# Pacific Voices XIV

### PACIFIC POSTGRADUATE SYMPOSIUM







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Pacific Voices XIV: Abstracts for the Pacific Postgraduate Symposium

### Foreword

A warm Pacific welcome to the *Pacific Voices XIV Postgraduate Symposium 2017*! This symposium showcases research by Pacific postgraduate students. At the University of Otago we are fortunate to have a very talented group of Pacific postgraduates, whose research will make a significant contribution to a range of fields, with widespread application to the Pacific region and beyond. Congratulations to those students whose work features in these Proceedings for the *Pacific Voices XIV Postgraduate Symposium*. Their research is inspiring, impressive and importantly, it will make a difference!

The participants of *Pacific Voices XIV Postgraduate Symposium, 2017* are all part of a vibrant graduate research community. These postgraduate students and their supervisors push the boundaries of knowledge, with new ideas, creativity and enthusiasm.

I am sure that readers of *Pacific Voices XIV* will be impressed with the quality and variety of research that is reported in this volume. In 2017 the presentations span a range of disciplines across the University including biochemistry, pharmacy, physics, film and media, education, law, history, politics, anthropology and geography. The topics range from 'Malaitan music and indigenous expression', to 'The 2010 constitutional reform in Tonga', and 'Sleep in Pasifika adolescents'. These are just a few of the presentations that are included in this Symposium.

Geographically, the research being reported includes issues in the Solomon Islands, Papua New Guinea and Samoa, as well as issues related to Pacific Islanders in Aotearoa/New Zealand.

Finally, on behalf of the University, I would like to thank all those responsible for *Pacific Voices XIV*, and in particular Tofilau Nina Kirifi-Alai and Alison Finigan.



Professor Rachel Spronken-Smith Dean, Graduate Research School

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An ordained minister for the Methodist Church in Samoa, Olataga is completing the final stages of a PhD in Theology. In 1996 he completed a BMus at the University of Auckland, followed by a BDiv at Piula Theological College (Samoa) in 2004. From 2003 to 2013 Olataga was a lecturer in Theology at Piula Theological College. In 2008 he completed an MTh at the Pacific Theological College (Suva).

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#### THE LANGUAGE AND THEOLOGY OF THE SAMOAN METHODIST HYMNBOOK: CIRCUMSCRIBING HYMNAL TRANSLATION FROM A POSTCOLONIAL PERSPECTIVE

#### Olataga Elu

Hymns are an integral element of Samoan Christian worship in its capacity to express both knowledge and interpretation of Scripture as well as the tenets of the Christian faith. Significantly, hymns consist of important 'theology' that influences and shapes one's understanding and interpretation of the environment, self, social order and future possibilities, and prescribes one's 'action' and 'reaction' in light of these.

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In saying this, Samoan hymnology consists almost exclusively of hymns written by European missionaries tasked with converting the people and cultures of the lost heathen world, during a period of imperial and colonial expansion and domination from the West. Thus, as 'writers' and 'rewriters' of Samoan hymnody, the 'missionaries' promoted both the salvific mission of Christ and the ideology of British imperialism and colonialism. As such, Samoan hymnology is outdated and strongly biased towards 'conversion' and a 'better life', rendering it problematic and ineffective to nurture and sustain genuine and relevant Christian growth and identity in the 21st century.

This research probes the issue of 'translation' in Samoan Methodist hymnody and its impact on the theology and mission of the Church and the Christian consciousness of the people in today's contemporary world. Through this work, the author hopes the Church will address the significant impact hymnal theology has on the Church and its members. For the once colonized spaces, translation should no longer champion 'revisions' or 're-editions'; instead, the author calls for a 're-translation' of the hymnal 'text' that advocated, and still advocates, the colonial mentality.

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Keywords: hymnology, postcolonial criticism, theological hermeneutics, cross cultural theology



#### TAHZEEB FATIMA

Tahzeeb is an international student in the Biochemistry department. She recently completed the final defense for her PhD, which was supported by an Otago Doctoral Scholarship. She completed her M.Phil (Physiology) in Pakistan, which enabled her to secure a senior position there. Tahzeeb's research focuses on integrating scientific and medical understandings of the relationship of gout to metabolic disease.

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# MENDELIAN RANDOMIZATION REVEALS A CAUSAL RELATIONSHIP BETWEEN IRON AND URATE METABOLISM

**Tahzeeb Fatima**, Cushla McKinney, Lisa K Stamp, Nicola Dalbeth, Cory Iverson, Tony R Merriman, Jeffrey N Miner

Iron is vital for an array of metabolic functions and its homeostasis is a tightly regulated set of biochemical processes. Transferrin regulates iron uptake and ferritin stores excess iron from intra- and extracellular pools. Ferritin has been positively associated with urate<sup>1</sup> and an interventional study suggested that iron has a role in triggering for gout flares.<sup>2</sup> A genetic variation in the transferrin receptor has been associated with gout.<sup>3</sup> We previously replicated the observational association with urate in Europeans and African Americans and extended it to NZ Polynesians. We also found a positive association between increased ferritin and risk of gout and gout flare frequency in NZ population groups.

This study aimed to use the Mendelian randomization (MR) approach to answer an open question of cause-effect relationship between iron and urate metabolism. Mendelian randomization is based on Mendel's second law of inheritance and exploits the random assignment of alleles at conception to disentangle cause and effect in the presence of confounding. In MR, genetic variants robustly associated with exposure phenotype (cause) are used as instruments to identify a causal effect on the outcome (effect).

Publicly-available data of ~158,900 European individuals were obtained from two large genome-wide association studies.<sup>4,5</sup> Various statistical analyses were done using the two-sample bidirectional MR approach. Multiple genetic variants associated with urate, iron, ferritin, transferrin and transferrin saturation were selected as genetic instruments for exposure(s).

There was evidence for a causal effect of increased serum iron and ferritin on urate metabolism. Conversely, there was no evidence for a causal effect of increased urate on iron metabolism. Our study, for the first time, implicates increased iron and ferritin to be causally involved in controlling urate metabolism.

Keywords: iron, ferritin, urate, gout, Mendelian randomization

<sup>1</sup> Ghio, A.J., et al. (2005). The association between serum ferritin and uric acid in humans. *Free radical research*, 39:337-42.

<sup>2</sup> Facchini, F.S. (2003). Near-iron deficiency-induced remission of gouty arthritis. *Rheumatology*, 42:1550-55.

<sup>3</sup> Merriman, T.R., et al. (2015). A Genome-Wide Association Study Reveals Association of the Transferrin Receptor Locus with Gout. *Arthritis Rheumatology*, 67 (suppl 10).

<sup>4</sup> Köttgen A. et al. (2013). Genome-wide association analyses identify 18 new loci associated with serum urate concentrations. *Nature Genetics*, 45:145-54.

<sup>5</sup> Benyamin B. et al. (2014). Novel loci affecting iron homeostasis and their effects in individuals at risk for hemochromatosis. *Nature Communications*, 5:4926.



Irene is a Solomon Island-New Zealand PhD candidate. Her ethnographic study focuses on North Malaitan women's music. Irene has been the recipient of the following awards: 2016 NZ Aid Postgraduate Field Research Award and Claude McCarthy Fellowship; 2013 Victor Galway Medal and Charles Begg Prize in Music; 2012 Pacific Island Bridging Scholarship; 2010 Jennie MacAndrew Prize in Music.

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*KWAIMANI ANA LIOHAUA GIA* (THE HEART OF US) – MALAITAN MUSIC AND INDIGENOUS EXPRESSION

#### Irene Karongo Hundleby

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This paper is a bicultural (Solomon Island-New Zealand) account of recent PhD music research that examines how North Malaitan ways of thinking and being are expressed and constructed within the music of Lau-Mbaelelea women in the Solomon Islands. As a researcher working with her own peoples, Irene's study has focused on ethnographic experiences as an apprentice learning intangible cultural heritage from her elders. As a descendant, Irene is gifted access to a musical world that engages with both the natural and the supernatural, where physical and spiritual planes are deeply integrated.

For generations, North Malaitan music and the arts have used subjective language cloaked in metaphor to communicate indigenous beliefs, values, histories and philosophical thinking. In this paper indigenous voices explain the significance of their music and document the transformation of their musical cultures due to colonial influences (eg. colonial administrators, indentured labour and missionary contact). Musical hybridity<sup>1</sup> reveals how North Malaitans have willingly adapted and transformed in response to introduced ways of being. Identities of the past meld with those of the present and expose spiritual concepts and metaphoric complexity.

This first study of North Malaitan music and *kastom*<sup>2</sup> gives a voice to indigenous expression and thinking, and demonstrates the integral part Lau-Mbaelelea women play in the social weave of their communities.

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Keywords: women's music, Malaitan music, indigenous expression, cultural transformation

<sup>1</sup> In this paper, musical hybridity refers to the fusion of indigenous (kastom) musical features with introduced musical features. Such features may include lyrics, melodic tunes, traditional and contemporary instrumentation, costuming, dance features. These features often relate to both ways of being and associated spiritual practices (indigenous and adopted religions).

<sup>2</sup> Kastom (Solomon Islands Pijin): tradition; culture of a given community, encompasses that which is traditional and pertains to Solomon Islands and/or a particular tribal/clan group; belief system, practices, spiritual beliefs.



#### JASON LEW KAR SHENG

Jason is an international student from Malaysia in his final year of PhD study in the Department of Physiology. His study is supported by a University of Otago Doctoral Scholarship and funding from the Department of Physiology. He is currently investigating the beneficial effects of various exercise intensities on diabetic heart disease.

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#### Jason Lew Kar Sheng

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Cardiac dysfunction in diabetes is associated with impaired myocardial angiogenic response. This has been attributed to the dysregulation of microRNA-126/SPRED-1/VEGF axis, a proangiogenic pathway. Therefore, restoration of microRNA-126 could be a potential therapeutic strategy. High-intensity interval exercise (HIIE) appears to be an effective intervention for cardiovascular disease. However, the molecular mechanism mediating the cardioprotection following HIIE still remains unknown. Hence, the aim of this study is to assess the effects of HIIE on the modulation of microRNA-126/SPRED-1/VEGF axis and myocardial angiogenic response in type-2 diabetic mice.

Type-2 diabetic *db/db* mice with established cardiac dysfunction were subjected to either high-intensity interval exercise (HIIE) or no-exercise. Age-matched *db*/+ lean mice with normal cardiac function were used as controls. Mice were subjected to exercise for 5 consecutive days a week for 8 weeks. Cardiac function was measured using echocardiography. Heart tissues were harvested to assess angiogenesis, functional capillaries and microRNA-126. Diabetic controls showed consistent deterioration in systolic and diastolic function during the 8-week study period. qPCR revealed downregulation of microRNA-126 and western blotting analysis confirmed downregulation of pro-angiogenic VEGF, a target protein of miR-126. Immunohistochemistry showed marked reduction in both functional and total arteriole and capillaries. Interestingly, HIIE reversed cardiac dysfunction and restored expressions of microRNA-126 and VEGE. This was associated with increased number of functional arterioles and capillaries.

HIIE reversed cardiac dysfunction in diabetes by improving cardiac function and perfusion. These functional changes might occur in part due to restoration of microRNA-126. This study advocates active lifestyle as a therapeutic strategy for metabolic-related cardiovascular diseases.

Keywords: diabetic heart disease, exercise, microRNAs, angiogeniesis



Sara is of Fijian-New Zealand decent and is currently pursuing a Master of International Studies degree. In 2016 she completed an LLB/BA (Anthropology major and Politics minor), and discovered an interest in international relations, particularly American foreign policy. Sara works with several community organizations in Dunedin, including Community Law Otago and the Pacific Island Law Students' Association.

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#### THE IMPACT OF PRESIDENT BARACK OBAMA'S CONCEPTION OF AMERICAN EXCEPTIONALISM ON THE COUNTRY'S FOREIGN POLICY

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#### Sara Lomaloma

American exceptionalism can be broadly defined as an informal belief that America has a unique, immutable nature that is grounded in superior liberal principles. Furthermore, it is a belief that America has a unique mission in the world.<sup>1</sup>

In considering Obama's presidential legacy, questions arise over the impact of his leadership on America's position as the world's only superpower. Did he conserve or hurt American primacy? Moreover, was he able to adapt America's global role to the realities of new security threats in an increasingly globalised world?

This research questions whether President Obama's formation of American exceptionalism differed from his Cold War predecessors, and how did this outlook impact his foreign policy outcomes.

To explore these issues, the study will show how the informal ideology of American exceptionalism has been used to shape the country's foreign policy. It will then demonstrate the differences and continuities in Obama's articulation of American exceptionalism and attempt to recalibrate America's sense in the world compared to his post-Cold War predecessors. These conclusions will then be analysed using the case study of Obama's foreign policy response to the Syrian Civil War.

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**Keywords:** American foreign policy, globalisation, Barack Obama, Syria

<sup>1</sup> Robert G. Patman, "Globalisation, the New US Exceptionalism and the War on Terror," *Third World Quarterly 27* (2006): 964.



Eseta Maka received a volleyball scholarship to study at Middle Tennessee State University, USA, where she completed her Bachelor of Science degree. She is currently completing her thesis in the University of Otago Master of Planning programme. She will commence employment at the Auckland City Council at the start of 2018 as a graduate planner.

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#### Eseta Maka

Frequently the urban regeneration process has unanticipated outcomes, particular for the host community who sometimes may have to change their place of residence. This process is taking place in the areas of Tamaki in Auckland which is the focus of this study. While improvements are occurring, it seems as if some people may have had to relocate, often away from their local networks and community. This has occasioned a degree of protest as reflected in the media.

To improve the situation, suggestions have been made to improve relationships between council and residents by involving them more through public participation. However, this does not give assurance to the residents, especially those in State Housing, that they will be returned to their homes once the regeneration projects are completed. The aim of this research is to evaluate the process that was undertaken by the Crown and Auckland Council-owned Tamaki Regeneration Company that had the overall responsibility to manage the renewal activities.

Using a qualitative methodological approach, the researcher will examine the process undertaken by the Tamaki Regeneration Company. The results from this research will expose gaps within Auckland development in the processes being used to better manage communities and their homes, as not just for built form and economic activities but also for the good of the community as a whole.

**Keywords:** urban development, sustainable development, regeneration, social equity



Sam Mehrtens is a Master of Arts student who has recently returned from a seven-week fieldtrip to East New Britain, Papua New Guinea, funded by the Ron Lister Trust and an MFAT Postgraduate Award. Sam returned to PNG after a one-year UNIVOL assignment in 2015 with VSA, where he worked at Kabaleo Teacher College.

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CHALLENGES TO IMPLEMENTING ICT IN PRIMARY EDUCATION IN EAST NEW BRITAIN PROVINCE, PAPUA NEW GUINEA

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#### Sam D. Mehrtens

Information and Communication Technology (ICT) has the potential to remove a sense of remoteness in East New Britain (ENB), but as it slowly integrates into the field of primary education its users come across challenges. Education is acknowledged as a basic need and this has been recognized in the United Nations Sustainable Development Goals, with a specific focus on enhancing the quality of education. Over the last 25 years ICT has grown to become an important tool in schools in the Global North for teaching and learning, school management and research. These same ICT strategies are emerging in ENB as a teaching aid but face significant challenges to full implementation because of issues relating to accessibility, cost, technical support, professional development and cultural attitudes towards change. This research explores how location and accessibility impacts on the ability of schools to provide quality education, and the role in which ICT is being used to mitigate these challenges within the rapidly growing province of East New Britain.

Keywords: primary education, Papua New Guinea, ICT, rural development



Following completion of her BSc and PgDipSc in Anatomy, Jaye joined the Merriman laboratory where she recently completed a Master's degree in Biochemistry. Jaye continues to pursue a PhD in Biochemistry where her research looks at integrating scientific and medical biology knowledge to understand the genetic and environmental factors causal of metabolic disease in Polynesian populations.

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THE DISCREPANT ASSOCIATION OF THE CREBRF VARIANT RS373863828 WITH INCREASING BMI AND PROTECTION AGAINST TYPE 2 DIABETES

J Moors, Tony Merriman, Mele Taumoepeau

The association of a missense variant rs373863828 (p.Arg457G1n) in the CREBRF gene significantly increases body mass index (BMI) and protects against type 2 diabetes (T2D) in adult Samoans living in Samoa.<sup>1</sup> The variant also associates with increased BMI and protection against T2D in the adult Māori and Pacific population of New Zealand (unpublished). It's association in the younger Polynesian population is yet to be determined.

This study aimed to examine the association of the variant rs373863828 with BMI, other measures of adiposity, and biochemical markers in a population of young Pacific adults residing in New Zealand.

A total of 248 participants of Pacific descent (NZ Māori, Cook Island Māori, Samoan, Tongan, Niuean and 'Other' Pacific ancestry) were recruited from the Otago region. Taqman<sup>®</sup> genotyping of the rs373863828 was performed, and association analyses were carried out in STATA 13.1. Association testing was carried out with adiposity measures (BMI, log-transformed BMI, waist circumference) and serum biochemical markers. Relevant adjustments for age and sex were made, and BMI where necessary.

The rs373863828 minor allele frequency within this population was 18.10% of young Pacific adults. The association testing of this variant with adiposity measures demonstrated no significant associations (log-transformed BMI;  $\beta = 0.035$ , P = 0.11, BMI;  $\beta = 0.960$ , P = 0.18, waist;  $\beta = 2.09$ , P = 0.14). Furthermore, there was no evidence of association with serum biochemical measures, particularly the measure for diabetes (glycated haemoglobin, HbA1c) employed in this study (HbA1c;  $\beta = -0.0002$ , P = 1.00).

The findings from this study showed no evidence of association with measures of adiposity and diabetes in a young Pacific population. However, the direction of effect with BMI, albeit insignificant, was consistent with the findings from the adult population. The lack of association in this study could be attributed to the relatively small sample size.

Keywords: CREBRF, obesity, diabetes, genetics, Pacific

<sup>1</sup> Minster RL et al.: A thrifty variant in CREBRF strongly influences body mass index in Samoans



Charles is of Kiribati and British descent, and lives in the Solomon Islands. He graduated from Otago in 2015 with First Class Honours in Anthropology and was subsequently awarded a Doctoral Scholarship. He is currently in his second year of a PhD and aspires to work in the Pacific in the field of anthropology.

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PREHISTORIC SETTLEMENT AND EXCHANGE SYSTEMS IN THE MANNING STRAIT, WESTERN SOLOMON ISLANDS

#### **Charles Radclyffe**

The colonization of Oceania<sup>1</sup> was a momentous chapter in prehistory as the remote Pacific was the last major region on Earth to be occupied by humans.<sup>2</sup> Archaeologists have studied interaction between early Oceanic societies to gain an understanding of how these cultures changed and diversified over millennia.<sup>3</sup>

This study is an investigation into the history of the settlement of the western Solomon Islands and the development of prehistoric trade and exchange systems in the region. It focuses primarily on an understudied part of the western Solomon Islands known as the Manning Strait, and aims to explain when the region was first occupied, where its prehistoric occupants came from, and how they interacted with one another. The study draws upon archaeological field research and laboratory analysis of ceramics and stone tools. In addition, it encompasses a systematic and comprehensive review of Melanesian ethnographic and historical literature. Preliminary findings are showcased, including field data collected by the researcher over three expeditions to the Manning Strait, and new evidence is provided from the region of the prehistoric production and widespread distribution of pottery, stone tools and traditionally sacred shell ornaments.

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Keywords: prehistoric settlement, regional interaction, pottery, Solomon Islands

Collective name of islands of the central and south Pacific, comprised of four major geographic and cultural areas: Australasia (Australia and New Zealand), Melanesia, Micronesia and Polynesia.

<sup>2</sup> Lilley, I. (2008) Migrations: Pacific. *Encyclopaedia of Archaeology*. Elsevier Inc., pp. 1632-1643.

<sup>3</sup> Some famous Pacific archaeologists and studies include Roger Green's (1973) Lapita pottery and the origins of Polynesian culture. Australian Natural History. 17: 332-337; Peter Bellwood's (1978) Man's Conquest of the Pacific: the Prehistory of Southeast Asia and Oceania. Auckland: Collins; and Geoffrey Irwin's (1990) Human Colonisation and Change in the Remote Pacific. Current Anthropology. 31, (1): 90-94.



Amara is an international student from Pakistan. Currently, she is pursuing doctoral studies in Biochemistry supported by a University of Otago Doctoral Scholarship. Previously, she completed an M.S. degree in Medical Physiology and Biochemistry from Pakistan, graduating with distinction. Amara's research focuses on integrating scientific and medical understandings on the role of inflammatory genes in gout pathogenesis.

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GENETIC ASSOCIATION OF BICC1 GENETIC VARIANT *Rs1649053* WITH GOUT IN NEW ZEALAND POLYNESIAN AND EUROPEANS

Amara Shaukat, Tony Merriman

Gout is a chronic arthritis, associated with elevated serum urate levels (hyperuricemia) and deposition of monosodium urate crystals in and around joints. The frequency is higher in Māori and Pacific people (Polynesian).<sup>1</sup> The genetic variation in gut and renal uric acid transporters contributes to gout development but hyperuricemia is not sufficient to cause gouty inflammation. The trans-metaanalysis of two urate related genome wide association studies has provided evidence of a signal of bicaudal C homologue 1(BICC1) intronic variant *rs1649053* with serum urate that might play potential role in gout.<sup>2,3</sup> Previously a BICC1 mutation has been reported with renal polycystic disorder in a mouse model<sup>4</sup>.

The present study aimed to test whether the BICC1 variant associate with gout risk in New Zealand (NZ) Polynesian and Europeans.

A total number of 6,564 clinically ascertained gout cases and 15,480 controls were recruited from the NZ Polynesian and various Europeans (NZ European, ARIC, FHS, CARDIA, CHS, Ardea Biosciences and UK Biobank). Taqman<sup>®</sup> genotyping of the *rs1649053* was carried out in Polynesian followed by association analysis in R.

A highly significant association of the BICC1:*rs1649053* C-allele was found with gout risk in Europeans (OR= 1.11, P=8.05×10<sup>-6</sup>). The *rs1649053* C-allele also exhibited a significant association with gout in the Western Polynesian participants (OR= 1.69, P=0.03). Moreover, this variant was found to be an expression quantitative trait locus of the TFAM gene (P= $7.87 \times 10^{-6}$ ). The *rs1649053* also associates to mitochondrial DNA copy number. The findings suggest a significant role of BICC1 variant in gout development through mitochondrial mechanism.

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Keywords: gout, BICC1 gene, inflammation, mitochondrial mechanism

Winnard, D., Wright, C., Taylor, W. J., Jackson, G., Te Karu, L., Gow, P. J., ... & Dalbeth, N. (2012). National prevalence of gout derived from administrative health data in Aotearoa New Zealand. *Rheumatology*, *51*(5), 901-909.

<sup>2</sup> Köttgen, A., Albrecht, E., Teumer, A., Vitart, V., Krumsiek, J., Hundertmark, C., ... & Yang, Q. (2013). Genome-wide association analyses identify 18 new loci associated with serum urate concentrations. *Nature genetics*, 45(2), 145-154.

<sup>3</sup> Okada, Y., Sim, X., Go, M. J., Wu, J. Y., Gu, D., Takeuchi, F., ... & Lim, S. C. (2012). Meta-analysis identifies multiple loci associated with kidney function–related traits in east Asian populations. *Nature genetics*, 44(8), 904.

<sup>4</sup> Kraus, M. R. C., Clauin, S., Pfister, Y., Di Maïo, M., Ulinski, T., Constam, D., ... & Grapin-Botton, A. (2012). Two mutations in human BICC1 resulting in Wnt pathway hyperactivity associated with cystic renal dysplasia. *Human mutation*, 33(1), 86-90.



Charles lives in Dunedin with his Samoan wife Stella, and two teenage children. He has an MSc in Electronics from Otago, and is currently studying towards an MSc in Biochemistry. Charles is supported an Otago Division of Sciences Scholarship, and funding from Otago Innovation.

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# THE RATIONALE FOR MYCOLIC ACID AS A BIOMARKER FOR TUBERCULOSIS IN A POINT OF CARE TEST

**Charles F. Shaw**, Richard C. MacKnight, Phillip C. Hill, Stephen J. Sowerby

Tuberculosis (TB) remains a significant cause of mortality worldwide, killing more people each year than HIV. Six Pacific nations were identified by the World Health Organization in 2015 as having a high TB burden. Kiribati tops the list at with a case notification rate 551 per 100,000 population. This exceeds the threshold for inclusion (70/100,000) by a factor of almost eight.

Fast and accurate diagnosis of active TB is essential to bring this highly infectious disease under control. Pacific Island nations are hampered by their reliance on sputum smear microscopy, which requires a high level of technician competency. The development of a replacement point of care test is urgently required, and is the objective of this project.

The presence of Mycolic Acid (MA) in sputum is an appealing biomarker for active TB. MA is a major cell wall constituent unique to mycobacteria, and has markedly different physical properties to the lipids found in normal healthy subjects. The current research aims to exploit this as the basis of a reliable inexpensive triage test.

Making a new diagnostic device widely available requires considerable financial capital. Funding is likely to come from partners in both the private and public sectors. In this situation, the normal academic principle of full disclosure must be balanced against the need to provide a sound intellectual property position for investors. These considerations are not mutually exclusive, and with appropriate timing both needs can be met.

Keywords: tuberculosis, point of care diagnosis, mycolic acid, Pacific.



Vanda is of Fijian descent and has recently submitted her PhD thesis in Science Communication. She has a BPharm (Hons) and PGCert in Pharmacy Research. Her PhD has been supported by a University of Otago Doctoral Scholarship. She is a published crime writer, and is examining the communication of science through crime fiction.

Academic department: School of Pharmacy, University of Otago

Division:	Health Sciences
Supervisors:	Associate Professor Natalie Medlicott Dr Susan Heydon
	Professor Warwick Duncan (Sir John Walsh
	Research Institute)

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FINDING YOUR RESPONDENTS – SNOWBALL SAMPLING IN ONLINE SURVEY-BASED RESEARCH: ADVANTAGES, LIMITATIONS AND PRACTICAL OBSERVATIONS

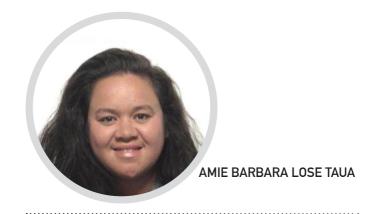
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Vanda Symon, Susan Heydon, Natalie J. Medlicott

The use of online survey platforms to conduct research is becoming more common. The platforms provide a means of survey design, distribution and data capture, but the researcher still has to be able to reach their target demographic.

Snowball or viral sampling is a method that allows researchers to reach an initial pool of respondents, who then share the survey link with others to reach a wider audience. We discuss the advantages of this method of distribution, potential bias and limitations. We then give observations based on the use of snowball sampling in two online anonymous surveys – a survey of writers of crime fiction, which attracted 44 respondents, and a survey of readers of crime fiction, which attracted 1021 respondents.

Keywords: snowball sampling, viral sampling, online survey, bias



Amie Taua is Samoan, and is currently working on her Master of Arts candidature supported by the University of Otago Pacific Island Masters Scholarship. Amie graduated with a Bachelor of Arts in English and Media and Films Studies, as well as an Honours degree in Media and Film Studies. Amie has received the Pacific Island Bridging scholarship, the University of Otago Study Grant and is currently on a Masters scholarship.

Academic department: Media, Film and Communication, University of Otago

Humanities

**Division:** 

Supervisor:

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tauam174@student.otago.ac.nz

Dr Davinia Thornley

BICULTURAL A	AUDIENCE	RECEPTION	IN A I	NEW 2	ZEALA	ND
CONTEXT						

### Amie Taua

The main focus of this research to look at ways to create a foundation for the development of a bicultural audience theory in a New Zealand context. The bicultural audience, in its simplest form, can be defined as individuals who are born in New Zealand to one or both parents who have immigrated from non-western countries. As a result, a bicultural person develops an identity that is informed by the mainstream culture – New Zealand – and the secondary culture, which is that of their immigrant parent/s.

These two cultures inform the bicultural identity and, as a result, create a double-lens that is utilized when viewing films. The bicultural audience and their experiences have not yet been realized on screen, so a unique viewing process is constructed so that the bicultural audience can engage with and enjoy cinema. Part of the research for this thesis will be based on outcomes from two focus groups consisting of young bicultural people, whose responses inform and relate to the studies and literature of bell hooks and Stuart Hall.

Keywords: bicultural, audience, film studies, New Zealand



The Rev. Wayne Te Kaawa is Māori, a first year, mature PhD student and an ordained minister of the Presbyterian Church. He is a former Moderator of the Māori Synod and has travelled extensively in the Pacific as an Executive member of the Pacific Conference of Churches (PCC). He will help host the General Assembly of PCC in Auckland in 2018.

Academic department: Theology and Religious Studies, University of Otago

**Division:** 

Humanities

Supervisors:

Professor Murray Rae Dr Jenny Te Paa-Daniel, Aitutaki

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# RE-VISIONING CHRISTOLOGY THROUGH A MĀORI AND INDIGENOUS LENS

### Wayne Te Kaawa

The taproot of Maori identity is inextricably linked to the islands of Maohi Nui, Mauke, Mitiaro, Rarotonga, Aitutaki and Savaii. When we die our human remains become part of Papatuanuku in Aotearoa but our human spirit travels home to the genesis of our origins Hawaiki, the islands of the Pacific. Christianity and the institution of the Church play an integral role in the life of the Pacific, spiritually, culturally and politically. The central question that underpins Christianity is the Jesus question: who do you say I am? There exists a substantial body of opinion of Māori and Pacific responses to the Jesus question. When you critically examine these responses they link back in time and place to the Pacific through shared histories, genealogies, stories, songs, dances and art. If Jesus where born today in Dunedin, Auckland or Wellington with our population statistics he would no doubt look Maori and Pacific and be into waka ama, playing kilikiti and like eating pork, taro, puha, kumara and banana all cooked with coconut cream.

In critically examining how Jesus Christ has been captured and depicted, what does this means to Māori-Pacific faith as it is lived out in a post-colonial-post-settlement era. The methodology of this doctoral research project is a Kaupapa Māori Research methodology which differs substantially from a western academic methodology.

Keywords: Christology, church, Christianity, faith



Mele is from Tonga and a lawyer by profession. She holds a BA in Law from the University of the South Pacific and an MA in Law specializing in Public International Law from the University of London. Mele began a PhD in Law at the beginning of 2017, supported by a University of Otago Pacific Island Doctoral Scholarship.

Academic department: Faculty of Law, University of Otago

Division:

Humanities

Supervisors:

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# THE 2010 CONSTITUTIONAL REFORM IN TONGA - THE DEVOLUTION OF THE MONARCH'S EXECUTIVE POWER

#### Mele Tupou

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At a time when a shift in authority from monarchy to representative government is generally agreed and only partially delivered, the Tongan Constitution of 1875, together with the objectives, processes and outcomes of the 2010 reforms, require examination in order to assess the role and place of underlying constitutional principles.

This research investigates the devolution by constitutional amendment of the monarch's executive authority, beginning with an examination of the nature of monarchy in Tonga and the role of the Constitution in Tongan society. The study will seek to understand those circumstances in Tonga's evolving history and culture that have led to the acceptance today of the sharing of executive authority. More specifically, the concept of democratization will be drawn upon to understand why Tonga moved toward democracy in 2010; what has happened since the reform in 2010; and whether or not the shift from an absolute monarchy to a democratically elected parliament has been carried through to its fullest extent.

The research will explore how executive power-sharing came to be expressed in the 2010 reform; the extent of, and exceptions from, the devolution that has actually taken place; the implications of the wording; and alternative approaches to describing the arrangement of power sharing that might be suitable for the Constitution of Tonga. It will examine the attitude of today's proponents of democratic reform to the concept and practice of power-sharing.

Keywords: Constitutional reform, democratization, devolution, power-sharing



#### LUPESILIVA TU'ULUA

Lupe is Samoan and is a Registered Nurse at the Canterbury District Health Board. She is currently working part-time on a dissertation at the University of Otago Post-Graduate Nursing Department (Christchurch campus), to complete her Masters in Health Science – Nursing Clinical. She recently became an authorized Nurse Prescriber in Primary Health and Specialty teams.

Academic department: Centre for Postgraduate Nursing Studies, University of Otago, Christchurch

Division:	Health Sciences
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## EXPLORING PSYCHOLOGICAL INSULIN RESISTANCE IN PACIFIC ISLANDS CLIENTS WITH T2DM WHO ARE RESIDENTS IN NEW ZEALAND

#### Lupesiliva Tu'ulua

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The study seeks to explore how the phenomenon Psychological Insulin Resistance (PIR) influences a Pacific Islands (PI) client with Type 2 Diabetes Mellitus (T2DM) in deciding whether to initiate, intensify or to continue with insulin therapy to treat their diabetes.

A qualitative case study methodology will be used to investigate how two PI clients diagnosed with T2DM responded to the prescription of insulin therapy. The data will be collected using different collection methods and the type of data produced will be mainly descriptive. The approach will be exploratory and the study will be conducted in a culturally sensitive manner. As PIR is a complex phenomenon and minority ethnic groups have been identified in the literature as more prone to its effect, the researcher is positive that two "critical cases" will be found that will be instrumental in illuminating the phenomenon under enquiry.

The research is just beginning. The proposal has been signed by two supervisors and is currently before the Research Proposal Committee for approval. So far two possible "critical cases" have been identified that will shed some light on the phenomenon under study. They have seen the draft information letter and the draft consent form and already they are keen to participate. The expected results are that Pacific Islands clients with T2DM who have been prescribed insulin therapy will exhibit classic signs of PIR as described in the literature.

Keywords: PIR, T2DM, Pacific Islands people, case study



Tevita is of Tongan and European descent, and is currently enrolled in the BMedSc (Hons) programme between the 3rd and 4th year of the MBChB degree. Tevita received the Maurice and Phyllis Paykel Trust Research Award in Medical Sciences for his research this year. This honours project builds on Tevita's HRC-funded Summer Studentship project.

Academic department: Department of Medicine, University of Otago

**Division:** 

Health Sciences

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Dr Rosalina Richards, Associate Dean (Pacific), Dunedin School of Medicine

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Professor Rachael Taylor

#### SLEEP IN PASIFIKA ADOLESCENTS

#### Tevita Vaipuna

Sleep of adequate duration and quality is crucial for maintaining every aspect of health. However, research suggests that Pasifika youth in New Zealand may not be getting enough, which may be contributing to health disparities between Pasifika communities and the general New Zealand population. This study aims to describe perceptions of Pasifika adolescents about sleep, their thoughts on how Pasifika culture impacts on sleep, and the appropriateness of different sleep improvement interventions within Pasifika families.

The study involved qualitative interviews with local Pasifika high school students, underpinned by the Talanoa research method and the University of Otago Pacific Research Protocols. Transcripts from these interviews were analysed using thematic analysis, noting common themes that arose from the interviews.

The results suggest that most Pasifika adolescents felt they had challenges in getting enough sleep. Alongside challenges that are consistent with adolescents worldwide (e.g. a delayed circadian rhythm and a tendency to catch up on missed sleep in the weekends), they felt some were more specifically related to aspects of Pasifika family values and lived experiences. For example, many mentioned living with large families that had inconsistent sleep patterns, attended family, cultural, and church/community events or activities during some evenings, and had high extracurricular and academic pressures, all which they felt negatively affected their sleep.

In discussions about the acceptability of different sleep interventions, participants indicated that the interventions likely to have the biggest positive impact would include sleep education for adolescents and their families, parental-set bedtimes, and restricting screen technology use.

Keywords: adolescent, sleep, Pasifika



Malia is of Tongan ethnicity, and was born in Christchurch. In December 2016, Malia completed a Bachelor of Science majoring in Energy Studies and minoring in Mathematics, and is currently completing a Bachelor of Applied Science with Honours in Energy Management. Malia has previously worked in the engineering industry in both Christchurch and Tonga.

Academic department: Physics, University of Otago

Division:	Sciences
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# DEVELOPMENT OF A THERMOCHEMICAL HEAT ENERGY STORAGE SYSTEM FOR HUMIDITY AND TEMPERATURE CONTROL OF NEW ZEALAND RESIDENTIAL BUILDINGS

#### Malia Tive Vehikite

# Can the use of an energy efficient and cost effective renewable energy storage system help prevent and eliminate New Zealand's indoor moisture problems through humidity and temperature control? This study involves the investigation and analysis of the technical and economic feasibility of a potential use for a type of thermal energy storage system within damp New Zealand residential buildings. This primarily involves researching New Zealand's current indoor moisture problems and solutions, and developing a mathematical model for the implementation of a thermal energy storage system (thermochemical) in order to analyze the system's thermodynamic properties and how moisture within a room model can be reduced to desirable levels through the control of temperature and humidity.

The mathematical modelling involves the derivation of appropriate governing equations from the general mass and energy balance equations. These equations consider the air exchanges from the environment, within the indoor space, and from the heat storage reactor, taking into account the diurnal and night fluctuations making the overall system an unsteady-state process (changes with time). Necessary data is obtained from previous studies for Dunedin as this is the chosen location for investigation. The data and equations are then input into the computer programme for results. If the desired results are produced from this model, indoor temperature will be increased to a value between 18-24 and the dew point temperature, with the relative humidity, decreased to a range of 30-45%<sup>1</sup> thus achieving the set objective.

**Keywords:** Indoor moisture, condensation, humidity, energy efficiency

<sup>1</sup> World Health Organization (WHO). (2009). Dampness and Mould. Retrieved from http://www.euro.who.int/\_data/assets/pdf\_file/0017/43325/E92645.pdf



Inano Walter (Cook Island, Pākehā) has recently completed her MA with Distinction in History. Inano received the Māori and Pacific Island Bridging Scholarship in 2014 to complete her BA (Hons), and then received a Masters Rutherford Scholarship in 2016. Inano's main interests are pre- and post-contact Māori society, analysing the juncture between tikanga practices and colonial law, with intentions to commence a PhD that focuses on Cook Island oral history and land tenure.

# Academic department: History and Art History

**Division:** 

Humanities

Supervisors:

Associate Professor Angela Wanhalla Dr Mark Seymour

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# MÃORI WOMEN, MÃORI MARRIAGE CUSTOMS AND THE NATIVE LAND COURT, 1865-1908

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#### Inano Walter

Until recently, research about the Native Land Court has focused predominately on land tenure and land loss for Māori. Yet, within court record books are the imprints of Māori social histories deserving further examination – the foremost being customary Māori marriage practices. Research on the court and its proceedings has also focused on male perspectives, leaving many women's voices unheard and their experiences understudied.

Literature on customary Māori marriage practices remains fragmented. Early ethnographers such as Raymond Firth, Elsdon Best and Maggie Papakura have analysed marriage practices. Bruce Biggs provides a monograph of customary marriage but without a locality specificity. Although Angela Wanhalla has focused on interracial marriages in the South, she has yet to analyse customary marriage within the Native Land Court. This is where research surrounding customary marriage has focused.

This paper seeks to address the main threads of customary marriage practices prior to European arrival to Aotearoa, in order to highlight changes that took place once the land, but also married Māori women, came under the jurisdiction of colonial law. Given that Māori women retained their place historically (and currently) at the forefront of land management and distribution, this paper examines their perspectives. The study found that customary marriage could not be analysed in isolation to whakapapa, mana, whānau, hapū and iwi as these relationships were interconnected within a Te Ao Māori paradigm.

Keywords: customs, marriage, women, Māori



# DR PATRICIA WHITFIELD

Patricia Whitfield is a consultant Endocrinologist at CCDHB, and a research fellow at the University of Otago, Wellington. She is currently undertaking a PhD, with her thesis focusing on ethnic differences in glucose metabolism in New Zealanders. She has been awarded an HRC Clinical Training Fellowship to complete this research.

Academic department: Department of Medicine, University of Otago, Wellington

**Division:** 

Health Sciences

Supervisors:

Associate Professor Jeremy Krebs Dr Rosemary Hall

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PREVENTING PROGRESSION FROM PRE-DIABETES TO TYPE 2 DIABETES IN NEW ZEALANDERS (THE PROGRESS NZ STUDY)

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**Patricia Whitfield**, Brian Corley, Rosemary Hall, David Rowlands, Mark Weatherall, Jeremy Krebs

Approximately 25% of the NZ adult population have pre-diabetes, a condition which heralds the onset of Type 2 diabetes (T2DM).<sup>1</sup> 70% of these adults will develop T2DM.<sup>2</sup> There are important ethnic disparities in rates of T2DM – highest rates are in Pacific and South Asian groups, with Māori close behind.<sup>3</sup> Reducing incidence of T2DM in a way that specifically meets the needs of Pacific peoples will improve health outcomes, and follows 'Ala Mo'ui principles.<sup>4</sup>

Body composition differs markedly by ethnicity. NZ Māori and Pacific people have greater lean:fat (L:F) mass ratio compared to NZ Europeans. South Asian individuals have lower L:F mass ratio with greater abdominal fat.<sup>5,6</sup> Given these differences, it is of great interest that those of Pacific and South Asian ethnicity share similar excess risks for T2DM. We hypothesise that there are fundamental differences in the pathogenesis of T2DM in relation to ethnicity that may be related to body composition and its response to interventions.

The PROGRESS NZ study is an HRC funded prospective cohort study which directly assesses markers of glucose metabolism in individuals of NZ European; NZ Māori; Pacific and South Asian descent. The relationship between these markers and their response to diet and exercise interventions will be assessed, as will whether this relationship differs by L:F ratio or ethnicity.

Preventing progression to T2DM is a major health priority for NZ. Understanding who best responds to diet vs exercise will enable health providers to be more targeted and 'individualised' in their approach to diabetes prevention.

#### Keywords: diabetes, obesity, Māori health, Pacific health

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<sup>2</sup> Tabák A, Herder C, Rathmann W, Brunner EJ, Kivimäki M. (2012) Prediabetes: A high-risk state for developing diabetes. *Lancet*, 379, 279-90

<sup>3</sup> Ministry of Health. Virtual Diabetes Register 2010-2015 www.health.govt.nz. Accessed July 2016

<sup>4</sup> Ministry of Health. 'Ala Mo'ui: Pathways to Pacific Health and Wellbeing 2014-2018. www.health.govt.nz Accessed July 2016

<sup>5</sup> Rush EC, Freitas I and Plank LD. (2009) Body size, body composition and fat distribution: Comparative analysis of European, Māori, Pacific Island and Asian Indian adults. Br J Nutr, 102, 632-41

<sup>6</sup> Rush EC, Plank L, Chandu V, Laulu M, Simmons D, Swinburn B and Yajnik C (2004) Body size, body composition, and fat distribution: A comparision of young New Zealand men of European, Pacific Island and Asian Indian ethnicities. *NZMJ*, 117, 1207



Fara Iati is Samoan, from the village of Lufilufi. She is preparing to enter the Master of Indigenous Studies programme, in Te Tumu, the School of Māori, Pacific and Indigenous Studies. Her research focuses on why Pacific people generally have lower socio-economic status than other New Zealanders, and in particular have a much lower income than the national average, despite many having lived in New Zealand for decades. This disparity is particularly notable when compared to the rapid rise of more recent migrants from other regions, in particular Asia.

Academic department: Te Tumu, School of Māori, Pacific and Indigenous Studies **Division**: Humanities

To be Determined Supervisors: Research topic or focus: To identify and examine the causes of poverty among Pacific islanders living in New Zealand, and in particular how quality education or the lack thereof affects these. atfa692@student.otago.ac.nz

**Email:** 



Mary Jane is Tongan and is from Otara in South Auckland. She has completed her Bachelor of Commerce and Master of Business Administration, and is the President of the New Zealand Tongan Tertiary Students Association. Mary Jane recently completed an HRC summer studentship on interpretation services in NZ DHBs.

Academic department: Executive Education, University of Otago

Division:	Executive Programmes
Supervisor:	Ian Lafferty
Research topic or focus:	Can cultural values influence addictive behaviour? Tongan values and the smoking patterns of Tongans.
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Laulalatoa-Sammy is a New Zealand-born Samoan, currently studying towards a Masters of Teaching and Learning. He holds a Bachelor of Arts and an ATCL in Music Performance from the St Cecilia School of Music. He was awarded a University of Otago Māori and Pacific Entrance Scholarship in 2014 and a TeachNZ Kupe Scholarship for Māori and Pacific High Achievers. Laulalatoa-Sammy is currently a Resident Composer for the NZSSC and NZ Youth Choirs.

#### Academic department: College of Education

Division:	Division of Humanities
Supervisor:	Dr Hugh Morrison
Research topic or focus	An insight into the value of cultural co-curricular activities, and the potential added value that student participation in these can contribute towards learner achievement in the classroom.

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Faafetai Tele Lava

Contribution from Tofilau Nina Kirifi-Alai TO COME

# Appendix

### INTRODUCTION TO PACIFIC VOICES XIII

14 October 2016 Professor Vernon Squire Deputy Vice-Chancellor, Academic

# Talofa lava, Malo e lelei, Bula vinaka, Kia orana, Goo-day and Warm Pacific Greetings to all!

Pacific Voices is a special event every year that I have always enjoyed.

Unfortunately, today – like all Fridays – I cannot stay for the whole programme as Friday is when I supervise my postdoctoral and graduate students and they won't let me off. My apologies.

There is a tendency to think your lecturers and professors are something special. They are, but they are also just like you. They aspired to have a rewarding career, so can you – and you have taken the first steps along the way. The common thread to us all is that we are all passionate about research.

First let me tell you about myself ...

I was born in suburban London. When I finished school I went Aberystwyth University for all the wrong – or possibly right – reasons. From there I proceeded to Cambridge University to complete postgraduate studies, which led me to spend time doing research in the Antarctica and the Arctic. And then, it was only a short hop from the South Pole to Otago, where I came as a young lecturer – and here I am still.

My wife is Scottish, from a place near Glasgow. It took a while for me to understand the way she speaks but we got there in the end. I have two sons, Dougal and Jonathan. Dougie is at the University of Melbourne finishing a PhD in engineering. Jono is a completing a postdoc at Caltech in California, after having done a PhD at Princeton and a BSc(Hons) here.

Earlier in my Otago career I lectured in Maths and Stats. Then I took on a little more administration by leading the Sciences Division, and now I'm fully on the dark side in the Clocktower Building with my office facing the Vice-Chancellor's.

My research interests relate to the Polar Regions, the Arctic and Antarctica, and especially the catastrophic effects of anthropogenic climate change.

Now, the famous British philosopher, Bertrand Russell, once said of research:

'The whole problem with the world is that fools and fanatics are always so certain of themselves, and wiser people so full of doubts.'

This is particularly relevant to climate change. Think about these facts ...

- Fact 1. Carbon dioxide levels in the air are at their highest for 650,000 years, reaching over 404 ppm in 2016; never to return below it in your lifetimes, according to scientists.
- Fact 2. Nine of the ten warmest years on record have occurred since the year 2000.
- Fact 3. In 2012 Arctic sea ice extent was the lowest ever recorded, decreasing some 13.4% per decade 55% of the summer Arctic ice has vanished in 20 years, with 2016 being almost as bad as 2012.
- Fact 4. Greenland ice sheet loss doubled between 1996 and 2005 put another way 281 billion tonnes of its ice per year has vanished off the face of the Earth.
- Fact 5. Statistically significant increases in surface wind speed and significant wave height have been observed over the last 20 years.
- Fact 6. And, of particular importance to Pacific nations, global average sea level has risen 180 mm over the last 100 years – that's 3.4 mm per year. Low lying atolls in the Pacific will be majorly affected.
- Fact 7. Higher global temperatures will probably amplify the risk of drought and cause an increased intensity of storms including tropical cyclones with higher wind speeds, a wetter Asian monsoon, and more intense mid-latitude storms.

Yet, despite these facts, Russell's '*fools and fanatics*', a.k.a. the climate change deniers, still maintain that climate change isn't occurring.

This is because scientists will never say that something is conclusively true. As Russell says 'wiser people are full of doubt.' There is always a small possibility that, despite oodles of data, the scientists have got it wrong. Very unlikely, but possible.

Recall, Albert Einstein, who sums this up so well by saying:

If we knew what it was we were doing, it would not be called research, would it? I'll come back to that in a few moments with some wise words to finish.

But for now I want to blow the University of Otago's trumpet a little, to remind you of a few things that you are part of ...

- Otago is exceedingly highly rated both nationally and internationally for the quality of its research.
- Did you know, for example, that the Vice-Chancellor and all her adjutants, i.e. the DVCs and PVCs, still do research and teach? We are the only university in New Zealand where this happens.

- Otago is rated number 1 in the country for research intensity.
- On the other hand, some people might say we focus too much on research and not enough on teaching. Wrong!
- Otago out-performs the other New Zealand universities in regard to course completion, qualification completion, retention and progression, and we continue to do so.
- Also, remarkably, Otago has won more national teaching awards than any other New Zealand university and it has won more supreme awards, i.e. Prime Minister's Prizes. Amazingly, Otago has won the top award for the last 5 years in a row!
- You are part of this, a most important part.
- Firstly, because you are part of a planned continuous rise in the percentage of postgraduate students at the University.
- Secondly, because one of our seven strategic imperatives is 'commitment as a local, national and global citizen'.

## Specifically, from the University's strategic plan and in the Pacific context ...

We will take steps to strengthen our links with Pacific communities. Locally and nationally, our Pacific focus will be on transition pathways into degree-level study, and on securing successful outcomes from that study. Internationally, we will continue to support the development of higher education in the Pacific and deploy our expertise to help address other pressing issues facing the region.

I personally have strong Pacific connections too, having chaired the Pacific Peoples Reference Group when it existed. During that time, I helped draft the Pacific Strategic Framework and the Pacific Research Protocol, and I also appointed the Director of Pacific Development who reports to me.

Over the years I have attended several Pacific Voices Symposia and watched the series grow into something very special.

I commend the students who are facing the challenge of presenting and all the people who have put their energies into making 'Pacific Voices' work so well. Some of you will inevitably encounter the 'fools and fanatics' mentioned in Russell's quote. My advice, admittedly presented through a scientific lens, is to be resolute in standing up for what you believe in. Don't cave in when you know you are right – remember and have confidence that your conclusions are based on sound, evidence-based research. But also don't lose sight of the fact that most 'fools and fanatics' are adamant that they are right and you are wrong – they are obstinate, and they are dogmatic. And all this with absolutely no evidence to support their views.

Well done and enjoy 'Pacific Voices 13'.

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