



CEO's Update

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The Asthma CRC is now two and a half years into its second seven year term and continues to make excellent progress. The past six month period has seen strong performances in all the research programs. Major milestones have been met in the therapeutics program and the angiogenesis, antibody, miRNA and grass allergen projects have produced valuable intellectual property. The diagnostic program is moving ahead steadily and the proteomics project has started generating interesting disease-related biomarker profiles. The second phase of the Lane Cove Tunnel project has commenced and the long term urban and regional air pollution projects are moving ahead well. The 2008 PhD scholarship round has been completed and seven new top up scholarships have been awarded. The CRC is currently providing support to 22 PhD students. Good progress is also being made with commercialisation of CRC IP and negotiations are underway in two areas.

The next six months will be very important for the CRC. All research groups will be preparing their new three year research proposals for review by the Scientific Review Committee in May. This will be followed by the external Third Year Review of the performance of our CRC after July. The results of this review will be provided to the Government and if the outcomes are satisfactory, the CRC will be funded to the end of the current term.

The new Government will also be carrying out a full review of the CRC Program. This review will focus on the overall performance of the Program since its inception in 1991 and will determine whether changes should be made to meet new challenges. Of particular interest will be the relative weighting between public good and commercially focussed research. The results of this review should be published in the second half of 2008.

Philip Bert

Patent Portfolio Growing

The capture and commercialisation of intellectual property is a key objective of the Asthma CRC. The research programs have been aligned with this commercial priority and it is gratifying to observe the increase in patenting activity over the past year. The CRC's patent portfolio is handled by Davies Collison Cave, a leading Australian firm of patent attorneys. The drafting of patents and progressing of applications is carried out by two biotechnology partners, Dr Tania Obranovich (Melbourne) and Dr Gavin Recchia (Sydney). Both these patent attorneys are very well qualified and they provide high level support to CRC scientists.

All research projects are reviewed regularly by the CEO and program leaders to ensure that discoveries of commercial value are identified at an early stage. When these discover-

ies are identified, prior art searches of the patent literature are undertaken to establish the patentability of the material. An assessment of the market potential is made and an appropriate patenting strategy is then put in place.

The CRC's patent portfolio covers ten patent families. These range from applications covering Hev b5 and Hev b6 latex allergen peptides (that have been granted), through to the Ap2 and Tumstatin drug targets and the more recent GM-CSF antibodies and Bahia grass pollen allergens.

The challenge now is to work with commercial partners to bring these inventions to market. The most promising candidates at present are the latex peptides and GM-CSF antibodies. Potential partners have been identified and licensing negotiations are underway at present.



Asthma CRC Conference - Coogee Beach



Asthma CRC Conference 2008

The date for the next CRC conference is the 5th and 6th June 2008. It will be held at the Sydney Marriott Hotel.

The Asthma CRC 2007 conference was held at the *Crowne Plaza Coogee Beach* in Sydney on the 18th and 19th June. The meeting was attended by over 80 delegates from the Asthma CRC research nodes in Sydney, Perth, Melbourne and Newcastle.

The research groups provided updates on the progress that had been made on their programs since last July. An interesting presentation was given by Deborah Sweeney from the Vision CRC. Once again

the student presentations were of an exceptionally high standard and were one of the highlights of the conference.

The last day provided time for the delegates to breakout into their program groups to discuss their research and to develop collaborative activities for the next three years.

Dinner was held at Deep Blue Bistro.



News from HMRI Node

Prof Peter Gibson's node of the CRC has enjoyed a productive year in 2007. The proteomics project is coming to fruition and is showing promising results. The analysis phase of markers relating to asthma control and inflammatory phenotype is underway. Sample collection for a collaborative project with Pharmaxis has been completed. The group also continues to enjoy a productive interaction with Prof Paul Foster's group, with a collaborative micro RNA project.

Two members of the group have been recognised for their scientific achievements, with Dr Lisa Wood and Dr Nikki Verrills being named as NSW Tall Poppies, at a reception in NSW Parliament House in October. During 2008 Lisa and Nikki will be attending functions around NSW, aimed at promoting science within education and the broader community. This is a great recognition of the caliber of the scientists within the CRC, their promise for the future, and of how the CRC is connecting with the community in its work.



Nikki Verrills and Lisa Wood at the Tall Poppy Awards (above)



Peter Gibson and Peter Wark celebrating their birthdays

The CRC PhD students have also been productive in 2007. Katie Baines submitted her PhD thesis in October. Her work was presented at ATS and ERS, where it was the highest rated abstract in that section. Our other CRC scholar, Vanessa McDonald, has also had a productive year, presenting her research at TSANZ, ERS and APSR in 2007. We also have a number of high school and undergraduate students, who are interested in careers in science, being hosted in our laboratory over the summer period.

October was also a big month in Newcastle, with Peter Gibson turning 50 and Peter Wark turning 40! (and the Pasha Bulker relocating to a safer berth).



Pasha Bulker (right)

PhD News

Overseas Lab Visit - Leia Hazlewood



Spending some of my PhD overseas was always something that I wanted to do. Towards the end of the second year of my PhD, I felt it was the right time both academically and personally to give it a try! I had discovered, quite unexpectedly, that a post-doc (Annick DeVries) in Edinburgh was working on the same research question as I was. So with the support of my primary supervisor in Australia (Paul Foster) I contacted the head of the immunobiology research group (Sarah Howie) at the Queen's Medical Research Institute at the University of Edinburgh.

Arrangements were made for me to travel to Edinburgh as a visiting scholar for 6 months from January 2007. After recovering from

difference in temperature between Australia and Europe in January, I settled into life as a PhD student in Edinburgh. The experiments centered on the role of dietary fat in mouse models of allergic lung inflammation. I also conducted a 5-month mouse study into the role of either high fat diet or dexamethasone treatment during the final trimester of pregnancy on allergic lung responses in the offspring. Laboratory techniques that I used included measurement of cytokines and immunoglobulins by both ELISA and cytokine bead array, histology, immunohistochemistry, flow cytometry, microscopy for visualization of cells from various fluids, cell culture and various animal laboratory techniques. I also needed to learn the ropes of a new and very different animal house, not the least of which was improving my running time for the ice-laden dash between the laboratory and the animal house. I also attended the annual British Society of Immunology conference in Glasgow in February.

From a personal point of view, the trip was a great experience to travel at weekends and I saw a lot of Scotland and also Yorkshire and London.

I wish to thank my supervisor, Paul Foster, for allowing me the chance to experience science in a different lab and country; the immunobiology research group at the University of Edinburgh for welcoming me into their lab; and the CRC for Asthma and Airways for the top-up scholarship provided to assist with my costs in Scotland.

I would thoroughly recommend an overseas lab visit to any PhD student as a wonderful experience both academically and personally.

Results of the PhD applications for 2008

The CRCAA Education sub committee met in December to review applications for the PhD top-up scholarship for 2008. We received 17 applications, all of a very high standard.

Seven scholarships were awarded to the following students:

Ms Karryn Grafton - University of Sydney
 Mr Max Plank - Newcastle University
 Mr Richard Kim - Newcastle University
 Ms Jeanne LeMasurier - Monash University
 Ms Kendle Maslowski - Garvan Institute
 Mr Gavin Pereira - University of WA
 Mr David Chapman - Woolcock Institute

Publication Update

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CRCAA ANNUAL REPORT

The CRC for Asthma and Airways 2006/2007 Annual Report is now available on the CRCAA website.

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