



Tāmaki Update

September 2013
A newsletter for
Tāmaki Innovation
Campus

New centre launched by world renowned addiction expert



ASB Visiting Professor Thomas Babor with the directors of the Centre for Addiction Research. Left to right: Assoc Prof Peter Adams, Dr Natalie Walker, Prof Thomas Babor, Assoc Prof Janie Sheridan, Dr David Newcombe and Dr Susanna Galea

Last month saw the official launch of the University's new Centre for Addiction Research; an initiative bringing together researchers from across the spectrum of the University to look at the effects of addiction on individuals, their families, communities and society.

The launch was timed to coincide with ASB Visiting Professor Thomas Babor from the University of Connecticut School of Medicine, an internationally recognised expert in alcohol screening, brief interventions and treatment. As well as sitting on several WHO advisory panels related to alcohol policy and drug policy, he is also Associate Editor

in Chief of the most prestigious academic journal in this field, *Addiction*.

According to the centre's associate director Peter Adams of the School of Population Health, hosting Professor Babor was a real bonus for researchers. "He's a recognised leader in areas we are keenly involved in and he's a leader in treatment research in alcohol and drug problems."

The centre is new on campus, but draws together a disparate background of over 20 years of research in the Faculty of Medical and Health Sciences and more than 30 different people across the faculty. In doing so, it gains a long awaited external identity.

Its mission is focussed on enhancing health and wellbeing by providing 'sound evidence to inform policy and practice in understanding, prevention and treatment of addictive consumptions'. These include tobacco, alcohol, other drugs and gambling.

Peter Adams explains that the centre works closely with treatment providers, using a broad, multi-disciplinary approach from molecular research through to societal relationships with addictive products.

"We hope to encourage more people into this area of study and create a stronger attraction for PhD and other postgraduate research students," he says. "Like all research there's that balance of attracting good people and funding, and grappling with some of the longer term research challenges."

For the centre, the presence of Professor Babor is a high profile, inspirational kick start. During his time on campus he delivered a number of seminars on alcohol screening and treatment, as well as alcohol and drug policy from a public health perspective. He also gave a public lecture on the impacts of alcohol marketing on binge drinking among adolescents, and the role of the alcohol industry in creating a culture of heavy drinking.

Professor Babor has spent many years examining scientific literature on effectiveness of various alcohol and drug control policies around the world, and spoke about the evidence available to support their effectiveness, or lack of effectiveness in many cases, relating to the potential efficacy of the new Psychoactive Substances Bill.



Message from Head of Tāmaki Innovation Campus

Dear Colleagues

As you may be aware, a new IT service delivery model has been introduced at Tāmaki to provide service from a unified, co-located Tāmaki IT team reporting to the Tāmaki IT Transition Manager, Quentin Jackson. These changes are providing opportunities for streamlining of workflow and improvements to service levels, and have already resulted in faster prioritisation, allocation of work, and reporting.

The Tāmaki IT team need your assistance so that they can provide the best possible service to you, their customers. Please log all IT requirements with the ITS Service Desk on ext 85100, by email to askIT@auckland.ac.nz, or via the AskIT service portal which can be accessed on the Staff Intranet. Your cooperation with this is much appreciated by the Tāmaki IT team.

As announced recently, the Tāmaki Innovation Campus now has its own Intranet which can be accessed at www.tamakistaff.auckland.ac.nz. I encourage you to take time to familiarise yourself with the site, and if there is anything you would like added, updated or you think is missing, please contact Suzanne Mitchell. The intention is that the Intranet will evolve and develop to meet the on-going needs of staff.

We were very fortunate to have the Vice-Chancellor, Professor Stuart McCutcheon, present at the Head of Tāmaki Innovation Campus Seminar Series recently. His seminar on "The future of universities" was particularly topical as many universities are striving to adapt to a fast-changing world under difficult circumstances. For the full audio and powerpoint presentation, please visit the Tāmaki Intranet.

I am very pleased that Associate Professor Rhema Vaithianathan has agreed to speak at the next Seminar Series on 4 October at 3pm in 731.201. Her topic is "Building an automated prediction tool to identify (at birth) children at risk of being maltreated". I encourage you to join us for the seminar and for networking opportunities following this. Also for your diaries, the final seminar for the year will be given by Associate Professor Bryony James from the Faculty of Engineering on 1 November, and I'm sure as always she will deliver a fascinating presentation.

Very warm congratulations to Professor Mark Taylor and his team, who were successful in the recent Ministry of Business, Innovation and Employment's High Value Manufacturing and Services Research Fund round. Professor Taylor and his colleagues were awarded over \$12 million to continue their innovative applied research as Product Accelerator (formerly Materials Accelerator). This is a significant achievement for the University and for commercialisation opportunities in the future. Read more about the Product Accelerator on Page Three, and look out for a Seminar Series presentation by Professor Taylor next year.

Best wishes

Associate Professor Greg Anson
Head of Tāmaki Innovation Campus



Celebration of ethnic diversity



Areej Asad (centre) with some of her guests.

One of the aspects of university life which makes for a rich experience, is the opportunity to meet and work with staff and students from a wide variety of ethnic and cultural backgrounds. And recently this was brought to the fore with the 'International Night' event. All were invited to bring a plate of their traditional food and to wear their national costume.

The event was the brainchild of Areej Asad, a PhD candidate in Speech Science. From Jordan, Areej was meeting fellow international students who were homesick and had no friends in New Zealand, and with their research commitments had little time for socialising.

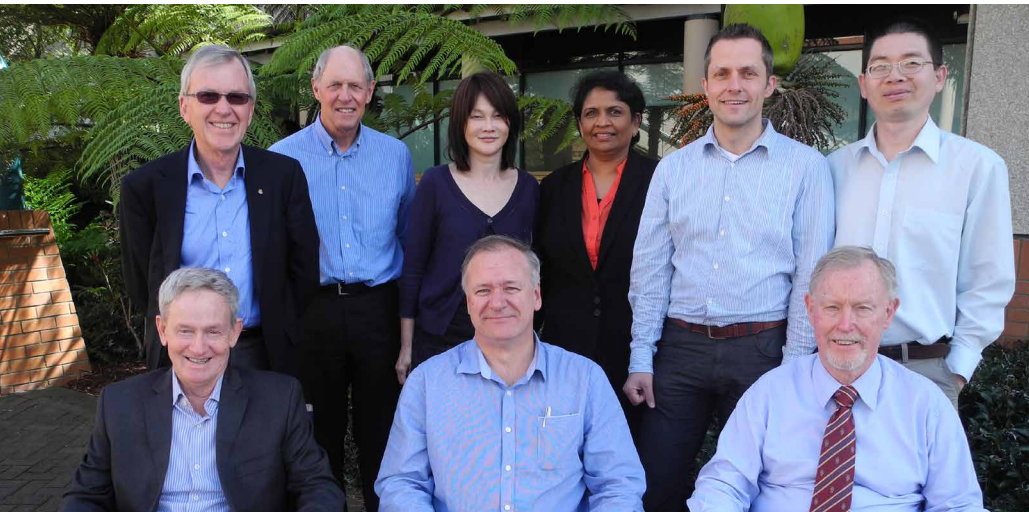
"I thought it would be great if University staff members and students could socialise in a relaxed atmosphere. Students want to be with their families and want to have new friends in New Zealand. It is a bit of a challenge to get both of them in the same place so I thought an evening of traditional homemade food, traditional clothes, and good company may give them the joy that they are looking for," says Areej.

Staff and students certainly took up the challenge and there was an impressive array of food from many nations, and attendees from countries such as Malaysia, Samoa, China, Brazil, Sri Lanka, Spain, Italy and the Ukraine.

"Given the success of the event and the enthusiasm of the guests, the International Night will definitely be a permanent fixture on the Tāmaki campus life programme," says event co-ordinator Suzanne Mitchell.



Multi-million dollar boost for advanced manufacturing research



Product Accelerator Team: Front (LtoR) Dr Tony Price, Prof Mark Taylor, Prof Ralph Cooney; Back (LtoR) Brian McMath, Anthony Meyer, Florence Taylor, Dr Karnika De Silva, Dr Robert Blache, Dr Chuong Nguyen

The latest Ministry of Business, Innovation and Employment (MBIE) funding round sees the Tāmaki based Product Accelerator gain \$12,713,940 over the next six years, from MBIE’s High Value Manufacturing and Services Research Fund.

This means the University will grow its advanced manufacturing research strength and its relevance to the business community through being the hosting institution for the Product Accelerator (PA), involving premier New Zealand research institutions as well as international collaborations.

The commercial benefit to New Zealand in the coming six years, and the University of Auckland’s part in it, is measured in the hundreds of millions of dollars in increased company revenues, according to director Professor Mark Taylor.

Professor Taylor says the funding is of crucial importance. “It will enable the successful Materials Accelerator to grow. The PA research programme is an expansion of research, encompassing product design and new, advanced manufacturing technology - specifically additive manufacturing (3D printing).”

In its first 4.5 years, the Materials Accelerator has helped over 40 companies

and grown to a network of more than 100 companies and eight research institutions throughout New Zealand. Now with the addition of product design and advanced manufacturing research the programme is transitioning to the name ‘New Zealand Product Accelerator’.

The goal, says Professor Taylor, is to have a substantial impact on the long term competitiveness and size of high value manufacturing in New Zealand. “But many technology and research challenges will need to be overcome. Most crucially, we need to establish much deeper collaboration and connection between the institutions which do research in high value manufacturing, and the companies who generate economic value through application.”

Following contract negotiations, the first tranche of basic research projects will be set up in the institutions. An expanded group of manufacturing, design and materials companies is already being assembled to provide market opportunities and new product targets for the network of research providers.

Professor Taylor expects the number of companies involved in the network to double over the next few years.

Food App to fight nation’s killers



The app displays healthier choices of more than 8,000 packaged food products.

A revolutionary smartphone app launched recently will empower New Zealand shoppers to make healthier food choices - reducing their risk of dying early from two of the nation’s biggest killers, heart attack and stroke.

In three easy steps, New Zealand consumers can reduce excessively high levels of fat, salt and sugar in their families’ diets and share shopping lists with friends via social media.

FoodSwitch allows users to scan the barcode of packaged foods using their Smartphone camera and receive immediate, easy to understand nutritional advice and see healthier choices.

The app was originally developed in Australia by The George Institute for Global Health and tailored for New Zealand shoppers by The National Institute for Health Innovation (NIHI), with FoodSwitch New Zealand launched in partnership with Bupa, one of New Zealand’s leading healthcare organisations.

“For too long, people have been bewildered by confusing food labels,” says Professor Cliona Ni Mhurchu who leads NIHI’s nutrition research programme. “Research shows that people like traffic light labels and can use them to make healthier food choices. FoodSwitch aims to make it easier for all New Zealanders to make healthier choices about the foods they eat.”



China to New Plymouth, via Tāmaki campus



Keen travellers, Xiao and April Wang are seen here in Paihia. They will be moving to New Plymouth soon where they have both accepted jobs at plastics and bitumen company, Technix Industries Ltd.

PhD researcher Xiao Wang is notching up new experiences at a breathtaking rate. The Chinese born student completed his undergraduate degree in China, and then picked up a scholarship to study at the University of Auckland Tāmaki Innovation Campus.

In changing country, he also changed his area of study; from materials engineering to a research group looking at a new type of polymer with electrical conduction and antistatic, antioxidant and antibacterial

properties - poly (ortho-methoxyaniline) blends.

He also met and married fellow Chinese national student April, a prospective PhD graduate in Mechanical Engineering, and they have both recently accepted jobs with Taranaki plastics and bitumen company, Technix Industries Ltd.

More change is ahead, as they prepare to move to the provincial town; a far cry from the multi-million population cities the couple grew up in. "Neither of us has any previous

experience in living in small towns, but we're looking forward to it," says Xiao, who has worked on his kiwiana by indulging a love of tramping, and the wide open spaces of the South Island ('no traffic lights for miles', he says in wonderment).

For the couple, the prospect of a job straight after completing studies is a bonus, no matter the location. And, says Xiao, his undergraduate degree in materials engineering helped secure the job.

"It's my first job in New Zealand, but I did have some work experience in China," he says. "Completing my PhD took four years, and I found working at Tāmaki campus different from being in Auckland's central city - it became my home. I'll definitely miss this campus."

Last year April also transferred to the academic 'new home' and the couple moved from the central city closer to Tāmaki. Keen travellers, they have already been ticking off the must-see's around New Zealand including 'up North' as Xiao puts it, demonstrating his adaptation to colloquialisms and - despite a self-confessed lack of rugby knowledge - their relocation to a strongly parochial 'Naki'.

Xiao's initial impetus to come to New Zealand was sparked by a lecture by visiting dean of the School of Graduate Studies from the University of Auckland, who alerted students to opportunities at Tāmaki campus. After replying to an ad listed on the website of his university, Xiao was eventually successful in gaining a scholarship (although he admits, the visa took considerably longer!).

His research, along with others in the group, looks at ways to incorporate (through melting) new era plastics and their capabilities into what have been traditional plastics, for a variety of commercial uses. He hopes to put some of this knowledge to use in his new job, as yet uncharted territory.

In all, he concludes, his experiences at Tāmaki have been happy and collegial, and a good stepping stone to a future career path, albeit in an unexpected location.



Positive parenting focus



Professor Matthew Sanders, Triple P founder and Adjunct Professor in the University of Auckland's Faculty of Education, speaks at the forum.

Leaders in parenting and family issues gathered together at a forum at the Tāmaki Innovation Campus recently to share their knowledge and discuss the theme, "Transforming the lives of children, parents and communities through positive parenting."

The Aotearoa/New Zealand Triple P and Practice Forum was hosted by the Parenting Research Group in the Faculty of Education and the Werry Centre based at Tāmaki in association with the Ministry of Health.

Presentations and sessions were heard from leading researchers and practitioners, including Triple P founder Prof Matthew Sanders, and Dr Louise Keown, deputy director Parenting Research Group.

A key message of Dr Keown's talk was that the Triple P programme is effective for fathers in improving their parenting skills and reducing difficult child behaviour. "The findings highlight the potential benefits of making an effort to engage both fathers and mothers to participate in the programme to optimise programme adherence, satisfaction, and effectiveness for both parents," she says.

The Triple P-Positive Parenting Program is one of the most effective evidence based parenting programmes in the world, and the Werry Centre co-ordinates a Ministry of Health funded pilot of Primary Care Triple P in a number of regions around the country. The centre works with regional leaders to support primary care practitioners to train and become accredited to deliver programmes for parents.

Werry Centre Triple P project co-ordinator, Lisa Maughan says, "Evaluation of the forum showed there is a marked increase in levels of knowledge of Triple P and increased levels of understanding of Triple P practice. This is important to the project vision of developing the knowledge and use of evidence based parenting support in the primary care sector and consequently increasing parents' access to this information."

Prostate cancer targeted



Dr Jim Watson, CEO of Caldera Health, and formerly head of Molecular Medicine at UoA (1984-93)

Caldera Health is a new arrival on campus. The Auckland based molecular in vitro diagnostics company is addressing what co-founder Dr Jim Watson calls the 'giant unmet clinical need in men's health today'.

Dr Watson says laboratory space at Tāmaki is particularly attractive, and he hopes Caldera's arrival will bring other start-ups.

The fledgling company works in the generation of new cancer diagnostics for prostate cancer detection.

Currently, there is one global test to detect prostate cancer - the PSA test. In 2012, the United States Preventative Services Task Force (USPSTF) downgraded its recommendation on using the PSA test for prostate cancer screening to a "D", meaning 'take care in how you use the test'.

Why? Dr Watson says prostate cancer could be viewed as a spectrum of diseases. Just as we are all different shapes, sizes, hair colour, and so on - we are different because our genetic make-up varies - the same is for a cancer. The disease arises because of changes in a number of genes, and the genes involved in prostate cancer vary from person to person, so a spectrum results, from non-life threatening to very aggressive disease forms of cancer.

The PSA test can't distinguish between these different cancers. Further, PSA levels may increase in the blood as a result of an infection in the prostate gland - yielding a false positive in the PSA test.

While the PSA test will continue to be used, it is clear better tests need to be found. Caldera's molecular technologies target genetic variations found in prostate cancers between individuals. They also have a direct application to diagnosis in other cancers.

"We are targeting the deficiencies of the PSA test by developing a novel suite of molecular diagnostic tests for the early detection and characterisation of prostate cancer. Essentially, these will allow clinicians to conduct early diagnosis of prostate cancer, distinguishing it from other prostatic diseases, and between the non-life threatening and aggressive cancers.

"This will eventually replace the biopsy and Gleason score as a tool for staging cancer. It will also lead to follow on monitoring, and prognosis and progression of the cancer and treatment options," says Dr Watson.

Survey shows young people are making good lifestyle changes

A report released recently, the third in the Youth2000 Survey Series from the Adolescent Health Research Group (AHRG), a multi-disciplinary group from the University of Auckland, has thrown up some surprising changes in statistics.

The study shows that among secondary students in New Zealand, substance use, risky driving behaviours, violence and many other risky behaviours are on the decline.

These reductions are dramatic in some cases; with cigarette smoking, there has been a 50% reduction in the past 11 years. Many findings are consistent with other research in New Zealand showing reductions in risky health behaviours among youth, but such dramatic reductions are world leading.

Providing an insight into trends of adolescent experience since 2001, the representative surveys have tracked health and wellbeing indicators for youth using a comprehensive computer assisted survey.

The first survey, led by Dr Peter Watson, set the standard covering a range of health-related areas with results going beyond simply producing a list of problems, and finding valuable insights into the positive aspects of young people's lives and factors that contribute to keeping them well.

In 2007, the second survey, led by Dr Simon Denny, raised new questions on issues, such as rapidly changing technology with the use of the internet, mobile phones and text bullying. With increasing concern about the apparent rise in the number of students who are overweight or obese, student measurements were also taken to provide some much needed data.

The 2012 survey, led by Dr Terryann Clark, was completed by 8,500 secondary school students and provides the country's most comprehensive data on current adolescent concerns and behaviour. In particular, it shows a marked reduction in tobacco, alcohol



The Youth2000 Survey Series has shown a decline in risky behaviours by secondary school students, however Dr Terryann Clark says we should not be complacent.

consumption, binge drinking and illegal drug use as well as lower rates of dangerous driving and small positive shifts in school life.

Dr Clark believes that the positive findings demonstrate that sustained comprehensive public health programmes, policies and education are working.

She says overall reduction in risk-taking behaviours among adolescents was exciting and cause for optimism, indicating strong positive emerging trends, however she warns against complacency.

"We can't say, 'great, we've fixed youth problems' because evidence suggests if you take away resources and effort in a particular area, there will be corresponding declines in wellbeing."

Other results indicated worsening wellbeing in their lives. Youth across the social spectrum are increasingly aware of

parental concerns around not having enough money for food, and increasing numbers of young people cannot secure part-time work or access primary healthcare. Many young New Zealanders are emotionally distressed, bullied, using contraception inconsistently, and/or are overweight.

The Adolescent Health Research Group hopes to run the survey again in 2016, dependent on funding. "The findings are enormously valuable to policymakers, schools, parents and caregivers," says Dr Clark. "It informs policy, and also monitors what measures to put in place to ensure young people are being well cared for."

Full report findings are now available on the [FMHS website](#).

Separate reports, including findings for Maori adolescents, using the same survey data will be released in October 2013.