Sun-Herald City2Surf

The Sun-Herald City2Surf will be held on Sunday 12th August with over 80,000 runners. We have acquired ten exclusive **Gold Charity entries** to this event. This will allow our team to have a distinct advantage and "jump the queue" starting just behind the Red Zone elite runners. The Gold Charity programme has become extremely popular with running events around the world as a way of raising much needed funds for charity. This is a fantastic way to raise money for the Cancer Surgery Research Foundation. If you, or a friend or relative are a serious runner and could commit to raising $750 (plus $250 registration fee) for CanSur while participating in this very popular event please call us on 9966 5163.

The High Tea for P.C. (Pancreatic Cancer)

The High Tea for P.C. event will be held at the Sebel Hotel, Church Street, Parramatta on Sunday 11th November at 1pm. Tickets will be on sale from 11th July with all profits going to the Cancer Surgery Research Foundation. For further information please contact Nadia on 0420 857 859 or email highteaforpc@yahoo.com.

CanSur's New Website

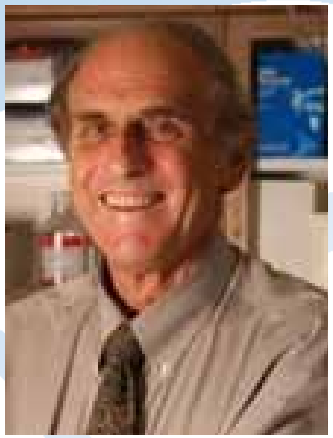
A new website for CanSur is being developed. This will include some special features which will allow publication of papers and online donations. We will also undertake a survey of dietary details, concerns about cancer and access to health facilities. We would like to outreach to a set of people in the city and compare to those in the country.

New MALDI Tissue Imaging

CanSur has contributed $55,000 to the purchase of new equipment, along with grants from NHMRC, Sydney University and Royal North Shore Hospital. This equipment will demonstrate how proteins function in cancer tissue. Along with the scientists at the Kolling Institute, we are excited with the future possibilities which will stem from this state of the art equipment.

Pancreatic Cancer Has No Respect For The Very Clever Or Rich

Nobel prize winner, Professor Ralph Steinman, worked on the immune response to cancer, which has been effective for some cancer types. Unfortunately, when he developed pancreatic cancer he applied these methods to himself but they were unsuccessful. Steve Jobs had a form of pancreatic cancer which he tried to fight with a range of methods. Sadly, the world lost his brilliance in the end. I would like to repeat one of his quotes: "Being the richest man in the cemetery doesn't matter to me – going to bed at night saying we have done something wonderful – that's what matters to me." This reflects the philosophy of CanSur's research staff.



If you would like to support CanSur's work please visit our website http://www.cansur.org to make a tax-deductible donation. Or send your donation on the enclosed form to:

Cancer Surgery Research Foundation
PO Box 1512,
Crows Nest NSW 2065
Phone: 02 9966 5163
Fax: 02 9437 3522

A.C.N. 089 161 704

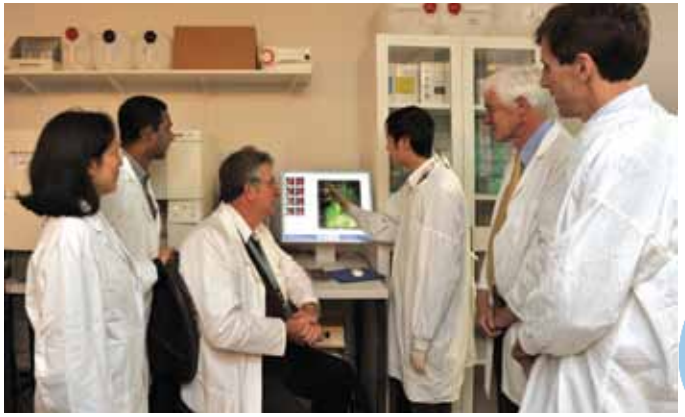
Cancer Surgery Research Foundation

News

July 2012

Chairman's Introduction

CanSur is interested in improving the outcome of surgery for patients with all types of cancer. It is hoped that by concentrating on the most aggressive cancer we would gain insights relevant to other cancers. Pancreatic cancer is a major challenge. Surgery, when possible, results in the best chance of cure but frequently cells are left behind which lead to recurrence. To treat these cells before they grow into masses is the best time to cure the cancer. This year the laboratory has had three main themes in its investigations:



Dr Aiqun Xue, Dr Sohel Julovi, Dr Lindsay Peters, Dr Matthew Wong, Professor Ross Smith and Dr Tom Hugh discussing laboratory results

Treating Resistant Cancers With Dual Anti-Cancer Therapy:

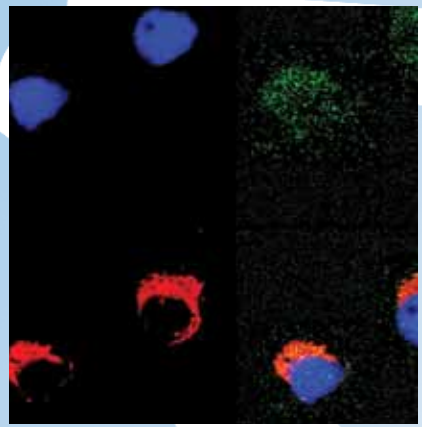
Dr Matthew Wong started an interesting study to overcome cancer resistance for his PhD. There are two treatments that are acknowledged to improve survival of pancreatic cancer patients. Firstly, a chemotherapy agent, Gemcitabine with its frequent side-effects. This benefits 60% of patients but eventually these patients develop resistance. Secondly, Erlotinib blocks growth factors and shrinks many cancers but pancreatic cancer frequently becomes resistant. To study the mechanisms behind this process we have developed resistant cancer cell lines. We have found exciting new drug combinations which work on these cells and we will test these on cancer tissue grown in the laboratory.

Growing Cancer Tissue In The Laboratory:

Dr AiQun Xue has developed methods of growing cancer tissue in the laboratory. This is important because the cancer tissue in humans is a complex structure of cancer cells and the supporting connective tissue. Cancer cells are dependent on their supporting structure and the response of anti-cancer treatments to such models reflects the response of these treatments in patients. These new models are able to test treatments and save patients undergoing clinical trials until the therapy has an established influence. We will undertake a pre-clinical study of the novel protocols developed by Dr Wong.

Targeting Cancer Tissues:

ApoA-II is a blood protein which we have discovered to be depressed in pancreatic cancer. Further work has shown that this protein is taken up by cancer cells. ApoA-II is a protein transporter carrying lipid particles to cancer tissues. It is likely that we can use this finding to deliver treatment to cancer without affecting normal tissue. Thus we may treat the cancer without causing side effects. The picture shows a cancer cell grown in the laboratory where the nuclei of the cells stain blue, the lipid is green and the protein of interest is red. Note that in the bottom right corner the cells have been in contact with both lipid and the protein and that the colour in the cells is orange indicating that both the protein and the lipid have passed into the cells.



Different laser wave lengths show nucleus-blue, lipid-green and ApoA-II- red

Graduation of Dr Nemes Sandanyake

Dr Nemes Sandanayake graduated with a PhD at Sydney University for his work with CanSur. After training as a gastroenterologist at Royal North Shore Hospital he studied at the University College London. Impressed with CanSur's work, he initiated a blood test (biomarker) discovery project and forged a link between the two hospitals. He became proficient with advanced equipment in both hospitals and discovered that levels of a protein LRG was elevated in patients with bile duct cancer and that these values improved the diagnostic ability of the standard measures. He also established the importance of a number of biomarkers for the diagnosis of very early pancreatic cancer before it became symptomatic. One of these proteins was a protein that past research in the laboratory had discovered. Further work is ongoing to confirm these findings and to develop methods to measure these proteins without the need for research equipment.

Primary Liver Cancer

Primary Liver Cancer has a wide variety of outcomes. We have investigated the protein profile of liver tumours and related these to the outcomes of patients. It is interesting that some patterns occur allowing tumours to be classified. Special stains will be developed to use this information on biopsy specimens. This work is ongoing.

Oesophageal Cancer Project

Dr Ada Ng has just completed her surgical training. She will undertake a Masters of Surgery project using the new MALDI imaging equipment to study how the proteins change in the lining of the oesophagus leading up to the development of oesophageal cancer. Her work will involve new biopsies as well as specimens from the tumour bank.