



Tāmaki Update

March 2013
A newsletter for
Tāmaki Campus

Passion for effective change driving Glenn Inquiry

“... You have to be passionate about it. You have to really want the result, even if this means years of work. The hardest part of any project is to begin.” - Sir Peter Blake

These are the closing words from the final log of Sir Peter Blake and are providing inspiration to the Glenn Inquiry, one of the newest initiatives at Tāmaki Campus.

An independent inquiry funded by philanthropic businessman, Sir Owen Glenn, the goal is to develop an evidence-based, solution focussed blueprint addressing child abuse and domestic violence in New Zealand.

According to Operations Director, Jessica Trask, the Inquiry is a natural fit with the University, and has been housed alongside the New Zealand Family Violence Clearinghouse, New Zealand’s national centre for research, policy and practice on family violence.

The blueprint will reflect the most up to date international research evidence as well as examples of what is working well in New Zealand and other countries, and will draw on findings from past reports. The Inquiry is taking a systems approach with a central question being “if New Zealand was leading the world in addressing domestic violence and child abuse what would that look like?”

The outcome is not intended to be a high level academic document, but a practical and flexible one that can work in rural and urban areas, derived from real life experiences. While it is intended initially for New Zealand, it is likely to have global relevance.

Still in its infancy, the Inquiry has pulled



Operations Director, Jessica Trask, says the Glenn Inquiry has been overwhelmed by the number of survivors, frontline workers and everyday New Zealanders who have contacted them.

together a 36-strong think tank of people with specific expertise. This differs from the traditional approach that would have seen an inquiry panel of four.

Survivors and frontline workers have been invited by the Inquiry to share their experience and knowledge on three key areas – what is working well currently, what isn’t working currently, and what does the systems approach need to look like?

“We were overwhelmed by the number of survivors, frontline workers and everyday New Zealanders who contacted the Inquiry in the six weeks since the website launched, and quickly realised a new approach was needed,” Jessica says.

Members of the New Zealand Think Tank will form smaller panels and hear testimony from around the country over the next 6-9 months as the evidence gathering phase of the Inquiry gathers steam.

A number of University of Auckland academics make up the Inquiry’s Think Tank including Associate Professors Janet Fanslow, Ian Lambie, Nicola Gavey, Susan Morton and Dr Teuila Percival.

Jessica says, “Essentially it has taken a life of its own and become a true ‘people’s inquiry’. Within the first eight weeks we had over 1,000 survivors, front line workers and everyday New Zealanders come forward”.

Continued on page two



Message from Head of Tāmaki Campus

Dear Colleagues

Welcome to my first Tāmaki Update message as Head of Campus and I am pleased to report that I have well and truly settled into my new role.

My first exercise as Head of Campus has been to meet with the head of each school, department, research unit and campus partner. So far it is proving to be a very beneficial exercise as I gain an understanding of the priorities and goals of the groups based at Tāmaki, and I look forward to speaking with those I have not yet met.

Thank you to all those who contributed to the success of the Orientation programme held at Tāmaki on 1 March. It was a great way to kick off the academic year with activities for new postgraduate and undergraduate students. I am sure you are all back into a routine after the initial excitement and I wish you and your students a satisfying and productive year.

Over the coming months, I will be keeping you informed of developments and anticipated changes associated with the planned purchase of the Lion Breweries site in Newmarket and the consequent relocation of activities from the Tāmaki Campus. With the Newmarket purchase expected to become unconditional in April, it is likely to be formalised at the meeting of the University Council on 22 April. The Vice-Chancellor, Professor Stuart McCutcheon, is scheduled to provide a briefing to staff at Tāmaki on 23 April at 11am. The venue and time will be confirmed nearer to this briefing.

We are looking forward to bringing you a number of interesting and topical speakers for the Head of Campus Seminar Series this year, with the March speaker being our own Professor Mick Clout from the School of Biological Sciences. Mick is retiring from full-time employment and I would like to acknowledge his outstanding contribution to the Tāmaki Campus and The University of Auckland. You can read about his impressive international career on Page Five.

Also in this issue, we welcome two new high profile groups to the campus. Firstly, the Glenn Inquiry which will address the issues of child abuse and family violence in New Zealand, and secondly, the Food Process Engineering group which is a joint collaboration between the University and Plant & Food Research, bringing equipment from both organisations together in one laboratory.

And, of course, I am very pleased to see the student profile on Page Four about Hayley MacDonald, a PhD student from my own department, Sport and Exercise Science. Hayley's research on Parkinson's disease is an excellent example of the exceptional research being undertaken by Tāmaki students.

Best wishes

Associate Professor Greg Anson

Head of Tāmaki Campus



Passion for effective results driving Glenn Inquiry

“Sir Owen is very keen to ensure that the loudest voices in the Inquiry are those from survivors themselves and frontline workers. These real life experiences add flesh to the bones of the inquiry.”

The Inquiry will reflect on which aspects of New Zealand's system response work well and where the system is failing and needs improvement. It will also take into account programmes and services proven to be effective globally, to build up a picture of the ideal system response and how closely the current New Zealand system aligns.

Jessica says domestic violence and child abuse impact on the health, well-being, social structure and economy of the country.

“In terms of economic impact and loss of life, the cost of domestic violence and child abuse in New Zealand is equal to the Christchurch earthquake every four years. We need to take action and ensure it's evidence-based and long-term.”

Major social change is needed, along with changes to government policies and a comprehensive range of support to families and individuals.

The evidence-based, client focussed approach looks to create a long-term sustainable solution. Its four stage approach comprises: establishing the think tank and supporting structures, evidence gathering, socialising and testing the blueprint within New Zealand and internationally, and publishing.

The Glenn Inquiry says it has “started this inquiry because we believe we can do it, we are passionate about it and we want results.”

Interested in participating, volunteering for the Glenn Inquiry or sharing your experience with a panel confidentially? Register at www.glenninquiry.org.nz or email admin@glenninquiry.org.nz



University and Plant & Food links strengthened



Dr Jocelyn Eason, General Manager of Science for Food Innovation at Plant & Food Research and Dr Zaid Saleh, Senior Lecturer at The University of Auckland and Team Leader at Plant & Food Research.

A recent high profile addition to the Tāmaki Campus – a food processing laboratory – is creating further links between the University and Plant & Food Research.

The collaboration brings together Plant & Food’s pilot plant equipment and the non-thermal processing equipment previously housed at the University’s City Campus into one location at Tāmaki in Building 734.

The combined \$3 million facility is expected to develop and foster new collaborative projects between the two organisations. It will also support New Zealand food companies, in order to understand the fundamental science behind existing products and processes, and scale up innovative commercially feasible processes and technologies using cost effective means.

A wide range of food processing projects will be carried out using the new state-of-the-art equipment such as extraction, fractionation, pasteurisation, sterilisation, evaporation, drying and the formulation of different food and ingredients from various

resources and by-products.

The partnership is consolidated further by the appointment of Dr Zaid Saleh from Plant & Food Research to the University’s Department of Chemical and Materials Engineering, and by Professor Murat Balaban, Chair of Food Process Engineering, who will hold an adjunct position at Plant & Food.

Dr Saleh says, “The presence of the food process engineering group, the new processing facility, and Plant & Food Research personnel at Tāmaki will fill the gaps between the wine science group and the materials science group, by providing food engineering and processing capabilities to help scale up their existing techniques and processes specifically in winemaking and food packaging, and also support them with commercial application.”

“The collaboration will be highly regarded by the academic sector as it will provide the University with unique capabilities and strong leadership in the food processing area among other New Zealand institutes

and universities. It will help to attract more postgraduate students who are eager to use the latest technologies and have the hands-on experience which is essential throughout the programme.”

The laboratory will be used by both Plant & Food and University staff, as well as postgraduate students. More than nine Masters of Engineering students’ projects, three fourth year projects and two large MBIE research programmes will be utilising this facility once all the equipment is in place.

The main aims of the research projects are to recover and isolate functional ingredients at higher yields and maximum biological activity, and to formulate and deliver new health or functional food products for the wellness market.

The two organisations are planning an opening ceremony to publicise the new facility, inviting key industry people and scientists from many organisations in Auckland and around New Zealand.



Parkinson's sufferers to benefit from PhD research



'Fascinating lectures' sparked Hayley MacDonald's interest in Parkinson's disease.

A self-described 'passion for neuroscience' drove Hayley MacDonald to her PhD study investigating response control in Parkinson's disease patients.

She said it was a logical step from her 2009 BSc with its double major in Sport and Exercise Science and Physiology, with 'fascinating lectures' sparking her interest in Parkinson's disease.

Volunteering as a subject in the Movement Neuroscience Laboratory not only helped in her honours dissertation, but also led to her present involvement, with her doctoral study supported by a W & B Miller Postgraduate Scholarship from the Neurological Foundation of New Zealand.

Hayley is hoping to shed new light on the role of movement networks within the brain during selective response control and help identify people at risk of developing impulsive behaviours when on specific Parkinson's medications.

Her PhD research is looking specifically at how the movement areas of the brain are

involved during response control and the implications for individualised treatment of Parkinson's disease.

"Response control, in the context of my research, means starting and cancelling anticipated movements; for example when waiting to go when the lights go green at an intersection and having to stop yourself when someone runs the red," says Hayley.

Her research forms two major themes. The first is the movement areas of a healthy brain where she is using non-invasive brain stimulation techniques to examine the activity levels of connections between the brain and muscles

The second theme investigates interactions between genes controlling levels of the chemical dopamine within the brain, specific Parkinson's disease medications, response control, and impulsive behaviour. This part could help predict how a person will respond to certain Parkinson's medications.

Hayley says that some patients (about 20%) become very impulsive on Parkinson's

medications and develop gambling problems, impulsive buying habits and binge eating tendencies, among other impulsive behaviours.

"These behaviours can have serious consequences. Currently there is no way to reliably predict who will show highly impulsive behaviours when beginning medication."

So far her first PhD experiment and previous work has found some interesting behavioural results when looking at the selective component of response control in healthy people.

"My research will extend these findings and hopefully reveal the neural mechanisms responsible for these behavioural results. The computer based behavioural task I am using requires the participants to make an anticipated response when a moving indicator intercepts a target on the screen. Sometimes the participants need to cancel their response if they see the indicator automatically stop early before reaching the target."

Despite significant research internationally on identifying risk factors for developing impulsive behaviour on Parkinson's disease medications, none have combined the analysis of dopamine genes and measures of response control to predict these impulsive behaviours.

Hayley hopes this combination of simple measures will ultimately be used by neurologists to identify patients who may respond badly to certain medications, allowing better individualised treatment of the disease.

Results from her first PhD experiment were published in the Journal of Neurophysiology and she presented her findings at the Australasian Winter Conference on Brain Research.

"I gained invaluable experience going through the peer review process and discussing my findings with other researchers, who sometimes presented interesting and opposing points of view. And, I've been pleasantly surprised that, through the process of doing my PhD, I've developed new skills that I wouldn't have thought to be within my field of research, such as computer programming."



Mick Clout's ecology and conservation legacy

This month, Professor Mick Clout retires from his full-time appointment at Tāmaki Campus, where he has been based for the whole of his 20 year academic career at The University of Auckland. He will remain in a part-time professorial position.

He also steps down from his role as Director of the Centre for Biodiversity & Biosecurity and his national appointment as Chair of the Biosecurity Ministerial Advisory Committee.

Mick's ongoing research and supervision of postdoctoral and PhD students will ensure his extensive knowledge and expertise will still play a crucial role in this campus' national standing in biodiversity, biosecurity and conservation.

His longstanding interests in the ecology and conservation of New Zealand birds and the behaviour and management of invasive mammals culminated in his role as Professor of Conservation Ecology in the School of Biological Sciences and School of Environment.

Internationally, Mick was the founding Chair of the Invasive Species Specialist Group of the IUCN Species Survival Commission and, through this, became involved in a wide range of international initiatives to prevent, eradicate and manage invasive species. He led this global group of experts (comprising over 200 scientists from more than 50 countries) for nearly 16 years.

Mick's three major research programmes are well known and published: conservation biology of threatened wildlife; ecology of introduced mammals; and international work on the biodiversity impacts of invasive species.

He says his personal interests have been captured with each of his three research programmes and contribute to a sense of purpose and fulfilment throughout his career.

"I was particularly interested in the ecology of New Zealand birds, starting with early research on the effects of plantation forestry on birds. More recently, I published work on the critically endangered kakapo and

the ecology of New Zealand pigeons, on which I conducted a series of studies and developed field techniques that are now routinely used. I was also one of the first ecologists to consider seed dispersal and avian frugivory in New Zealand forest ecosystems".

Mick's early research on the ecology and behaviour of brushtail possums was extended to work on other introduced mammals. A strong recent interest has been the invasion ecology of introduced mammals on islands.

In 2007 Mick was awarded the Charles Fleming Medal for Environmental Achievement by the Royal Society of NZ, and in 2008 he was awarded the Sir Peter Scott Medal for Conservation Merit at the IUCN World Conservation Congress.

Mick says the establishment of the Centre for Biodiversity and Biosecurity and the subsequent Joint Graduate School with Landcare Research are some of the highlights of his time at Tāmaki. Overall, his greatest satisfaction has been helping with international advances in awareness of invasive species and seeing his postgraduate students and colleagues flourish and establish themselves professionally.

Professor Gillian Lewis, Director of the School of Biological Sciences, says the international linkages he developed will be of ongoing significance to the School. "His international collaboration is well respected and a testament to his ability to work well with a range of people. He is also very supportive of his colleagues, helping to grow their own research and assisting with opportunities."



Professor Mick Clout plans to enjoy semi-retirement which will include spending more time with family.

Mick says that despite relinquishing several responsibilities and choosing not to teach, this will still be an area that he will miss.

Instead, he intends to become more directly involved with research on invasive mammals and native birds. He will also put time into national conservation commitments, including his longstanding role as Chair of the Kakapo Recovery Group and his recent appointment as the Royal Society of NZ nominee on the NZ Conservation Authority. Another involvement is in the concept of a 'Predator-free New Zealand' linking to several of his own interests.

In summary, Mick plans to enjoy semi-retirement over the next few years 'doing more research, re-engaging with conservation work, and spending more time with family'.