

## Congratulations to Dr AiQun Xue



*Professor Ross Smith, Dr AiQun Xue, PhD and Professor Christopher Jackson at AiQun's PhD ceremony, Sydney University, May 2010.*

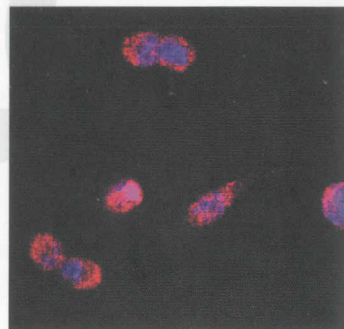
AiQun Xue was awarded her PhD in May this year for her work in the CanSur Laboratory. She has recently had a paper accepted in the top ranking British Journal of Cancer, titled "Discovery of Serum Biomarkers for Pancreatic Adenocarcinoma Using Proteomic Analysis". Acceptance by such an important journal is a fine reward for long effort. The paper's findings are likely to improve the diagnosis of cancer at an earlier stage and have the potential to initiate new therapies.

### Why are proteins so important?

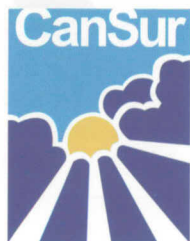
Someone has asked "Why are proteins so important?" Protein is the end product of gene expression. Proteins are derived from twenty-three amino acids which are linked together in potentially many millions of combinations, sizes and shapes. Despite this variation the body recognises those that belong to healthy tissues and destroys abnormal proteins. Cancers may be identified

by the abnormal proteins which are tolerated by the body. Some proteins act as messengers to increase growth and the cancer's blood supply. Some proteins carry nutrients, some are confined to the local tissue while others are a response of distant organs. Small abnormal proteins may leak from the tumour and circulate in the blood.

With that background we have screened the blood for unique protein patterns which may aid diagnosis from a blood sample. We have access to SELDI-TOF equipment which can screen multiple blood samples for small proteins so that diagnostic patterns can be identified. Our studies have found that proteins in the blood which carry lipid have abnormal concentrations and are in effect feeding the cancer. This picture shows an abnormal protein stained red, being engulfed by pancreatic cancer cells with the blue nucleus. Our aim is to add poison to the lipid in order to destroy the cancer.

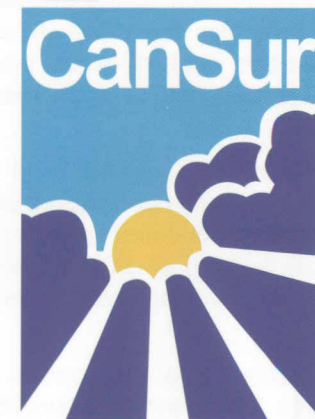


If you would like to support CanSur's work please visit our website <http://www.cansur.org> to make a tax-deductible donation. Or send your donation on the enclosed form to:



**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

June 2010