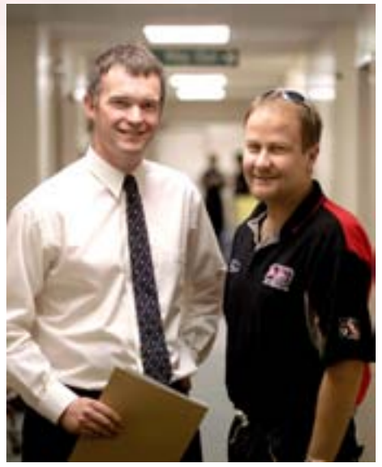
VOLUNTEERS WANTED!

Medical research often relies on patient volunteers providing samples or blood tests. Usually the more people involved the more accurate the results.

Often the School also requires 'healthy' volunteers,who fit a set of criteria, and can act as a statistical comparison or 'control' group for research purposes.

At present one particular research project is looking for volunteers which may help the estimated 10,000 people in New Zealand who are suffering from Inflammatory Bowel Disease (IBD), i.e. Crohn's Disease or Ulcerative Colitis. Dr Richard Gearry is conducting this ground-breaking study looking into environmental factors that could be linked to IBD such as diet, the role that genes might play, improving the use of medication, and developing better ways of assessing the severity of the disease.



Dr Richard Gearry with IBD and liver/bowel transplant patient Scott Large

"I want to contact anyone in Canterbury with Inflammatory Bowel Disease," he says. "Being a volunteer simply means filling out a questionnaire and having a blood test."

"Often people who take part learn a lot about their condition, and how to manage it better." One of the big handicaps with IBD is that we still don't know how many people actually have it. If you would like to find out more please contact
Dr Richard Gearry at the School on (03)641567/richard.gearry@cdhb.govt.nz.

This study is funded by the Canterbury Medical Research Foundation.

canterbury medical research foundation

NEW PROFESSOR WILL BENEFIT MOTHERS AND UNBORN BABIES

Professor Pippa Kyle has been away from New Zealand for 16 years and has recently returned to take up the position of Chair of Obstetrics and Gynaecology at the School. She brings with her a wealth of experience in the UK as a sub-specialist in Maternal and Fetal Medicine.

Her enthusiasm for Maternal and Fetal Medicine is obvious. She says it's a very exciting clinical and research area, that over the last two decades has expanded the boundaries of medicine and is continuing to do so. Professor Kyle is consequently keen to establish a specialist referral unit as part of Christchurch Women's Hospital, benefiting pregnant women from throughout the South Island.

"The Unit would focus on the fetus in terms of diagnosis and therapy. For many years the fetus was ignored, partly because of difficulties of access, but over the last two decades we have been able to push back the boundaries and can now do a lot more in terms of diagnosis with the use of ultrasound and other techniques. This Unit would also link in with maternal assessment of pregnant women who have other health problems."

Professor Kyle says that research will have a high priority in the new clinical unit, which will primarily be a referral facility for pregnant women from throughout the South Island with more complex medical problems.

"In relation to that my interests revolve around such areas as fetal abnormality, multiple pregnancy, and complications in pregnancies such as preterm labour and preeclampsia which lead to significant maternal and neonatal morbidity," says Professor Kyle

"Essentially this is looking at the problems that the mother and fetus can develop throughout gestation and even before conception".

She says ultrasound is the major development which has allowed doctors to gain insights to what is happening in the womb, and which can be augmented by various diagnostic tests. There have also been big developments in fetal therapy over the last two decades, treating the baby in the womb, through techniques such as intrauterine blood transfusions.

However Professor Kyle also points out that understanding the genetic origins of fetal problems is probably the most interesting pathway for future medical research. As in many other medical areas, abnormalities and health problems have their origins in the genetic make-up of the fetus.

"The really interesting thing about Maternal and Fetal Medicine is that you are dealing with two people, the mother and the unborn child, and their interactions. For instance, the fetus may have paternal genes, which the mother doesn't possess, or even rejects, so this can create problems which we need to understand more."

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Christchurch School of Medicine and Health Sciences

December 2003

Connecting with the Community

This is the School's second Community Newsletter for 2003. Since our last edition we have held an important and well attended public meeting in September on the new medical curriculum. This will come into operation in the 2005 academic year, and will shape the education of New Zealand doctors graduating from the University of Otago for some years to come.

The aim of the meeting was to obtain feedback and comment from the community on some of the key attributes and skills needed by the modern medical practitioner. Issues raised in discussion at the meeting covered a wide spectrum of concerns.

Some of those included communication skills, resources for the new case-based teaching framework, the emphasis on understanding the needs of the disabled and those with mental health problems, support for Maori and Pacific Island students and their communities, and the training of rural doctors amongst others. It was pleasing to see that the presentations by Professors Campbell and Wilkinson were generally well received by those who attended.

However, there is still time to make comment! This is possible by viewing our website for feedback, the graduate profile and the new curriculum on:

http://healthsci.otago.ac.nz/division/medicine/newpathway/feedback.htm
http://healthsci.otago.ac.nz/division/medicine/newpathway/profile.htm
http://healthsci.otago.ac.nz/division/medicine/pathway.htm

At the beginning of this year we organised a very well attended lecture series by School staff on important health issues. In March/April of 2004 we are intending to present another Health Series, and welcome any suggestions from the public or health sector interest/support groups as to possible topics. We are also keen to establish a 'Friends of the School' group interested in the teaching and research work that the School carries out within the Christchurch community.

Contact Ainslie Talbot on 364 1199 if you wish to suggest topics for the next Public Health Series, or are interested in joining a 'Friends of the School' group.

Professor Ian Town
Dean.

HEALTH RESEARCH COUNCIL GRANTS BOOST MEDICAL RESEARCH

A very important source of funding for medical researchers at the School comes from the government funded Health Research Council.

Every year the HRC considers hundreds of grant applications for research projects and this year was no exception with 252 projects vying for $43.5 million dollars, usually for three to five years research funding. There are always many more applications than funding available, and this year 51 were successful after intensive peer review scrutiny.

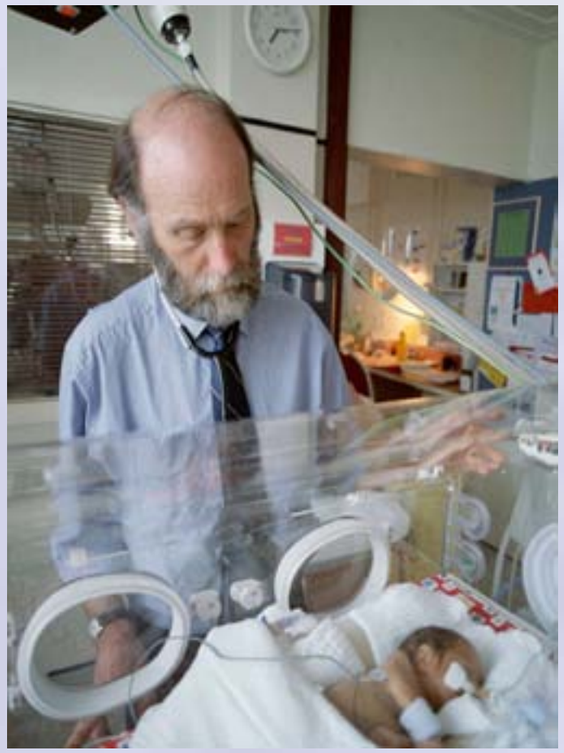
The Christchurch School of Medicine and Health Sciences has a record of doing well in the HRC funding round, and for 2003/04 received grants of $3.53 million for seven new studies.

“Despite this being another very competitive grant round, I was delighted with the success our researchers achieved,” says Professor Town.

The largest share of the HRC monies went to the Department of Psychological Medicine, headed by Professor Peter Joyce, for work in the area of depression and manic depression, which impairs the lives of thousands of New Zealanders. The studies will look at the influence genetic make-up has on these conditions and response to different treatments. The manic-depression study will evaluate the effectiveness of different psychotherapy treatments.

Another area to receive funding is a five year international collaborative study with Professor Brian Darlow, into the use of immunoglobulin in newborn babies suspected of suffering from infection. Every year 600 babies die in Australia and New Zealand from bacterial infection.

Dr Margret Vissers, Professor Christine Winterbourn and Dr Mark Hampton from the Free Radical Research Group, have been funded to further examine the role Vitamin C and other antioxidants play in the vital function of programmed cell death.



Professor Brian Darlow

Dr Annette Beautrais,Psychological Medicine, has been funded for two further studies on suicide.
Associate Professor Tim Wilkinson will be looking at the effectiveness of exercise programmes for the elderly.

Meanwhile the Canterbury Respiratory Research Group, led by Dr Michael Epton, has received a grant for a collaborative study with the University of Auckland into why some smokers develop chronic obstructive pulmonary disease or COPD (chronic bronchitis and emphysema) while others do not.

RESEARCHING OUR MOST COMMON CANCER

Colorectal or bowel cancer is one our most common forms of cancer in New Zealand with over 2500 cases a year; of which half will die. This is one of the highest rates of colorectal cancer in the developed world.

The causes are not clearly known, but research suggests that the high levels of animal fat in our diet may play a role, although up to 8% of cases can also be linked to genetic factors.

The School is very aware of the high cost of bowel cancer to New Zealanders well being, and the health system generally, and is therefore heavily involved in bowel cancer research in a number of areas.

Dr Judy McKenzie from the Haematology Research Group and Professor Justin Roake from the Department of Surgery are investigating the development of a vaccine for treating advanced bowel cancer. The concept is to stimulate the body’s immune system through the use of a rare type of blood cell called a dendritic cell. By combining the patient’s cancer cells with their own dendritic cells, the new cell will not only contain the cancer which the body needs to target, but also those attributes needed to stimulate the immune system.

When injected back into the patient these new combined cells will in turn stimulate cancer killing T-cells which can then seek out and destroy residual cancer cells.

The Angiogenesis Research Group is investigating how to actually stop the growth of tumours by closing down its blood supply. Research scientist Sarah Gunningham has discovered a new family of receptors which are important in the stimulation of growth of blood vessels around cancer tumours.

This family of receptors is called Neuropilin-1, and is present at a much higher level in those people with more severe forms of bowel cancer. This discovery may help to detect those patients with more aggressive forms of the disease to target treatment more effectively.

Dr Jacqui Keenan from the Surgery Department is also working in an area which may help us understand causes of bowel cancer. She’s looking at the role a bacteria called Helicobacter may play in the development of Inflammatory Bowel Disease which in some cases can lead to bowel cancer. This project is trying to ascertain the frequency of Helicobacter in the colon and to test if IBD is a consequence of that infection.

Meanwhile, on another front, Associate Professor Philip Bagshaw, Dr Randall Allardyce and Professor Frank Frizelle of the Surgery Department are involved in a nine year collaborative study comparing patient outcomes between ‘keyhole’ or laproscopic surgery for bowel cancer, with conventional surgery.This study is monitoring the results of 600 patients in Australia and New Zealand.

“The outcome of this study will be very significant in determining the best surgical techniques for dealing with different kinds of bowel cancer,” says colorectal surgeon Professor Frank Frizelle. “ For many patients recovery time can be halved with laproscopic surgery, with less cost to the health system”.

Funding for these projects is provided by the Canterbury Medical Research Foundation, Health Research Council,Cancer Society, Bone Marrow Transplant Trust, Robert McClelland Trust and Lottery Health.