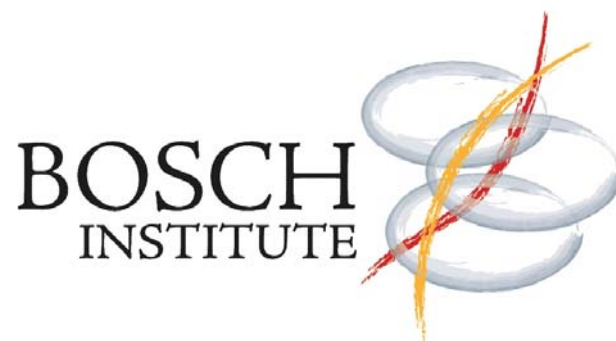


**The Bosch Institute
Brief update
April – June 2008**



Premier's Award for Outstanding Cancer Research Scholar



In May 2008, Bosch Young Investigator, Katie Dixon received the Premier's award of Outstanding Cancer Research Scholar. Katie completed her PhD with Prof. Rebecca Mason in the Department of Physiology and was

recognised for her cancer research on ultraviolet radiation-induced skin cancer. Her study was the first to demonstrate a role for vitamin D compounds in reducing tumour formation and skin cancer progression.

The studies carried out in this project helped to unravel the mechanisms

underlying photoprotection by vitamin D compounds. A preliminary study carried out in human subjects showed a reduction in some of the early events that lead to skin cancer development; in particular the reduction of sunburn cells and DNA damage.



Katie Dixon, second from left, with Chief Cancer Officer Professor Jim Bishop, Verity Firth, Minister for Science and Research and fellow prize recipients.

Sir Zelman Cowen Prize

The Sir Zelman Cowen Universities Fund Prize for Discovery in Medical Research is awarded in alternate years at the University of Sydney and at the Hebrew University of Jerusalem. It recognises discovery in medical research by a researcher under 40 years of age who has made a major contribution to the understanding or treatment of disease. The Trustees of the Fund have awarded the 2008 Prize to Bosch Researcher Dr Catherine Leamey.

Dr Leamey was nominated for the identification of a gene, *Ten_m3*, which is essential for binocular vision. In its absence the projections from the two eyes which see the same part of visual space are not aligned with each other in the brain. This has devastating functional consequences - animals that lack the gene behave as if blind. Most remarkably, Dr Leamey has shown that the acute



Atomu Sawatari, Catherine Leamey and Sam Merlin

blockade of all activity in one eye of these animals can rescue vision in the other eye. The restoration of vision indicates that the "blindness" results from suppression, which arises as a consequence of the interocular mismatch. This is the first time pharmacological blockade of a neural pathway has been shown to cause a gain in visual ability. This has important implications for the development of therapies for both visual and developmental brain disorders such as autism and mental retardation.

2008 Annual Scientific Meeting

The third Bosch Annual Scientific Meeting was held on Friday 13 June 2008. The theme for this year's symposium was "Heart, Vessels and Health" and at the



recommendation of Jacquie Stratford, Bosch COO, the meeting was held in the Kerry Packer Auditorium at the Royal Prince Alfred Hospital.

One of the main objectives of the Bosch Institute is to facilitate the translation of basic research into clinical relevance so hosting our ASM at the adjoining hospital allowed many clinical researchers to attend at least part of the comprehensive program.



John Kearny and David Celermajer.

The Keynote Speaker was Professor John Kearny from Boston, USA, a well known clinical researcher in the general area of atherosclerosis. Professor Kearny's Plenary was very well received by the capacity audience and his unique second presentation for the Hospital's Grand Rounds "Endothelial Function and CVD: From Bench to Bedside and Back" provoked much interest from the Clinicians in attendance. Dr Paul Tortzilo commented "that was an incredible insight into the practical applications of basic research findings". It is hoped that we will encourage further collaboration with our clinical colleagues over the next few months.



Dr Yutang Wang, Dr Sabine Wimmer-Kleikamp, Dr Renae Ryan and Dr Lachlan McDowell.

The remaining speakers were all invited speakers from the Bosch Institute: Professor David Celermajer, Professor Roland Stocker, Professor Cris dos Remedios, Associate Professor Tailoi Chan-Ling, Dr Karen Cullen. One session was devoted to presentations from our Bosch Young Investigators and Dr Lachlan McDowell, Dr Yutang Wang and Dr Sabine Wimmer-Kleikamp were invited to present their work as mini talks.

The afternoon ended with drinks and canapés during a Bosch Young Investigators Poster Session which allowed more opportunities to network.



Poster Prize recipients Zheng Lung Ling and Steven Yun

During his closing remarks Executive Director Nick Hunt thanked Professor Kearny for travelling from the USA especially for the ASM, Caduet for sponsoring the day, the staff at RPAH for allowing us the use of the venue, Associate Professor Craig Mellis for accommodating the Bosch within their Grand Rounds Program and Kathleen Evans for her management of the event.

The 2008 Bosch Annual Scientific Meeting was proudly sponsored by



Distinguished Seminar

On 13 May 2008, Professor David Celemajer was the invited speaker for the Bosch Distinguished Seminar Series. David's talk was titled "Preventing vascular disease - from cells to societies".



Bosch ED, Nick Hunt with David Celemajer.

David Celemajer is the Scandrett Professor of Cardiology, University of Sydney. He is the Director of Echocardiography and Clinical Academic Cardiologist at Royal Prince Alfred Hospital, Clinical Director and Group Leader of Clinical Research at the Heart Research Institute, and holds a position as Cardiologist at the Children's Hospital Westmead. David's research focus is "The prevention of atherosclerosis – presymptomatic diagnosis and early treatment of arterial diseases".



E/Professor Paul Korner and Professor Roger Dampney

David's talk was very well received by the capacity audience and we are delighted to announce that David has recently joined the Bosch Institute's Cardiovascular Theme.

Professor Des Richardson

In May 2008, Professor Des Richardson was awarded the title of Biochemical Journal Editor of the Year and was also the recipient of a Muscular Dystrophy Association USA grant worth over \$400,000 US.

Secretary General of the International Union for Pure & Applied Biophysics

In April 2008, Professor Cris dos Remedios was elected Secretary General of the International Union for Pure & Applied Biophysics, a six year appointment, Cris was also the recipient of the Bob Robertson Medal for service to the Australian Society for Biophysics.

Experimental Biology 2008 Conference, San Diego, California



In April Dr Valéry Combes gave an invited presentation at the Experimental Biology 2008 conference in San Diego, California. Her talk was about the ground-breaking work carried out by her and

Professor Georges Grau on the role played by small biological particles ("microparticles") in causing the brain complications of malaria.

ASMR Dinner



Bosch Young Investigator Renae Ryan with Board Members Michael Jackson and Janice Taylor at the Australian Society for Medical Research Gala Dinner held at the Doltone House, Pyrmont on 3 June 2008.

Bosch Young Investigators

“B is for Bosch” Harbour Cruise

140 Bosch Young Investigators dressed as Björn Borg, Boris Becker, Barry Hall, Batman, Bumble bees, Biohazards, Bob the Builder, a Bishop, a Bride and Bob Marley amongst many others to enjoy the 2008 BYI Harbour Cruise welcome.



Everyone danced the night away to their favourite classic hits on the jukebox, enjoyed a selection of finger food and kept the bar staff busy. The evening culminated in a fashion parade on the lower deck and the overall “best dressed” was Björn Borg a.k.a. Dr. Paul Austin from Anatomy.

Overall, a fantastic night out – thanks to the Bosch Young Investigators Committee and A/Prof. Frank Lovicu.

Katie Dixon

BYI Seminar Series

The first of the revamped Young Investigators seminar series took place on April 25, with a fantastic turnout from all disciplines. The seminars themselves were a great mix of current research covering a diverse range of topics, from developing new forensic tests to identify skeletal fragments, through to characterization of a protein enabling visual neuron patterning. In addition, the first “perspectives” seminar was presented and discussed the history of neurophysiology. Following the seminars, we gathered for a BBQ and drinks in the Anderson Stuart courtyard and were joined by our colleagues both from the Anderson Stuart building and beyond!

The session was a great success, and is set to continue in September with the second instalment. Speakers will again be invited from all disciplines, and as such will provide us with a unique opportunity to be the first to learn about the latest findings that could potentially change the society in which we live.

Aaron Camp, PhD

Opening of new Molecular Biology Facility

On Tuesday 22 April 2008 the new Bosch Molecular Biology Facility, in the Blackburn Building was officially opened by the Governor Marie Bashir. This new facility is part of a major Microsearch complex which also includes special microsurgical and postgraduate facilities.

DATES FOR YOUR DIARY:

Friday 5 September 2008

Bosch Distinguished Seminar Series, Prof Rebecca Mason
Lecture Theatre 351, Education Building A35

Thursday 18 September 2008

NSW Cell and Developmental Biology Meeting
Bosch Auditorium, MFB, 92-94 Parramatta Road
Contact A/Prof Frank Lovicu
lovicu@anatomy.usyd.edu.au