CRC for ASTHMA
News

Volume 4, Issue 1
April 2005

The exciting news in this edition is of course, the tidings that the CRC was successful in its bid for a second term of funding. Congratulations to all those involved in the successful bid.
Jodi Roper,
Education Manager

Inside this issue:

CRC for Asthma
K-25 Medical Foundation Building
University of Sydney 2006

P: (02) 9036 3125
F: (02) 9036 3129
jodir@asthma.crc.org.au
www.asthma.crc.org.au

CRC awarded 2nd round of funding

The CRC has been successful in its bid for a further round of funding worth $54M over 7 years. The new grant period will start in July of this year. The results of the 9th CRC Selection Round were announced by Dr Brendan Nelson shortly before Christmas. The CRC for Asthma and Airways (CRCAA) was one of 14 successful bids out of an initial 85.

The partners involved in the new CRCAA — the Garvan Institute, Woolcock Institute, Universities of Sydney, Monash, WA, and Newcastle, WA Departments of Environment and of Health, GlaxoSmithKline, Pharmaxis, NSW Health and Bird Healthcare — celebrated the good news with functions in Sydney, Perth, Newcastle and Melbourne.

"The achievement of this wonderful outcome would not have been possible without the collaboration between the partners over the last 2 years."
Philip Bert, CEO

The CRCAA will contribute significantly to commercial, industrial, economic and health outcomes in Australia and globally by addressing asthma and other airway diseases.

The CRCAA will identify key pathways in asthma mechanisms involving unique sets of genes, inflammatory molecules and proteins that will underpin a rational commercial approach to the better use of existing treatments and the development of novel, improved therapeutic strategies for asthma. This includes the development of diagnostics to identify subsets of patients who are likely to respond to specific treatments, to detect those who are at risk and those who will progress to chronic severe disease, and to assess disease activity and monitor drug therapy.

In addition, the CRCAA will improve our understanding of the environmental factors that influence the high and increasing rates of asthma with the goal of developing air quality guidelines and policies that will be implemented through state government partners. This will improve the health of asthmatics and will have a significant economic impact.

(Continued on page 2)

Established and supported under the Australian Government's Cooperative Research Centres Programme

(Continued from page 1)

Research Programs with the new CRC

The research program will have three major components.

Program 1: New and Superior Treatments. This program will focus on the identification and validation of targets for new therapeutics, and the development of immunotherapies for asthma and allergic disease. It will be comprised of five integrated sub-programs.

Novel Asthma Drug Targets. Prof Charles Mackay of the Garvan Institute will lead this unit, which will also involve SydneyUniversity/ Newcastle University/UWA and GSK.

Drug Targets from New Animal Models Prof Paul Foster of Newcastle University leading his team, including input from Monash, Garvan and GSK.

Genetics of Asthma Prof Phil Thompson of UWA leading with involvement from the Garvan and GSK.

Mechanisms of Airway Remodelling lead by Prof Judy Black of Sydney University and involving UWA, the Garvan and GSK.

Immunomodulation Prof Robyn O'Hehir of Monash University will direct efforts and will involve Newcastle Univeristy and Pharmaxis.

Program 2: Advanced Diagnosis and Monitoring. This program will develop diagnostic products and devices based on novel biochemical and physiological measures and is made up of two sub-programs.

Functional Measurements Lead by Prof Norbert Berend of the Woolcock Institute and also involving Newcastle University, Monash University and Bird Healthcare.

Markers of Disease Activity Prof Peter Gibson of Newcastle University will lead this group, including work from Monash University, UWA, Woolcock Institute and Pharmaxis.

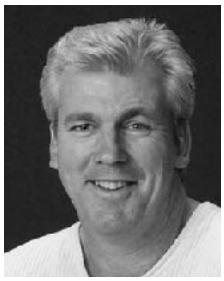
Program 3: Consequences of Adverse Air Quality This program has been developed to generate a decrease in the rates of asthma and other airways disease which contribute significantly to Australia's illness and mortality burden.

It will be headed up by Prof Phil Weinstein of UWA and also involving the Woolcock, NSW Health/WA Health and WA Dept of Environment.

The Education Program will continue the scholarship training scheme, and will also include High school students' career outreach program, Professional Training and Community Education. This program will be headed up by Dr Christine Jenkins and will involve all partners in the new CRCAA.

New Research Leaders involved in the CRC for Asthma and Airways include:

Professor Judy Black
University of Sydney



Professor Paul Foster
University of Newcastle

Professor Phil Weinstein
University of Western Australia

New Board member

Prof Michael Berndt

Professor Michael Berndt is currently a NHMRC Senior Principal Research Fellow, a Professional Fellow in the Department of Biochemistry & Molecular Biology at Monash University and Associated Dean (Research) for the Faculty of Medicine at Monash university. He has received numerous national and international research awards including the Glaxo-Wellcome Medal in 1996, and serves on several editorial boards.

Professor Michael Berndt

Congratulations to Professor Christine Jenkins, who has been made a Clinical Professor in the Central Clinical School, Faculty of Medicine, University of Sydney.

Website

If there is any information about your project, recruitment for clinical trials, or news that you would like to see included on the CRC website, please contact Jodi or Dee or (02) 9036 3125

CRC Celebrates Nationwide

Perth

The UWA Centre for Asthma, Allergy and Respiratory Research was delighted to be able to celebrate its role in the CRCAA win at a drinks party hosted by CRC CEO Mr Philip Bert. The party was held at a famous Perth pub restaurant, Stephanie's, which overlooks the Swan River and it saw UWA staff enjoy West Australian wine and delicious canapés while watching the sun set. A number of guests from the WA Department of Health and the WA Department of Environment also attended.

Mr Bert gave a brief address on the significance of the work that the new CRC would undertake, while Professor Philip Thompson spoke about how grateful he was to his staff and to the many other individuals responsible for putting together the application for further CRC funding.

The Vice Chancellor of UWA, Professor Alan Robson, emphasised the importance the University attached to winning a CRC grant, how much the University valued being associated with the success of the CRCAA and the fact that this was by far the biggest involvement the UWA has had in a CRC to date. He finished by highlighting that the achievements of this sort are a direct reflection of the leadership capacity of those in charge.

Melbourne

Staff from the Department of Allergy, Immunology and Respiratory Medicine, Alfred Hospital and the Department of Immunology, Monash University celebrated the CRCAA award Greek style! The venue for dinner was Pireaus Blues Restaurant, Fitzroy. A great time was had by all eating, drinking and listening to a live Greek band.

Mr Philip Bert and Professor Robyn O'Hehir hosted the event and we were joined by Mr Robin Ould (CEO of the Asthma Foundation of Victoria), Mr Bob Bird (Bird Healthcare) and Dr Roland Scollay (Director of Commercialisation, Monash University).

Newcastle

Professor Ron MacDonald, Deputy Vice Chancellor of the University of Newcastle hosted a gathering at the University Staff club to celebrate the announcement of the new CRC partnership. CEO Mr Philip Bert addressed the gathering, welcoming the Hunter based participants of the new CRC. Professor MacDonald expressed his satisfaction at the University of Newcastle being part of the successful bid. Vice Chancellor Professor Nick Saunders also attended. Professor Saunders recounted his experience of being a past Board member with the CRC for Asthma and also stressed the important role the new CRCAA would play in future medical research in Newcastle.

Sydney

Sydneysiders celebrated the news of the CRC for Asthma & Airways win with drinks at the CRC head office, in the Medical Foundation Building, University of Sydney. The CEO Philip Bert, chairman of the CRC for Asthma Board, Arthur Emmett and Board member, Mervyn Michell, mingled with researchers representing all of the Sydney based partners. Long term CRC members from the Woolcock and Garvan, including Professor Norbert Berend, Dr Michael Rolph and Professor Guy Marks celebrated with researchers from Professor Judy Black's unit and discussed the new venture.

Vice Chancellor of UWA Professor Alan Robson with Professor Phil Thompson at the UWA celebrations.

The Melbourne node celebrated the win with dinner at Pireaus Blues.

Post Graduate Students

Ms Katie Baines is the latest student to be awarded a CRC for Asthma Post-graduate Scholarship. She joins our current group of 7 students working diligently on their research projects.

Katie Baines

I began studying in 1999 with the University of Newcastle, where I completed my B. Biomedical Science degree in 2001, with honours in the field of Molecular Cytogenetics in 2002. I worked for a short time as a research assistant and then decided to change fields, starting my PhD in Respiratory Medicine under the supervision of Prof Peter Gibson and Prof Rodney Scott. I am now a 2nd year PhD student, and the title of my project is "Molecular Pathogenesis of Non-Eosinophilic Asthma". Non-Eosinophilic Asthma (NEA) is a newly described phenotype of asthma, characterised by persisting asthma symptoms in the absence of eosinophilia. NEA could account for up to 50% of people with asthma, and these patients respond poorly to current treatments. NEA has been linked to elevated numbers of neutrophils, and higher levels of the neutrophil attractant IL-8 in the airways. As a result of this research I hope to further characterise the role of the neutrophil in the pathogenesis of NEA.

Katie Baines

Dendritic Cell Conference Andrew Sutherland

During the course of my PhD studies I have developed a keen interest in the workings of the dendritic cell and was excited when I noticed that the Keystone Symposia had scheduled a conference titled 'Dendritic Cells at the Center of Innate and Adaptive Immunity: Eradication of Pathogens and Cancer and Control of Immunopathology' for early 2005 in Vancouver, Canada. This conference seemed to be the perfect opportunity to learn more about this fascinating and expanding field of research. My expectations were more than realized with an excellent program of speakers from around the world, whose research encompassed the important facets of the dendritic cell field as it stands today. The program covered diverse aspects of dendritic cell biology, including the role of dendritic cells in immunity and tolerance, control of infectious diseases, development of allergy and autoimmunity, and the use of dendritic cells for successful vaccine development and targeting of cancer. Daily poster sessions were held in addition to the speaker program and provided a more intimate environment in which to discuss the intricacies of people's work. I presented a poster displaying my work on the role of BAFF in regulating T cell responses, which was well received. Overall, I found the conference to be a highly successful learning and interacting environment and would recommend Keystone Symposia to CRC for Asthma students who want to immerse themselves in their field of interest.

Whilst in North America I took the opportunity to visit a number of labs in which I am interested in conducting my post doctoral work. I visited laboratories of Richard Flavell at Yale University in New Haven, and those of Mike Grusby, Laurie Glimcher and Dale Umetsu at Harvard Medical School in Boston. I presented the findings of my PhD studies to these groups and received a large amount of positive feedback regarding my work. I was able to meet with the group leaders and a number of post docs currently working in these labs, which enabled me to get a feel for their research interests and which of these labs would be the most suitable for me. These visits have provided me with a clearer insight of where I would like to work at the completion of my PhD and will hopefully lead to a position in one of these highly respected and productive groups.

Finally I would like to thank the CRC for Asthma for their ongoing support in the form of post graduate scholarships and especially the provision travel funds for students, which I believe is essential for our development as young scientists.

Andrew Sutherland

Thesis News

Some of our previous CRC for Asthma scholars have successfully submitted their research work over the past few months.

Congratulations to:

Thai Tran: has been awarded her PhD and is currently on a Canadian fellowship completing a postdoc with Dr Andrew Halayko in Winnipeg, Manitoba.

Ingrid Laing: submitted her thesis in December, and has been awarded the Inaugural CHATA Ann Woolcock Australian Fellowship. She has recently begun work (at UWA) on investigating the genetic susceptibility to acute lower respiratory tract infection in infants from Papua New Guinea.

Sarah-Jane Beavitt: has just been awarded her PhD and is currently deciding upon her next move.

Bennett Shum to feature at CRC Association conference

PhD student, Bennett Shum of the Garvan, has won the opportunity to present his research work at the CRC Association conference in Melbourne in May. The 'Showcasing CRC PhD Students' session is always the highlight of the conference. Competition for the award was fierce, with 33 applications received. Bennett has been chosen as one of the top 4 students to deliver a 10 minute presentation. Bennett's win includes airfares, accommodation and the opportunity to attend a specially tailored, one-day workshop on media/presentation skills. Bennett will be talking about 'aP2' and its role in asthma. The CRC Association conference is a gathering of CEO's, business, communication and education managers and draws together some of Australia's most influential people in government, industry and research institutions. There is a prize of $2000 for the best student speaker.

Publication Update

There have been a number of publications in the last six months.

Aroni, R, Goeman D, Stewart K, Thien F, Sawyer S, Abramson M, Douglass J. **Enhancing Validity: What Counts as an Asthma Attack?** Journal of Asthma Vol. 41, No.7, pp 729-737, 2004.

Drew AC, Eusebius NP, Kenins L, de Silva HD, Suphioglu C, Rolland JM, O'Hehir RE. **Hypoallergenic Variants of the Major Latex Allergen Hev b 6.01 Retaining Human T Lymphocyte Reactivity**
The Journal of Immunology, 2004, 173: 5872-5879.

Powell H, Gibson PG
Initial starting dose of inhaled corticosteroids in adults with asthma: a systematic review
Thorax 2004' 59:1041-1045

King GG, Brown NJ, Diba C, Thorpe CW, Munoz P, Marks GB, Toelle B, Ng K, Berend N, Salome C. **The effects of body weight on airway calibre.** Eur Respir J 2005; 25: 1-6

Kedda MA, Lose F, Duffy D, Bell E, Thompson PJ, Upham J. **The CD14 C-159T polymorphism is not associated with asthma or asthma severity in an Australian adult population.** Thorax 2005; 60:211-214.

Reddel HK, Vincent SD, Civitico J. **The need for standardisation of peak flow charts.** Thorax 2005; 60: 164-167.

CRC Conference 2005

The next CRC Conference will be held on 20/21 June at the Swiss-Grand at Bondi Beach.

The resort is located right on Bondi Beach overlooking the Pacific Ocean.

The program will involve a wrap up of all the current CRC projects which are nearing completion, together with discussion and planning for commencement of new projects for the CRC for Asthma & Airways.