

FNI News



Flore
Neuroscience
Institutes

Improving life through brain research

Director's message



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Welcome to the first edition of the Florey Neuroscience Institutes' quarterly newsletter, which aims to keep you informed of progress in our ambitious project to create the largest neuroscience research institute in the Southern Hemisphere.

The FNI has been created through the amalgamation of the Howard Florey Institute, the Brain Research Institute and the National Stroke Research Institute to form a remarkable concentration of basic and clinical neuroscientists. The FNI will be further strengthened by the co-location of the Mental Health

Research Institute and neuroscientists from the University of Melbourne. Together, this will create a powerhouse of around 500 FNI staff and students with a recurrent operating budget of more than \$50 million that will be focused on improving our understanding of the brain with the long-term aim of finding ways to better treat and ultimately to prevent and cure brain disorders.

The research areas will be led by internationally prominent scientists and will include major neurological and psychiatric disorders - Alzheimer's disease, Parkinson's disease, stroke and neurotrauma,

multiple sclerosis, epilepsy, schizophrenia and addiction, as well as basic understanding of normal brain development, regeneration and stem cells, and brain control of bodily functions. Supporting these research programs will be state-of-the-art platforms including advanced neuroimaging, genomics and proteomics, bioinformatics, animal behaviour, neurochemistry, and cell and molecular biology.

The FNI will be a focus for Australian participation in international neuroscience and we aim to be amongst the global top 10 brain research institutes by 2015.

Building the biggest brain research institute in the Southern Hemisphere

Amalgamating the Howard Florey Institute, the Brain Research Institute and the National Stroke Research Institute into the Florey Neuroscience Institutes (FNI) is just one part of our ambitious project to create the biggest brain research institute in the Southern Hemisphere. The other part is constructing two new purpose-built facilities to house our powerhouse of neuroscientists.

These two buildings - one on the University of Melbourne's Parkville campus and the other at the Austin Hospital in Heidelberg - will equip more than 500 FNI neuroscientists with the tools required to conduct cutting-edge research aimed at developing ways to prevent, treat and cure brain and mind disorders.

Until recently, work towards constructing these new buildings had been limited to a large amount of design work and meetings with



Demolition of the old Biochemistry building at the University of Melbourne.

our architects, Lyons Architects, and the project manager, Donald Cant Watts Corke, and specialist engineers. Now, the first physical signs of progress are occurring. The old Biochemistry building at the University of Melbourne is being demolished to make way for the new Parkville building.

Demolition and clearing of the Parkville site will be finished in May 2008. The first stage of construction is to build a three-level underground car park. Once this car park is

finished, construction of the main building will commence. Demolition of the Austin Hospital's old 3KZ building will begin in September to make way for the new FNI building. Schematic designs for both the Parkville and Austin buildings are also underway. The cost plan for the two buildings predicts a cost of \$204 million. The entire project to construct and fit out the buildings, and increase scientific output, will cost \$225 million.

The next task for Lyons Architects is to develop the detailed design for the 18,650m² building at Parkville and the 5,000m² building at Austin. While occupation of the new buildings will not happen until 2011, there is a tremendous amount of work to be done to ensure our vision of being one of the world's top 10 neuroscience institutes becomes a reality.



Ian Mosley

Researcher Profile

Ian Mosley

Research Fellow and Final Year PhD candidate

Ian Mosley, a Registered Nurse with qualifications in Business and Education, has been investigating the management of acute stroke from the onset of stroke symptoms through to a patient's first medical assessment in the Emergency Department.

When completed, his research will inform the way the public, ambulance paramedics and the medical community respond to people suspected of having a stroke.

Mr Mosley said everyone should learn the signs of stroke and importantly, know what to do in the event of a stroke.

"If the time from the onset of symptoms to arrival at the hospital can be reduced, the chances of a full recovery are significantly higher. Clearly, the best response for people who experience or observe stroke symptoms in others is to call an ambulance," he said.

Virtual link connects campuses

Computing experts from the Florey Neuroscience Institutes are creating a special communications link between the Parkville and Austin campuses to improve their research capabilities and enable virtual meetings.

One of the motivations for creating the FNI was to enhance the potential for new research discoveries and realise efficiencies. The establishment of a dedicated communications network is one of the FNI's first major initiatives to facilitate collaborations between its scientists.

The \$100,000 network will enable researchers from the Austin campus to access high-performance computing for real-time analysis already available at the Parkville campus.

A/Prof Egan, head of the Neuroimaging group located at the Parkville campus, said their NeuroGrid super computer improved Magnetic Resonance Imaging (MRI) data management and analytical procedures.

"NeuroGrid can provide our scientists with answers to complex problems in minutes that formerly took days," A/Prof Egan said.

"The network will be able to transfer 100 MB data files for processing in real-time, and also enable larger datasets to be easily transferred between campuses for off-site backup," he added.

While the network will benefit the FNI's science, Dr David Abbott, a senior scientist based at the Austin campus, said it would also allow FNI staff to attend virtual meetings, so staff would not need to drive the one hour return trip to each campus for face-to-face communication.

"We'll have a dedicated virtual meeting room at each campus with a user-friendly video hook-up that is always switched on," Dr Abbott said.

"Staff will simply walk into the virtual meeting rooms and start their meeting. Unlike previous teleconferencing technology, there won't be any fussing around with connections or dialling ISDN phone lines."

"Because the virtual meeting rooms will be so easy to use, we anticipate our staff will eagerly use them to share information with their colleagues," he said.

To create a high bandwidth dedicated network, each campus will require a microwave link with a new transmitter at each end. When the new FNI buildings at Parkville and Austin are complete, the transmitters will be moved to the new buildings.

Team Florey hits the road

Team Florey had a great start to the cycling season with their new FNI wind vests. The team wore the vests for the first time during the 'Around the Bay in a Day' event in October and again for the Melbourne Summer Cycle in February.

Addiction researcher and keen cyclist, Prof Andrew Lawrence, said he liked wearing the FNI vest. "The vest is great, especially in the morning when it's still cold, and the FNI colours really stand out when we are cycling in a pack."

Team Florey is now training for its next cycling event - the Melbourne Autumn Daytour in April.



L to R: Andrew Gundlach and Andrew Lawrence wear the FNI cycling vests.

The Brain Appeal

Under the Chairmanship of Mr Harrison Young, the Brain Appeal was launched to raise the funds necessary to construct and outfit two new purpose-built facilities that will house Australia's leading neuroscientists.

The new buildings at the University of Melbourne and the Austin Hospital will equip our researchers with the tools required to conduct cutting-edge research aimed at

developing ways to prevent, treat and cure brain and mind disorders.

Working together on this appeal are the Florey Neuroscience Institutes, the Mental Health Research Institute, the University of Melbourne and Austin Health.

The appeal target is \$225 million and to date \$168 million has been pledged by the Federal and State Governments, the University of

Melbourne, the Ian Potter Foundation, The Myer Foundation and a number of very generous donors including, Mr Martyn Myer, Ms Joanna Baeviski, Mr Baillieu Myer AC and Mrs Sarah Myer, Mr John Higgins, Dr Alan Finkel AM, Mr Harrison Young, Mr Charles Allen AO, Dr Mark Nelson, Mr Roger & Mrs Lesley Gillespie and Mr Michael Hamson.

Anyone wishing to make a tax deductible donation to the Brain Appeal should contact:

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