funded by the HRC and Te Puni Kökiri. The Centre was renamed Te Röpü Rangahau Hauora a Eru Pōmare in 1995, following the untimely death of its founder Professor Eru Pōmare.

The goals of the Centre are to promote and foster health research by and for Māori and to provide an environment in which Māori can be trained in a variety of research techniques. Health disparities between Māori and non-Māori continues to be the foundation of the Centre’s research.

Health Inequalities Research Programme (HIRP)
The HIRP programme is an HRC funded programme established in July 2005 to explore, explain and provide solutions for systematic health inequalities in New Zealand. There are eight projects within the HIRP programme: SoFIE-Health, SoFIE-Primary Care, Unequal Treatment – the role of health services, differential colon cancer survival by ethnicity in New Zealand, Neighbourhoods and Health, the New Zealand Census-Mortality Study, CancerTrends and Social Indicators.

Ecology and Health
This area of research is an innovation, especially for health sciences in New Zealand, which reflects growing awareness internationally of impacts on health and well-being of human-induced environmental, and especially ecological change, as recognised by the UN Millenium Ecosystem Assessment (United Nation 2005, Ecosystems and Human Well-being), and in the emerging disciplines of ‘Ecological Health’ and ‘Conservation Medicine’. There is no equivalent in other New Zealand universities.

Health Services Research and Policy
The Department aims to address policy-relevant health services problems using public health frameworks that emphasise health gains for population groups and the reduction of health inequalities. The health services research activities of the Department are focused in the following main areas:
• Primary care
  and mental health
  and ownership
  and access
  and organisational characteristics

• Access to secondary care

HIA Research Unit
The Health, Wellbeing and Equity Impact Assessment Research Unit (HIA Research Unit) is a research, evaluation, training and resource unit of the University of Otago. It is a joint initiative between the Otago University Divisions of Humanities and Health Sciences – and a Wellington company, Quigley and Watts Ltd. The Unit brings together leading experts in the field with the aim of researching, promoting, and supporting the use of HIA throughout New Zealand, and helping to embed consideration of health and wellbeing within planning and policy making.

Health Promotion and Public Health Policy Research Unit (HEPPRU)
The Health Promotion and Public Health Policy Research Unit (HEPPRU) aims to foster excellence in research in health promotion and public health policy. The unit has particular emphasis on nutrition, tobacco and equity-focused research but includes a wide range of relevant research.

Staff

Professor Peter Crampton
Professor P Howden-Chapman
Professor Tony Blakely
A/P Kevin Dew
Dr Michael Baker
Dr Sunny Collings
Dr Fiona Cram
Dr Richard Edwards
Dr Ausaga Fa’asalele
Dr Simon Hales
Dr Ricci Harris
Dr Michael Keele
Dr Amanda Kvaløvig
Mr Gordon Purdie
Ms Bridget Robson
Dr Diana Safarti
Dr Louise Signal
Dr George Thomson
Dr Nick Wilson
Dr Kristie Carter
Donna McCormack
Dr Sarah Hill
Dr Sheena Hudson
Dr Santosh Jatrana
Ms Ester Laban
Dr Mary McIntyre
Dr Jen Hester-Moore
Mr Desmond O’Dea
Nevil Pierse
Mr Tim Rochford
Dr Gabriel Sertsou
Ms Shirley Simmonds
Dr Kamalesh Venugopal
Ms Carolyn Watts

Professor and Head of Department
Professor
Research Professor
Associate Professor
Senior Lecturer
Senior Lecturer
Senior Research Fellow
Senior Research Fellow
Senior Research Fellow
Senior Research Fellow
Senior Research Fellow
Senior Research Fellow
Senior Research Fellow
Senior Lecturer
Senior Research Fellow
Senior Lecturer
Senior Lecturer
Research Fellow
Research Fellow
Research Fellow
Research Fellow
Lecturer
Lecturer
Research Fellow
Lecturer
Research Fellow
Research Fellow
Research Fellow
Lecturer
### External Research Grants

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Dr Nick Wilson</td>
<td>Longitudinal study of smokers for tobacco control: NZ arm of multi-country study</td>
<td>HRC – Project</td>
<td>$1,429,125</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Michael G Baker</td>
<td>Pandemic influenza control at the borders of islands and within households</td>
<td>National Institutes of Health</td>
<td>$1,373,187</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Antony Blakely</td>
<td>CancerTrends</td>
<td>HRC – Project</td>
<td>$924,355</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Antony Arthur Blakely</td>
<td>Strategies to Promote Healthier Food Purchases: A Supermarket Healthy Options Project – Main Trial</td>
<td>Auckland Uniservices Ltd</td>
<td>$629,993</td>
</tr>
<tr>
<td>2006</td>
<td>A/Prof Kevin P Dew</td>
<td>Tracking Health Care Interventions: patient-professional communication</td>
<td>Marsden Fund Project</td>
<td>$570,667</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Phillipa Howden-Chapman</td>
<td>Housing Heating and Health Study – Reports</td>
<td>Ministry for the Environment</td>
<td>$249,999</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Peter Crampton</td>
<td>Pacific Health research workforce capability and capacity development initiative</td>
<td>Research Trust of Victoria University of Wellington</td>
<td>$150,001</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Simon E Hales</td>
<td>Seasonal patterns of cardiovascular disease in New Zealand</td>
<td>National Heart Foundation</td>
<td>$124,999</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Philippa Howden-Chapman</td>
<td>Residential movement and attachment: Health Module</td>
<td>Centre for Research, Evaluation and Social Assessment</td>
<td>$94,749</td>
</tr>
<tr>
<td>2006</td>
<td>Louise M Delany</td>
<td>Public Health Law in NZ</td>
<td>HRC Foxley Fellowship</td>
<td>$80,000</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Peter Edwards</td>
<td>Services to present Smoke-Free Evaluation Findings 2006</td>
<td>Ministry of Health</td>
<td>$74,000</td>
</tr>
<tr>
<td>2005</td>
<td>Ms Bridget H Robson</td>
<td>Unequal treatment – the role of the Health Services</td>
<td>HRC – Project</td>
<td>$1,064,673</td>
</tr>
<tr>
<td>2005</td>
<td>Professor Peter Crampton</td>
<td>SoFIE- primary care: Structure of primary care, quality and health outcomes</td>
<td>HRC – Project</td>
<td>$770,914</td>
</tr>
<tr>
<td>2005</td>
<td>Professor Philippa Howden-Chapman</td>
<td>Exploring the housing needs and experiences of people with disability in New Zealand</td>
<td>HRC – Project</td>
<td>$372,977</td>
</tr>
<tr>
<td>2005</td>
<td>Ms Bridget H Robson</td>
<td>Nga Mate Pukupuku: Cancer Chart booklets</td>
<td>Ministry of Health</td>
<td>$124,533</td>
</tr>
<tr>
<td>2005</td>
<td>Ms Ramona Tiatia</td>
<td>Family centred healing at home</td>
<td>HRC Fellowships and Scholarships</td>
<td>$102,853</td>
</tr>
<tr>
<td>2005</td>
<td>Ms Bridget H Robson</td>
<td>Kaupapa Māori Epidemiology in Health research – Finding our own standards</td>
<td>National Institute of Research Excellence for Māori Development and Advancement</td>
<td>$80,355</td>
</tr>
<tr>
<td>Year</td>
<td>Principal Investigator</td>
<td>Project Title</td>
<td>Grant Source</td>
<td>Amount</td>
</tr>
<tr>
<td>------</td>
<td>------------------------</td>
<td>---------------</td>
<td>--------------</td>
<td>--------</td>
</tr>
<tr>
<td>2005</td>
<td>Professor Philippa Howden-Chapman</td>
<td>Provision of housing research relevant to public health policy development and training</td>
<td>Ministry of Health</td>
<td>$50,000</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Antony Blakely</td>
<td>SoFIE-Health: Longitudinal Study of social trajectories, primary care, and health</td>
<td>HRC – Project</td>
<td>$1,439,579</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Antony Arthur Blakely</td>
<td>Neighbourhoods and Health</td>
<td>HRC – Project</td>
<td>$900,368</td>
</tr>
<tr>
<td>2004</td>
<td>Diana Sarfati</td>
<td>Differential Colon cancer Survival by ethnicity in New Zealand</td>
<td>Cancer Society</td>
<td>$361,459</td>
</tr>
<tr>
<td>2004</td>
<td>Ms Bridget H Robson</td>
<td>Contribution to operational costs of Christchurch Tissue Bank</td>
<td>Cancer Society West Coast Division</td>
<td>$286,125</td>
</tr>
<tr>
<td>2004</td>
<td>Ms Bridget H Robson</td>
<td>Hospital Oral Health Services Use in the Wellington Region</td>
<td>HRC – Project</td>
<td>$132,562</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Philippa L Howden-Chapman</td>
<td>Social Environment – Healthy Housing Index (HVDHB)</td>
<td>Hutt Valley DHB</td>
<td>$100,000</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Papaarangi Reid</td>
<td>Towards the development of guidelines for the handling, use, and storage of Māori genetic material in research</td>
<td>Auckland University Subcontract</td>
<td>$55,753</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Philippa Howden-Chapman</td>
<td>A pilot study in the Hutt Valley for the creation of a Healthy Housing Index (HHI)</td>
<td>ACC</td>
<td>$50,000</td>
</tr>
<tr>
<td>2003</td>
<td>Professor Lynne Howden-Chapman</td>
<td>He Kainga Oranga/Housing and Health Research Programme</td>
<td>HRC Programme</td>
<td>$3,649,756</td>
</tr>
<tr>
<td>2003</td>
<td>A/Prof Kevin P Dew</td>
<td>Exploring clinician decision making when rationing is explicit</td>
<td>HRC – Project</td>
<td>$209,953</td>
</tr>
<tr>
<td>2003</td>
<td>Dr Mavis Duncanson</td>
<td>Role of alcohol in serious unintentional domestic fire incidents</td>
<td>NZ Fire Service</td>
<td>$86,268</td>
</tr>
<tr>
<td>2003</td>
<td>Professor Philippa Howden-Chapman</td>
<td>Residential movement and attachment: Health</td>
<td>Centre for Research, Evaluation and Social Assessment</td>
<td>$84,195</td>
</tr>
</tbody>
</table>

**Total** | **$15,623,399**

**Combined 2002-2006 income for all grants ≤ $50,000** | **$688,342**

**Grand Total** | **$16,311,741**
Research Contracts

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Contractor</th>
<th>Organisation</th>
<th>Total $ Approved</th>
</tr>
</thead>
</table>
| 2002-06       | Ms. Bridget Allan  
               Dr. Michael G. Baker  
               Prof. Antony Blakely  
               Dr. Catherine D. Collings  
               Ms. Donna Cormack  
               Prof. Peter Crampton  
               Dr. Paul F. Davis  
               Dr. Kevin P. Dew  
               Dr. Mavis Duncanson  
               AvProf Philippa Gander  
               Dr. Simon E. Hales  
               Dr. Sarah Hill  
               Prof. Philippa Howden-Chapman  
               Prof. Papaarangi Reid  
               Ms. Bridget H. Robson  
               Prof. Douglas Sellman  
               Dr. Louise Signal  
               Prof. Alistair Woodward | Animal Health Board  
Boeing Commercial Airplane Group  
BRANZ  
Central Regions District Health Board  
Contact Energy Ltd  
Everlife Group Ltd  
Health Research Council of NZ  
Institute of Environmental Science and Research  
Limited  
Massey University  
National Heart Foundation of NZ  
National Institute for Water and Atmospheric Research  
Obesity Action Coalition  
Statistics New Zealand  
University of Waikato | $3,829,989 |

Combined 2002-2006 income for all contracts ≤ $20,000  
Grand total $3,986,019

Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD*</td>
<td>15</td>
<td>14</td>
<td>15</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Masters†</td>
<td>15</td>
<td>16</td>
<td>16</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>

*as at 1 June each year  
†thesis or dissertation students only

Awards and Scholarships

<table>
<thead>
<tr>
<th>Year</th>
<th>Researcher</th>
<th>Award/Scholarship</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>Prof Peter Crampton</td>
<td>Harkness Fellowship in Health Policy</td>
</tr>
</tbody>
</table>

Publications

**Authored Book**


**Journal Article**


Crampton, P. Choose your sector: Public, private or third? *New Zealand Doctor* 8(24):8 (2002).


Signal, L. Resources that have influenced a health promoter from Aotearoa/New Zealand. Reviews of Health Education and Promotion Online (March), (2002). www.rhpeo.org


**Commissioned Report for External Body**


**Submission to Ministry of Health**


DEPARTMENT OF SURGERY AND ANAESTHESIA

The Department of Surgery and Anaesthesia is involved in a range of research fields: surgery, anaesthesia, resuscitation, emergency medicine and cardio-respiratory physiology. Between 2002 and 2006 staff research interests included:

A/P D Galletly  Resuscitation and cardio-respiratory entrainment
A/P A Thurston  Injury and surgery of the upper limb
Dr E Dennett  Epidemiology, surgery of the large bowel and rectum
Mr J Keating  Bowel cancer
Dr P Larsen  Cardio-respiratory rhythms, resuscitation
Dr A Swain  Emergency medicine, resuscitation
Mr T Wells  Ophthalmic surgery and glaucoma
Mr P Devane  Hip prosthesis wear and image analysis
Professor G Horne  Prosthetic hips
Dr J Weller  Education and human factors

The Department of Surgery and Anaesthesia’s Physiological Rhythms Unit, is a group of collaborating researchers working on aspects of physiological rhythmicity, in particular cardiac, respiratory and electroencephalographic waveforms and their interactions. The group is made up of Duncan Galletly, Peter Larsen, Shieak Tzeng, Dawn Elder, Angela Campbell, Karen O’Keefe and Graham Orsborne. Current research includes:

• Heart rate variability – in particular the physiological significance of heart rate and blood pressure variability, and time series analysis of heart rate variability under different clinical, pharmacological and physiological conditions.

• Cardioventilatory coupling – the entrainment of respiratory rhythm by a cardiovascular afferent inputs. This research includes exploration of the mechanisms of entrainment – as well as the physiological consequences of entrainment of inspiratory timing to non-respiratory afferent inputs.

• Ventricular fibrillation – Our research explores time series analysis of this lethal arrhythmia, and the information content of signals derived from implanted cardioverter defibrillators.

• Breath to breath respiratory variability – the control of respiratory timing, particularly during sleep in the adult, newborn and infant, the occurrence of central apnoeas, and patterns of breathing during anaesthesia.

http://www.wnmeds.ac.nz/academic/dos/index.html

Staff
A/P Duncan Galletly  Associate Professor and Head of Department
A/P Alan Thurston  Associate Professor
Dr Elizabeth Dennett  Senior Lecturer
Mr John Keating  Senior Lecturer
Dr Peter Larsen  Senior Lecturer
Dr Andrew Swain  Senior Lecturer
Mr Tony Wells  Senior Lecturer

External Research Grants

Combined 2002-2006 income for all grants ≤ $50,000  $23,375
Research Contracts

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Contractor</th>
<th>Organisation</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>Dr Anthony Wells</td>
<td>Alcon Australia</td>
<td>$48,388</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total $</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$48,388</td>
</tr>
</tbody>
</table>

Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Masters†</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

*as at 1 June each year
†thesis or dissertation students only

Publications

**Authorised Book**


**Chapter in Book**


**Journal Article**


‘Optimisation of Drug Therapy’ is the general research aim of the School of Pharmacy, and research is focused into four areas to meet this aim. These include:

**Fundamental drug research** – including drug discovery, metabolism and action to extend the range of drugs available and to provide a scientific basis for the quality use of medicines and bioactive substances.

**Formulation and drug delivery** - development of ways to administer and deliver bioactive materials in ways that maintain their stability and achieve optimal beneficial effects while minimising unwanted side effects.

**Clinical pharmacy** – including strategies to optimise drug therapy and minimise harm in patients, drug and food metabolic interactions in special populations, toxicovigilance and optimal use of medicines, drug utilization studies combined with pharmacoeconomics to minimise wastage and optimise use of medicines.

**Pharmacy practice research** – including medicines use and medicines wastage in the community, the treatment of sprains and strains, and the use of herbal medicines.

http://pharmacy.otago.ac.nz/pages/research.html
## External Research Grants

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>Dr Sarah M Hook</td>
<td>A formulation approach to improving the immune stimulatory capacity of peptide cancer vaccines</td>
<td>Cancer Society Project</td>
<td>$215,954</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Pauline Norris</td>
<td>Knowledge and use of antibiotics amongst Samoan people in New Zealand and Samoa</td>
<td>HRC Strategic Development</td>
<td>$122,260</td>
</tr>
</tbody>
</table>

**Total** $338,214

**Combined 2002-2006 income for all grants ≤ $50,000** $286,222

**Grand Total** $624,436

## Research Contracts

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Contractor</th>
<th>Project Title</th>
<th>Organisation</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Professor Thomas Rades</td>
<td>Characterisation and optimisation of tocopheryl phosphate particles</td>
<td>Phosphagenics Limited</td>
<td>$195,240</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Thomas Rades</td>
<td>Absorption enhancement using amorphous systems – workorder 5</td>
<td>Roche (Switzerland)</td>
<td>$155,770</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Thomas Rades</td>
<td>Prediction of tablet quality and API-lactose interaction TIF Destari Pratiwi</td>
<td>Foundation for Research, Science and Technology</td>
<td>$91,333</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Ian Tucker</td>
<td>Prevention and treatment of mastitis in dairy cows</td>
<td>Bomac Research Ltd Mastitis Research Centre Limited</td>
<td>$53,989</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Thomas Rades</td>
<td>Characterisation of amorphous compounds Kirsten Graser PhD</td>
<td>GlaxoSmithKline</td>
<td>$51,420</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Natalie J Medlicott</td>
<td>Formulation of angiogenic extract from deer velvet</td>
<td>AgResearch</td>
<td>$32,007</td>
</tr>
<tr>
<td>2006</td>
<td>Professor Thomas Rades</td>
<td>Characterisation of resinates as amorphous solids</td>
<td>Rohm and Hass Company</td>
<td>$26,245</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Sarah M Hook</td>
<td>Immunological testing of glycodendrimers</td>
<td>Industrial Research Ltd Foundation for Research, Science and Technology</td>
<td>$299,998</td>
</tr>
<tr>
<td>2005</td>
<td>Professor Thomas Rades</td>
<td>Assembly and immunological testing of synthetic immune</td>
<td>Industrial Research Ltd Foundation for Research, Science and Technology</td>
<td>$299,998</td>
</tr>
<tr>
<td>2005</td>
<td>Professor Thomas Rades</td>
<td>Suitability of APIs to be transferred into the amorphous form</td>
<td>Roche (Switzerland)</td>
<td>$112,000</td>
</tr>
<tr>
<td>2005</td>
<td>Dr J Paul Fawcett</td>
<td>Effects of ST810 (salbutamol sulfate) on performance and body composition in Ross broiler chickens</td>
<td>Stirling Products Ltd</td>
<td>$44,438</td>
</tr>
<tr>
<td>Year</td>
<td>Principal Investigator</td>
<td>Project Title</td>
<td>Organisation</td>
<td>Funding (NZD)</td>
</tr>
<tr>
<td>-------</td>
<td>------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>-------------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>2005</td>
<td>Professor Ian G Tucker</td>
<td>Radiolabelled DC-005 I animal study, Pharmacokinetic assessment of DC-005 I</td>
<td>New Zealand Institute of Crop &amp; Food Research</td>
<td>$40,000</td>
</tr>
<tr>
<td>2005</td>
<td>Professor Thomas Rades</td>
<td>Raman spectorscopic investigations for the quantification of amorphous material in suspensions of ampicillin trihydrate and oxacillin sodium in middle chain triglycerides (totoriilin suspension</td>
<td>Bayer AG Healthcare Germany</td>
<td>$32,000</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Ian G Tucker</td>
<td>Oral delivery formulations for possums</td>
<td>AgResearch</td>
<td>$132,625</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Thomas Rades</td>
<td>Determination of key information about excipients work order 3</td>
<td>Roche (Switzerland)</td>
<td>$116,874</td>
</tr>
<tr>
<td>2004</td>
<td>Dr Natalie J Medlicott</td>
<td>Formulation of angiogenic extract from deer velvet</td>
<td>AgResearch</td>
<td>$90,000</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Ian G Tucker</td>
<td>Non steroidal anti inflammatory drugs from New Zealand biota</td>
<td>National Institute for Water and Atmospheric Res</td>
<td>$53,333</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Thomas Rades</td>
<td>Development and characterisation of oral formulations containing lauric acid</td>
<td>Easy Life Management Pty Ltd</td>
<td>$50,000</td>
</tr>
<tr>
<td>2004</td>
<td>Professor Thomas Rades</td>
<td>THz pulsed spectroscopy, drug delivery – student PhD Axel Zeitler</td>
<td>Tera View</td>
<td>$30,995</td>
</tr>
<tr>
<td>2003</td>
<td>Professor Thomas Rades</td>
<td>Immunological testing of glycodendrimers</td>
<td>Industrial Research Ltd Foundation for Research, Science and Technology</td>
<td>$400,000</td>
</tr>
<tr>
<td>2003</td>
<td>Dr Natalie J Medlicott</td>
<td>Formulation of angiogenic extract from deer velvet</td>
<td>AgResearch</td>
<td>$142,222</td>
</tr>
<tr>
<td>2003</td>
<td>Professor Ian G Tucker</td>
<td>Pharmacokinetic and metabolism studies of the Mito Q10 in rat and human</td>
<td>Antipodean Biotechnology Ltd</td>
<td>$111,199</td>
</tr>
<tr>
<td>2003</td>
<td>Professor Thomas Rades</td>
<td>Determination of key information about excipients work order 1, work order</td>
<td>Roche (Switzerland)</td>
<td>$102,770</td>
</tr>
<tr>
<td>2003</td>
<td>Professor Ian G Tucker</td>
<td>Evaluation of the bioequivalence of piroxicam from a 20mg capsule formulation healthy male volunteers after a single dose</td>
<td>Agotex New Zealand Limited</td>
<td>$54,000</td>
</tr>
<tr>
<td>2003</td>
<td>Professor Thomas Rades</td>
<td>Raman-Spectroscopic Investigations of the Polymorphic Behaviour of Bay 44-4400 in Aquesous Dispersions</td>
<td>Bayer AG Healthcare Germany</td>
<td>$30,000</td>
</tr>
<tr>
<td>2002</td>
<td>Professor Ian G Tucker</td>
<td>Controlled Release intramammary Formulations</td>
<td>AgResearch</td>
<td>$100,443</td>
</tr>
<tr>
<td>2002</td>
<td>Dr Hu Zhang</td>
<td>Deer velvet-hepatic drug metabolising enzyme in rats</td>
<td>AgResearch</td>
<td>$76,042</td>
</tr>
<tr>
<td>2002</td>
<td>Professor Ian G Tucker</td>
<td>Oral Delivery of Bioactives to Possums</td>
<td>AgResearch</td>
<td>$63,214</td>
</tr>
</tbody>
</table>
Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD</td>
<td>21</td>
<td>23</td>
<td>16</td>
<td>22</td>
<td>27</td>
</tr>
<tr>
<td>Masters</td>
<td>9</td>
<td>9</td>
<td>12</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

*as at 1 June each year

Publications

**Authorised Book**


**Journal Articles**


**Intellectual Property**


**Commissioned Report for External Body**


SCHOOL OF PHYSIOTHERAPY

Research and knowledge transfer are integral parts of the School’s activities, and these areas continue to develop rapidly. The School’s external research funding has more than trebled in the last three years, and it has active research programmes in a variety of rehabilitation related areas, which are managed through the new New Zealand Centre for Physiotherapy Research. Current research interests are varied and include lower back pain, neurorehabilitation, rehabilitation in multiple sclerosis, physiological and clinical effects of electrophysical agents.

http://physio.otago.ac.nz/res/projects.asp

Staff

Professor Dave Baxter  Professor and Dean
Professor John Sullivan  Professor
A/P Peter Milburn  Associate Professor
Dr Stephan Milosavljevic  Associate Dean Postgraduate Studies
Dr Leigh Hale  Senior Lecturer
Dr Gillian Johnson  Senior Lecturer
Dr Margot Skinner  Senior Lecturer
Dr Richard Newsham-West  Lecturer
Mr Tony Schneiders  Lecturer
Ms Giesla Sole  Lecturer
Dr Haxby Abbott  Research Fellow
Dr Allan Carman  Research Fellow

Research Grants

<table>
<thead>
<tr>
<th>Year</th>
<th>Principal Investigator</th>
<th>Project Title</th>
<th>Funder</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Dr Leigh A Hale</td>
<td>Evaluation of the ACC’s Tai Chi Programme for the Elderly</td>
<td>Auckland University of Technology – Subcontract</td>
<td>$232,469</td>
</tr>
<tr>
<td>2006</td>
<td>Dr Leigh A Hale</td>
<td>Incidence of and risk factors for falls in adults with intellectual disability</td>
<td>HRC Feasibility Study</td>
<td>$119,084</td>
</tr>
<tr>
<td>2006</td>
<td>Ms Hilda Mulligan</td>
<td>Perceptions of participation in physical recreational activities by persons with disability in NZ</td>
<td>HRC Disability Research Placement Programme</td>
<td>$85,000</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Stephan Milosavljevic</td>
<td>Cumulative Loads on the Body in Wool Harvesting</td>
<td>HRC Strategic Development</td>
<td>$121,134</td>
</tr>
<tr>
<td>2005</td>
<td>Dr Stephan Milosavljevic</td>
<td>Cumulative loads on the body in wool harvesting</td>
<td>Vernon Willey Foundation</td>
<td>$60,000</td>
</tr>
</tbody>
</table>

Total $617,687

Combined 2002-2006 income for all grants ≤ $50,000 $110,399

Grand Total $728,086
External Research Contracts

<table>
<thead>
<tr>
<th>Year Approved</th>
<th>Contractor</th>
<th>Organisation</th>
<th>Total $ Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>Professor Stephen John Sullivan</td>
<td>Accident Compensation Corporation</td>
<td>$150,000</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>$150,000</td>
</tr>
<tr>
<td>Combined 2002-2006 income for all contracts ≤ $20,000</td>
<td></td>
<td></td>
<td>$7,730</td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td></td>
<td>$157,730</td>
</tr>
</tbody>
</table>

Postgraduate Students

<table>
<thead>
<tr>
<th>Total Head Count</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>PhD</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Masters</td>
<td>7</td>
<td>2</td>
<td>7</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

*as at 1 June each year

Publications

**Authored Book**

**Journal Article**


**Commissioned Report for External Body**

RESEARCH SUPPORT SERVICES

The Health Sciences Division hosts the following research support services:

Anatomy Museum and Human Skeletal Collection
The W.D. Trotter Anatomy Museum in the Department of Anatomy and Structural Biology was established in 1874 and holds a large collection of anatomical specimens and models, many of which date back to the late 1800s. The Museum also holds many osteological specimens and an extensive collection of normal and abnormal radiographs.

The Department has a well-equipped plastination laboratory which provides many of the new material for the Museum's collections. A number of plastination techniques are undertaken including the silicone technique for plastinated prosections, E12 for transparent body slices, and P35 for thin brain slices.

The Department's anthropological collection of human skeletal material is the largest in New Zealand Postgraduate students and staff from any department in the University may apply for research-based access to the Museum and skeletal collections.

http://anatomy.otago.ac.nz

Anatomy Otago Genomics Sequencer
The Department of Anatomy and Structural Biology houses a state-of-the-art Roche/454 GS FLX gene sequencer. This sequencer is widely regarded internationally as a breakthrough technology that will transform research in the biological sciences.

The Mega DNA sequencer uses revolutionary new technology to produce DNA sequences 1000 times faster than existing technologies. All you need to supply is high quality DNA. It can sequence anything from viruses, bacterial genomes, transcriptomes, amplicons or eukaryotic genomes.

http://sequence.otago.ac.nz

Biomechanics Laboratory
The 12-camera Motion Analysis System (Motion Analysis Corporation) system in the Biomechanics Laboratory of the School of Physiotherapy provides clinicians, researchers, coaches and industry with an accurate description of how a person moves during sporting, workplace or everyday activities.

Two Advanced Mechanical Technology Inc., Force Plates provide information on external ground reaction forces while electromyography provides information in the temporal sequencing of muscle activity in the generation of movement. The Biomechanics Laboratory also provides motion capture (MoCap) to the animation industry in applications such as computer games, advertising and television programs.

The TeleMyo 2400T-G2 12 channel telemetric SEMG system (Noraxon), gives insight into muscle recruitment and muscle temporal activity in the generation of movement.

http://physio.otago.ac.nz/gait/about/about.asp
**Biostatistical and Bioinformatics Services**

The Division provides a professional Biostatistical Service that is available across our three campuses. Individual arrangements for accessing the services exist in each school.

Dr Mik Black in Biochemistry can be approached for advice on bioinformatics problems, especially pertaining to microarray data.

For more information please email Dr Michele Coleman

---

**Centre for Protein Research**

The Centre for Protein Research (CPR) is equipped with robust and state of the art standard technologies for protein and proteome analyses. Following the concept of a user laboratory, it supports research projects in the Departments of Biochemistry, Microbiology and Immunology, and provides non-commercial services for other departments within the University of Otago and institutes outside the University.

The Centre is equipped with a new ABI 4800 MALEI tandem time-of-flight mass spectrometer, which combines the high mass accuracy and resolution of a TOF-analysers with a highly specific precursor ion selection for sensitive CID (collision induced association) analysis. For large scale proteomics MALDI mass spectrometry can be combined with an Ultimate 3000 nano-flow liquid chromatography system with a set-up for 2-dimensional peptide fractionation which is coupled online to a Probot fraction collection for automated MALDI-plate spotting. Electrosopy 3-D ion trap mass spectrometry and Edman amino acid sequencing also allow in depth protein analyses.

[http://biochem.otago.ac.nz/cpr/home.html](http://biochem.otago.ac.nz/cpr/home.html)

---

**Histology Unit**

There are two Histology Units – one in Pathology, DSM and one in Dentistry.

The Pathology Unit offers histology services to all departments in the University. They process research tissue and produce either unstained slides for immunological analysis, or stained slides for microscopy. Equipment is also available for individuals to use and includes: Cryostat, Embedding machine, Microtome, Staining machines and light and fluorescent microscopes.

Contact: Dianne Potter

Also available in Pathology is a Dako Autostainer. This is an automated horizontal slide-processing system optimized with Dako reagents for the staining of formalin-fixed, paraffin-embedded tissues, frozen sections, cytospins, cell smears and fine needle aspirates

Contact: Xin Tan
Otago Centres for Electron and Confocal Microscopy
The Otago Centre for Electron Microscopy (OCEM) is well-equipped for all conventional electron microscopy applications. The Centre specialises in a range of cryopreparation techniques (both transmission electron microscopy and scanning electron microscopy) and immunocytochemical techniques.

There are two transmission electron microscopes, a Phillips CM 100TM and a Phillips 410LS TEM. The scanning electron microscopes are a JEOL 6700f field emission scanning electron microscope and a Cambridge S360 conventional SEM. The JEOL 6700f is fitted with an Alto 2500 high resolution cryostage for working with frozen hydrated specimens, and an elemental analysis (EDS) system.

The Otago Centre for Confocal Microscopy (OCCM) works in close association with the OCEM. It has two Zeiss LSM 510 confocal laser scanning microscopes: one configured for fixed, slide mounted material, the other for live cell investigations. Both are also capable of phase contrast, DIC, brightfield and fluorescence microscopy. There is also an Olympus FV1000 confocal laser scanning microscope which is configured to extend the range of experimental procedures, particularly those in the shorter excitation range. The Centre also has a UMIS, nano-indenter system which augments hard tissue morphology data by quantifying its physical attributes, and a SkyScan 7200 high resolution micro CT scanner.

http://anatomy.otago.ac.nz/

Otago Flow Cytometry Facility
Housed in the Department of Microbiology & Immunology, this Facility has the following equipment:

- 3x flow cytometric analysers
- 1x flow cytometric cell sorter
- 1x AutoMACS (magnetic cell sorter)
- 1x BioPlex multiplex analyser

These can be used for the analysis of complex cell suspensions: (blood cells, bacterial communities, disassembled tumours, cell cycle analysis).

To find out about use of this facility, contact Dr Alex McLellan:
alex.mclellan@stonebow.otago.ac.nz

Otago Genomics Facility
The Otago Genomics Facility (OGF) was established in July 2000 to provide University of Otago Researchers access to microarray technology. The Facility provides researchers with the ability to analyse patterns of gene expression in normal growth and development, and in disease.

The facility comprises two powerful technologies: gene expression microarrays and laser capture microdissection (LCM). The OGF microarray lab provides DNA microarray technology allowing researchers to determine gene expression levels using cDNAs and oligos arrayed on glass slides. The use of microarrays on glass slides provides a relatively simple means of obtaining large-scale expression data for thousands of individual genes from a single experiment. Microarray technology is revolutionising research into gene discovery, disease diagnosis and treatment, and drug development for diseases such as cancer.

http://genomics.otago.ac.nz/
**Protein Crystallography Facility**

Prof. Kurt Krause serves as the Director of a newly installed protein crystallography facility at the University of Otago. The facility consists of three large temperature controlled rooms. One is devoted to crystallization and contains a new MosquitoTM crystallization robot. The second room contains computer control and modeling facilities. The third room contains a MicroMax007HF with an R-axis IV++ area detector. It is equipped with both chromium and copper anodes and separate optics. Chromium radiation is used for single wavelength anomalous diffraction (SAD) determination of protein structures, mitigating in most cases the need to visit a synchrotron. This approach has been effective in our hands for proteins with 2% or more S or Se containing residues. The flux of this machine is roughly equivalent to the protein crystallography beamline at the LSU- CAMD synchrotron facility in Baton Rouge, La. Cryo-cooling is carried out using a Rigaku X-stream 2000 cooling system. The University is also part of a consortium that will have regular access to the protein beamlines at the Australia National Synchrotron in Melbourne. Beamlines there will be optimized for MAD structure determination and native data collection.

Collaborators interested in pursuing a protein crystal structure determination should e-mail Prof. Krause at kurt.krause@stonebow.otago.ac.nz or call ext 5166.

**Real Time PCR**

An ABI PRISM 7000 real-time PCR machine is available in the Department of Pathology.

- Multi-colour detection for multiplex quantitation assays, allelic discrimination assays, and plus/minus assays, tungsten-halogen illumination and compatibility with the following dyes: FAM/SYBR Green 1, VIC/JOE, NED/TAMRA, and ROX
- PC-based software, including the latest version of the Sequence Detection System Software for the ABI PRISM 7000
- Automated primer and probe design using Primer Express Software
- Complete compatibility with the ABI PRISM 7700 Sequence Detection System assay design and PCR characteristics.

Contact: **Professor Mike Eccles**

**Otago University Christchurch**

A full range of Molecular and Cell Biology equipment and tools are available at the Christchurch Campus. An ABI 3130 Genetic Analyser has been approved and will be available shortly. In addition through the success of a collaborative bid to the TEC from University of Canterbury and OUC, OUC staff will be able to access new equipment to be housed at UC.

**Artificial Mouth**

The Dental Research Unit at OUW houses a novel computer-controlled ‘multiplaque artificial mouth’. This allows the development of realistic plaque microcosm biofilm model systems.

Contact: **A/Professor Chris Sissons**
DIVISIONAL SUPPORT FOR RESEARCH

Health Sciences has a Divisional Research Committee, consisting of the Associate Deans of Research from each School plus other representatives. (See http://healthsci.otago.ac.nz/research/index.html for Terms of Reference). This Committee meets four or more times annually and controls a budget which provides:

- Postdoctoral Fellowships
- PhD Conference Travel Funding
- An annual Divisional Research Forum
- Mentoring for targeted grant applications
- Review of HRC, TAD and NZS&T applications
- Review of PBRF Evidence Portfolio preparation
- Research Workshops
- Other support as decided

This Committee is Chaired by the Division’s Associate Dean for Research, Professor Warren Tate.
The Division employs Dr Michele Coleman as its Research and Development Manager.

Email: michele.coleman@otago.ac.nz
RESEARCH OFFICE

The Otago Research and Enterprise Office deals with research funding and assists researchers in gaining money from the application/proposal stage right through to contracting and reporting stages. Research and Enterprise staff are the liaison between the Funding Bodies, Industry or Businesses and staff at the University. The Research and Enterprise Office deal with a range of activities including:

- Research grants, proposals and contracts (including externally funded travel and equipment grants)
- Fellowships
- University of Otago Research Grants
- Technology transfer
- Intellectual property protection (including patents and trademarks)
- Material transfer agreements

Under the auspices of the Research and Enterprise Office, research in the Health Sciences Division is supported by a number of Research Advisors and Administrators, and additional staff at Otago University Christchurch and Wellington.

Staff with Health Sciences Responsibilities

Christine Groves, Research Advisor
University of Otago Wellington
christine.groves@otago.ac.nz

Karen Chaney, Research Advisor
University of Otago Christchurch
karen.chaney@otago.ac.nz

Virginia Irvine, Research Manager
University of Otago Christchurch
virginia.irvine@chmeds.ac.nz

Ali Bacon, Clinical Research Advisor (DSM)
Research and Enterprise Office, Dunedin
ali.bacon@otago.ac.nz

Ruth Sharpe, Clinical Research Administrator,
Dean’s Office, DSM
ruth.sharpe@otago.ac.nz

Dr Julie Weaver, Research Advisor (Health Sciences)
Research and Enterprise Office, Dunedin

To be appointed Oct 200, Research Advisor (Health Sciences)
Research and Enterprise Office, Dunedin
mary.gamble@otago.ac.nz

David Grimmett
Research Marketing Manager
David.Grimmet@otago.ac.nz

Dr Rachel Elliott
Research Marketing Manager
rachel.elliott@otago.ac.nz
APPENDIX 1: NOTES ON HOW THESE DATA ARE REPORTED

This report contains information on the research activities of the Division of Health Sciences at the University of Otago, for the period 2002-2006.

The data contained within the report have been sourced from the University of Otago Research Master Database, from departmental websites, and from individual departments themselves. Every attempt has been made to ensure that this report is as complete and as accurate as possible, but given the diversity of activities and interests within the Division, there may be omissions or inaccuracies for which we apologise.

There are a number of important points that should be noted.

• Research grants and contracts have been attributed to the home department of each principal investigator, where there were multiple principal investigators on a given grant or contract. It is acknowledged that this will inflate the sums of external income somewhat.

• In a number of cases grants/contracts straddled departments and it is unfortunate that this document is unable to give credit to co-investigators who, while not listed here, did nevertheless contribute to securing research funding.

• Details of grants and contracts which were approved prior to 2002, but were active throughout some, or all, of 2002-2006, were unable to be included in this Report.

• PhD students have only been listed in the department of their primary supervisor according to the records of the PhD Office. There is often a substantial role for second or co-supervisors that this document cannot acknowledge.

• Publications have been listed under the department of each author and co-author and hence there is a degree of duplication.

Other sources of information that may be of assistance to those interested in research within the Division of Health Sciences include:

The Division of Health Sciences website

http://healthsci.otago.ac.nz/research/index.html

Research and Enterprise Office, University of Otago

http://www.otago.ac.nz/research/index.html

Research Office, University of Otago, Christchurch

http://www.chmeds.ac.nz/research

Research Office, University of Otago, Wellington

http://www.wnmeds.ac.nz/Research/office.html

Research Office, Dunedin School of Medicine

http://dnmeds.otago.ac.nz/research/index.html