PREMIER JOINS FNI TO LAUNCH STAGE ONE OF THE $225M BUILDING PROJECT

The $225 million construction project to build two facilities that will house the largest neurosciences group in the Southern Hemisphere commenced in early August at the Austin Hospital.

The Premier of Victoria John Brumby, Minister for Innovation Gavin Jennings, Federal Minister for Families, Housing, Community Services and Indigenous Affairs, and local member for Jagajaga, Jenny Macklin and four of the world’s leading experts in the neuroscience and mental health turned the first sod for the $45 million Austin Neuroscience Facility.

The Austin Neuroscience Facility, which is part of the Melbourne Neuroscience Project, will house more than 200 research and support staff from the Florey Neuroscience Institutes, The University of Melbourne, Mental Health Research Institute and Austin Health.

Its researchers include leading authorities in the fields of stroke, epilepsy, brain imaging and Alzheimer’s disease, Professors Geoff Donnan, Sam Berkovic, Graeme Jackson and Colin Masters.

Over their combined 110 years of clinical and research experience, the four professors have discovered genes, developed new treatments for disease, published more than 1,000 papers and book chapters and received dozens of international awards.

They have also seen more than 150,000 patients, and Director of FNI, Professor Geoff Donnan, said they would continue to pursue research with a strong clinical focus.

“The opportunity for the groups to collaborate closely will lead to exciting new discoveries and treatments for the three million Australians affected by these diseases every year,” Professor Donnan said.

“The new facility, which will also attract leading scientists from around the world and build on the reputation of both Heidelberg and Parkville as leading centres for biomedical research,” he said.

The facility is the first stage of the $225 million Melbourne Neuroscience Project, which will see two new research facilities built over two years.

FNI, which is the lead agency in the project, expects construction of the second facility to commence later this year, and for the Austin facility to be completed by October 2010.
DIRECTOR’S MESSAGE

MAKING DISCERNABLE STEPS TOWARDS A GOAL IS GOOD FEELING. FNI RESEARCHERS AND STAFF HAVE HAD A GOOD SENSE OF THIS OVER THE PAST FEW MONTHS.

FNI RESEARCHERS AND THEIR COLLABORATORS AT THE UNIVERSITY OF MELBOURNE ANNOUNCED THAT THEY HAD DISCOVERED TWO NEW GENETIC VARIANTS THAT INCREASE THE RISK OF MULTIPLE SCLEROSIS (MS) AND OTHER AUTOIMMUNE DISEASES. AFTER DEFINITIVE IDENTIFICATION OF THE GENES THE TASK AHEAD IS TO DETERMINE WHAT TRIGGERS THE GENES TO CHANGE. IT IS HOPED THAT THIS PROCESS WILL UNLOCK NOVEL APPROACHES TO PREVENT MS.

We also commenced the building process of the Austin Neuroscience Facility, which will accommodate 145 FNI researchers and staff. The collaborative process with the Mental Health Research Institute, Austin Health, The University of Melbourne and the State and Federal Governments came to fruition when Premier Brumby launched the program in late August. We are looking forward to the completion date of October 2010.

With funding secure for the building process, FNI is now looking to attract and retain the best scientists we can find from an international pool. Competition for talent is fierce and part of our strategy turns to funding scholarships for bright PhD and Post Doctoral students.

I am happy to announce that we have secured world-renowned Prof Fred Gage from the Salk Institute in the United States to be our speaker for the 13th Kenneth B Myer Lecture on the 10th of December. Prof Gage’s expertise is in brain plasticity and repair, stem cells and environmental stimulation. Prof Gage will be talking about how the brain can be regenerated, grow and repair. This promises to be an exciting lecture.

Finally, as reported in this issue of Brain Matter(s), Mr Martyn Myer has stepped down from the FNI Board after many years of dedicated service. Martyn was instrumental in formation of FNI and in getting the Melbourne Neuroscience Project off the ground. On behalf of the staff of FNI I would like to thank him for his commitment and ongoing support of the Institutes.

Prof Geoffrey Donnan, Director, Florey Neuroscience Institutes

AUSTRALIA DEVELOPERS GET THE GREEN LIGHT

FNI has awarded international construction firm Hooker Cockram the contract for the development of the new Austin Neuroscience Facility (ANF), the first stage of FNI’s building program, with construction commencing in early August. The project has a current overall budget of $45 million and an expected completion date of October 2010.

A competitive tender process was undertaken to select a candidate and five construction companies were invited to tender. Hooker Cockram’s cost-effective plan, coupled with their impressive international portfolio, secured their winning bid. The contract was signed during an official ceremony on the 25th June and the developers have since taken over the site to prepare for the laying of the ground works.

Hooker Cockram’s Director, Darren Milne, said they were delighted to be involved with this world class facility that will further enhance FNI as a leader in this type of research.

“The construction of this facility further enhances our reputation in the construction of complex buildings,” Mr Milne said. “We are very excited to be able to contribute towards a successful project outcome for all parties.”

FNI’s Project Commissioning and Building Development Director, Mr David Foxley, said that the Melbourne Neuroscience Project was benefiting from the current economic downturn, allowing the allocated funds to go further.

“The current financial environment is certainly producing tenders which are beneficial to client organisations and this project will benefit as a result,” Mr Foxley said. “All savings will be injected back into the project, allowing FNI to achieve more than first estimated.”
WHAT IS EPILEPSY?

The world class Epilepsy Division at FNI continues to make exciting discoveries, bringing us closer to finding a cure for the 1 in 140 people who suffer epilepsy.

Work led by Assoc Prof Steve Petrou focuses on the fundamental basis of Epilepsy. His team uses multidisciplinary approaches from the biophysics of single ion channels to the behavioural analysis of mice. Through the use of modified mouse models of specific human epilepsy syndromes, the team is able to identify and monitor the molecular and biophysical activity that leads to epileptic seizures.

WHAT IS EPILEPSY?

Epilepsy is a group of brain disorders that result in recurrent behavioural seizures with electrical disturbances of the brain. These seizures are the physical symptoms of the sudden and usually brief surge of excessive electrical charges either within the entire brain or a group of brain cells.

Seizures can vary from the briefest lapses of attention or muscle jerks, to severe and prolonged convulsions. They can also vary in frequency, from less than one per year to several per day.

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How is the lifestyle of an Epilepsy patient affected by their condition?

“A patient with active seizures is limited in the activities they can perform such as driving or certain outdoor activities where a loss of consciousness may result in serious injury. There are also psychosocial issues that are not as readily apparent but equally as important to the well being of the patient.

“The discrimination and social stigma that surround epilepsy in different communities and cultures can often be more difficult to overcome than the seizures themselves.

“Epilepsy also has significant economic implications in terms of health care-needs, lost work productivity and in some cases, premature death.”

What has your research revealed?

“Through our research we are beginning to unravel the functional mechanism of many inherited epilepsies. We are in the process of studying the genes involved in inherited forms of the disease and understanding how they alter brain function to cause epilepsy or “Epileptogenesis”

“Syndrome specific models of epilepsy are the key to understanding the fundamental origins of this disease and to the development of better diagnostics and therapeutics.

“Our studies begin with the functional validation of epilepsy causing gene mutations found in patient populations. The majority of these mutations are found in a class of proteins called ion channels. These are proteins that create gated switches in cell membranes, control excitability of neurons and underlie the basic functioning of the brain. We assess the effects of mutations by using a range of electrophysiological and cell biological methods. Once disease causing mutations are identified in human studies, mouse models are created that harbour the identical mutations.

“With these models in hand our studies should reveal mechanisms of seizure genesis, thus providing fertile ground for development of novel treatments strategies.”

We say goodbye and best wishes to long standing Board member and past President of the Howard Florey Institute, Mr Martyn Myer AO, who stepped down on the 21st of May.

The day of his resignation was a chance for colleagues and friends alike to acknowledge and celebrate Martyn’s tremendous commitment to the Florey over a period of more than 15 years. Carrying on the tradition of previous Board Chairmen, Mr Myer’s portrait was commissioned by the Board and presented to him at his last meeting. The portrait was painted by local artist and Archibald prize nominee Vincent Fantauzzo.

Martyn was appointed to the Board of the Howard Florey Institute in 1992 to fill the position left by his father, Kenneth Myer AC, who tragically died in a plane crash in July of that year.

During his time on the Board he held several roles: Treasurer in 1994; Vice President in August 2000, and President in September 2004. Martyn was Chairman of the Project Committee for the Melbourne Neuroscience Project, playing a vital role in the new building’s design process.

FNI Chairman, Mr Charles Allen AO, said it had been both a pleasure and an honour to have someone as committed as Martyn on the Board for the past 15 years.

“Martyn’s drive, passion and wealth of knowledge have provided a continual contribution to the growth and development of the Florey into what it is today,” he said.

“We wish him all the best, and have no doubt that he will continue to have the same positive impact and success in the organisations he works with in the future.”

L-R. Charles Allen and Martyn Myer

Assoc Prof Steven Petrou

Brain Matter(s) spoke with Assoc Prof Steven Petrou about his research.

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MAJOR ADVANCE MAY LEAD TO NEW TREATMENTS & APPROACHES TO PREVENT MS IN THE FUTURE

RESEARCHERS FIND LINK IN MS MYSTERY

As a part of their work with the Australian and New Zealand Multiple Sclerosis Genetics (ANZgene) consortium, FNI and the University of Melbourne researchers have discovered two genetic variants which increase the risk of Multiple Sclerosis (MS) and reveal links to other autoimmune diseases.

FNI Senior Research Fellow, Dr Justin Rubio, and Director of the Centre for Neuroscience and MS Division Head, FNI, Professor Trevor Kilpatrick lead the team in the three year study, which involved scanning the DNA of 1,618 people with MS and 3,413 people without MS (controls).

Using a genome-wide association scan (GWAS) approach, researchers scanned the entire human genome in broad brushstrokes looking at genetic landmarks in the genome called SNPs, and then progressively narrowing down their search to individual genes.

After comparing over 300,000 SNPs, two genetic regions on chromosome 12 and 20 showed significant differences.

Changes in the chromosomes coincide with an increased susceptibility to autoimmune diseases Type 1 Diabetes, Rheumatoid Arthritis and Graves’ disease.

In addition, chromosome 12 encodes the enzyme that converts Vitamin D, which we obtain mainly through sunlight, but also our diet, into an active form that our body can use. This finding coincides with previous research that shows a correlation between sun exposure, Vitamin D and incidence of auto-immune diseases.

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“Our second AGM, A BIG SUCCESS

The second Annual General Meeting of Florey Neuroscience Institutes in May was attended by more than 100 guests, including Board members, Governors, Members at Large, philanthropy partners, staff and students. People from both campuses were able to meet and socialise, whilst gaining a better understanding of the direction and vision for the future management of FNI.

The highlight of the day was the announcement by Chairman Charles Allen AO of the $39.8 million allocated to the Melbourne Neuroscience Project in the Federal Government’s budget. This was the final tranche of the $225 million needed to complete FNI’s new research facilities at Parkville and Austin.

In describing the development and growth experienced through the amalgamation process the Chairman commented upon the new Mission, Vision and Values statements. “These demonstrate the Institutes’ commitment to neuroscience in its widest application” he said. “These carefully chosen words will guide our scientific and administrative teams in building a strong FNI identity.”

It was also an occasion to celebrate the outstanding achievements of staff and students through the presentation of long service certificates and travel awards. Particularly impressive were the achievements of Brett Purcell and Ruston Barlow, who were recognised for their service to the Howard Florey Institute for 30 and 35 years respectively.

FNI congratulates all the recipients, and looks forward to seeing everyone again next year.
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Liptrot from South Australia

SUPPORT BRAIN
WRISTBANDS
INJURY RESEARCH

Sixteen year old Shamus Liptrot from South Australia was competing in a cycle track carnival in Devonport, Tasmania, when he was involved in a multiple collision in 2007. He was critically injured, but fortunately there was a trauma expert present who supervised his transfer to hospital.

Young cyclist Rikki Belder visited him every week, sometimes after school, and helped his mother with massage and physiotherapy. She decided to raise funds for research into traumatic brain injury by selling wristbands; she and Shamus bagged the bands, counted them out and sorted the large from small. Not only was this good therapy for Shamus, but they have raised $847 towards FNI research into traumatic brain injury.

Shamus has since returned to school for several half days each week and has amazed many people with the progress he has made, given the extent of his injuries. We hope that FNI’s research into the effects of traumatic brain injury will help him and many other young men to recreate their lives in the future.

THE BRAIN TEAM TAKES ON RUN MELBOURNE

June 28th dawned bright and chilly and The Brain Team (a group of 14 FNI staff, friends and family) joined 14,000 other participants in Run Melbourne. The event participants collectively raised over $500,000 for a large number of charitable organisations. Everyone on The Brain Team completed the course running a choice of a Half Marathon, 10 kms, or running/walking 5 kms, including Erica Meagher, Karen Sitte’s six year old!

Our team had cajoled family, friends and colleagues to sponsor their efforts with online gifts. Additional generous support from Patent Attorneys, Davies Collison Cave provided sponsorship for T-shirts and a gift to support the team with an overall total raised of $4,000.

The Brain Team agreed to use these funds to provide a Postdoctoral and a PhD Student Travel Award, to enable young scientists to present their work at national or international scientific meetings, as well as a small item of surgical equipment for Parkville and some patient amenities for the MRI facility at Austin.

Congratulations to all members of The Brain Team and sincere thanks to all their supporters.

STEVE MASON – A MAN OF MANY PARTS

Since Steve Mason’s retirement quite a few years ago he has been busier than ever. He maintains regular contact with ex-staff – some 600 of them – of the erstwhile State Bank of Victoria, writes newsletters, organises events such as Christmas lunches, BBQ’s and picnics, and travels regularly to the larger country towns for reunions.

Bequest Officer Helen Whyte learned at a recent meeting that, as a young soldier, Steve spent some years during WW2 in Dutch New Guinea with the Australian Special Wireless Group, and he also keeps a newsletter going for the men and women who served in this special group.

Steve’s other great love is cricket, and he can frequently be found working as a Guide at the Melbourne Cricket Ground.

We are very honoured that such a remarkable man has decided to leave a bequest to Florey Neuroscience Institutes, and we thank Steve for allowing us to feature him in our Newsletter. If you would like information about how you, too, can join our Brain Alliance, contact Helen on 9035 8624.


L-R Shamus Liptrot, Rikki Belder
THANK YOU TO THOSE WHO HAVE GENUEROSLY DONATED TO THE FLOREY NEUROSCIENCE INSTITUTES BETWEEN JUNE AND AUGUST 2009. LISTED ARE THOSE WHO KINDLY DONATED $1,000 OR MORE.


IN MEMORIAM GIFTS IN MEMORY OF:
JAMES (JIM) HYDE, GRAEME DUNSTAN AND JOAN TENNI.

MEDAL CELEBRATES GROUNDBREAKING EPILEPSY RESEARCH AND LEADERSHIP

This year’s prestigious Bethlehem Griffiths Research Foundation Medal has been awarded to Professor Samuel Berkovic for his outstanding contribution to international epilepsy research.

The Foundation medal celebrates Professor Berkovic’s single-minded leadership of epilepsy research over two decades. The Director of both the Epilepsy Research Centre of the University of Melbourne and the Comprehensive Epilepsy Program at Austin Health Heidelberg, Professor Berkovic, who has an honorary appointment and collaborates closely with FNI, was the first to prove a genetic link to one form of epilepsy.

“Explaining the causes of this disease is crucial for patients and their families. It relieves the stress of thinking that they are at fault in some way and is a major part of the healing process”, Foundation Chairman Mr Bill Clancy said.

The Bethlehem Griffiths Research Foundation awards this medal and a $5,000 gift for outstanding contribution to clinical research in progressive neurological disorders or palliative care.

Past FNI winners have included Professors Frederick Mendelsohn and Geoffrey Donnan.

FNI researchers currently supported by Bethlehem Griffiths Research Foundation grants include Drs Julie Atkin, Roqan Tinsley, Tim Aumann, Michelle Porritt, and Professors Malcolm Horne and David Howells. Their research covers such areas as Motor Neuron Disease, Parkinson’s disease and stroke.

NEWS IN BRIEF: FNI RESEARCHERS WIN PRESTIGIOUS AWARDS

Professor Philip Beart recently won the Lawrie Austin Lectureship at the Annual General Meeting of the Australian Neuroscience Society (ANS). The Lawrie Austin Lecture is named in honour of Lawrie Austin, who was instrumental in founding ANS and played key roles in the International and Asia-Pacific Societies for Neurochemistry.

Assoc Prof Julie Bernhardt was awarded the Heart Foundation Top Ranked Career Development Fellow in the clinical research category for Victoria. The award was presented by the Governor of Victoria, Prof David de Kretser.

Governor of Victoria, Prof David de Kretser with Assoc Prof Julie Bernhardt

For more information contact the Editor, Robert Hilkes: robert.hilkes@florey.edu.au
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