

Welcome to the LIMELIGHT

November 2018

This newsletter puts tertiary teaching and learning in the limelight and links you with all the latest news from the members of the Ako Aotearoa Academy of Tertiary Teaching Excellence.

Presidential

Kia ora, talofa lava, and 'sup, folks. I am trying (and failing) to match the tri-lingual eloquence of one of the newest members of our growing whānau – this year's Supreme Award Winner Associate Professor Fa'afetai Sopoaga – who lit up the awards night with thanks in Māori, Samoan, and English. She was well-accompanied too, with new whānau bolstering the ranks of those of us who teach business, sports, teacher training, geography, and health sciences, among others. Senior tutors, lecturers, and Profs among them. I've seldom felt so intimidated to speak after others in welcoming these folks to the Academy. I remind myself that back in the Vaudeville days the job of the last act was not to outshine the main performance, but to encourage the audience to leave. This is a job I take seriously...

So, to the 2018 winners, congratulations and welcome. One of the greatest perks of the Academy is our Symposium, and this year's in Christchurch is an important one – our tenth. The loose theme is 'Engaging Teaching, Inspiring Learning' and it's meant to be deliberately ambiguous – is it about teaching that's engaging and learning that's inspiring, or is it about engaging teaching that inspires learning? (It can be both or either).

We'll have keynotes from two of our own – 2017 Supreme Winner Te Taka Keegan, and freshly minted Chief Science Advisor to our relatively newly minted Prime Minister, Juliet Gerard. An extra-Academy perspective will come from Professor Russell Bishop.

The Programme is available and you will see more than 60 (count 'em) presentations, keynotes, campfires, and workshops. We're thrilled to be joined by a strong contingent of people from our West Island ('Australia') who are sure to season our usual offerings with their own flavour. Thanks to Charles Fleischmann who is the person on the ground at the University of Canterbury for laying the foundation this year.

So, please join with me for our annual shindig, promising to be a fantastic mix of view from the balcony and the dance floor, a chance to welcome new whānau and to farewell those who have passed.

Ngā mihi maioha,

Marc Wilson, Victoria University of Wellington



This year's TTEA Awards

Bradley Hurren, University of Otago

In mid-September we welcomed ten inspirational new members into the Academy following presentation of their Tertiary Teaching Excellence Awards in Wellington. Members of the Academy executive hosted awardees and their guests at an afternoon tea prior to the award ceremony, which was a wonderful opportunity to get to know our newest members. With experience and expertise in areas such as medicine, education, anatomy, business, nutrition and geography, it was clear from their introductions that they are not only diverse in their skill sets, but their passion for transforming the lives of their learners is infectious and we are very proud to welcome them into our whānau.

The celebrations continued with the awards dinner at Parliament where, alongside the masterful wit of MC Pio Terei, presentation of the awards was carried out by Hon Chris Hipkins, Minister for Education. Award videos were shown and awardees addressed their friends, families and colleagues in fantastic speeches that resonated the reasons why they deserve to be recognised so much. Often they attributed their success to their students, colleagues and families, rather than themselves.

Special mention goes to Professor Michelle Thompson-Fawcett and Associate Professor Mānuka Hēnare, who received awards in the Kaupapa Māori category, and to Faumuina Associate Professor Fa'afetai Sopoaga, who received an award with Endorsement for Excellence in Supporting Pacific Learners, as well as the 2018 Prime Minister's Supreme Award. This also meant that Faumuina became the custodian of Rauaroaha, the korowai passed to her from the 2017 Supreme Award winner Dr Te Taka Keegan.

We extend a hearty welcome to our newest Academy members, and look forward to meeting the next group of awardees in 2019.



Augmented reality: do holographic patients enhance student nurses' learning experiences?

Liz Ditzel and Emma Collins, Otago Polytechnic

Augmented Reality (AR) is a software technology that allows a virtual two- or three-dimensional (3D) computer generated image to be overlaid on a real environment. For medical and nursing students AR is part of an emerging suite of teaching technology that offers learners the opportunity to interact with a life-sized moving and breathing person, albeit a hologram. For example, AR is being used in medical education to show 3D representations of the internal body and to teach anatomy. It has been trialled in Canberra as an immersive teaching tool to enhance nurses' understanding of anatomy and physiology and physical assessment skills.

This year, as part of an Early Adopter Programme with Pearson Publishing, the School of Nursing at Otago Polytechnic has trialled two AR apps: the HoloPatient and HoloHuman. Both are used with the Microsoft HoloLens headset which projects a hologram into the user's surrounding real-life environment to create a mixed-reality immersive learning experience. Headset users see a patient dressed in a hospital gown in front of them and can hear sounds transmitted via a small speaker in the headset. They can also 'air click' keyboard commands to view the person's vital signs (blood pressure, temperature, respirations, pulse). Two teaching scenarios have been developed. Instructor resources can be used as a teaching guide, as well as to debrief the learning.

HoloPatient Jerry is a young mountain biker who presents with symptoms of anaphylactic shock related to an infected wound. First year students gather information from careful observation, noticing Jerry's skin colour, posture, etc., and listening to sounds of discomfort. Because the students have limited nursing experience the objective is to make explicit the steps of the clinical reasoning cycle. They record the visual and aural cues in small groups on colour coded Post-it notes. Then processing the information, they identify problems, issues and gaps in their knowledge before making a nursing diagnosis and planning Jerry's care.



Photo 1: Students looking at the hologram that is only visible to headset wearers

HoloPatient Sandra is a 19-year-old experiencing an asthma attack. Students see and hear her struggling to breathe. Based on cues gathered, students are invited to explain their intended nursing actions for Sandra. Clip two shows Sandra's response to students' nursing care. To conclude, the teacher facilitates a group debrief of this learning experience.

We used the HoloHuman app in our first-year Bioscience course, which also allows the user to view a life-sized human body, its anatomical structures and internal organs. Students can explore inside body systems, view organs in close-up detail, and navigate their way around different parts of

the body. Others can view the holographic images and participate through using a classroom projector or streamed images to their laptop/iPad.

The value of using the holographic patient to assist students to develop clinical reasoning skills is that they are safely exposed to learning experiences not replicable outside of clinical or real-world contexts. Also, rather than interacting with a manikin in a simulation laboratory or suite, the patient in the room surprises students with its realism.

From a teacher's perspective, the use of the equipment is straightforward, but having IT support and training is essential as the headsets must be charged and calibrated before each session. Preliminary results and student comments, such as 'the holograms are awesome', suggest that AR has enhanced the learning experiences of our first and second year nurses.



Photo 2: Student interacting with the HoloHuman

Using virtual field trips to support learning how to do Geology in the field

Marlène Villeneuve, Jonathan Davidson, Ben Kennedy, University of Canterbury

It is generally agreed that field work is a fundamental component of geological education. Some of our best memories as geologists are attending field trips, field schools and field camps. Educators carefully design field activities to provide contextual experiences that help students tie together the theory and practical skills they learn in lectures and labs on campus.

At a recent conference Marlène started asking colleagues from Australia, Canada and the USA what they thought about virtual field trips. The response was overwhelmingly negative: 'students must be able to get out into the field!' was the consensus. That is, until she explained to them how we do virtual field trips at the University of Canterbury. Then these same colleagues got very excited and starting asking how they could incorporate this into their tertiary teaching and professional development courses!

So, how do we run virtual field trips at Canterbury? We use them in addition to, in support of, and as complements to live field trips. They have not replaced field experiences, but virtual field trips can allow students to learn about, and practice, field skills at their own pace before we go into the field. For example a 3D model of Te Ahi a Tamatea/Rapaki rock forms the basis for a practice field trip to learn how to do scanline mapping. The ability to navigate the outcrop in 3D results in a more authentic experience than a series of photos (see images).

Some virtual field trips go to other countries where we could never take the students so they can learn about geology elsewhere and link that to what they have learned about New Zealand geology. Additionally, virtual fieldtrips are made available when certain real fieldtrips are not an option, for example for students with disabilities. We can incorporate virtual field trips with scenario and game-based learning that helps students practice their future roles as decision makers and problem solvers.

All of this is done with well-structured and aligned live field trips and we have seen improvement in the students' use of their time in the field, as well as their confidence when faced with a new field environment. The feedback we have received has been positive, but students' expectations must be clearly defined for them to engage with the virtual field trips and understand how they support their learning for live field work.

Come find out more in our session at Talking Teaching and check out our virtual field trips on <http://www.holoceneadventures.com>



Photo: 3D model (left) and drone photo (right) of Te Ahi a Tamatea/Rapaki rock in the Port Hills | Ngā Kōhatu Whakarekareka o Tamatea-pōkai-whenua of Christchurch

Obituary: Gary Bold

John Hosking, University of Auckland

Associate Professor Gary Bold died unexpectedly on 3 July this year. He was a great physicist and one of the country's most influential science educators. He began as a radio physicist, but moved to underwater acoustics, working on underwater sound propagation, including trans-oceanic sound propagation, from which data on ocean temperatures and climate states could be derived.

But perhaps Gary's most remarkable contribution was through his teaching. Thanks to the huge number of students he taught and inspired at Auckland, and his record as a teacher of teachers, Gary is likely one of the most influential physicists to ever work in New Zealand. His teaching was remarkable for both his own classroom practice as a stellar lecturer, a showman honed by his involvement with amateur theatre, a lover of clever demonstrations, quirky results and nifty examples, and as an exemplar for his colleagues.

Many of Gary's key contributions as a leading educator significantly anticipated what is now seen as best practice, from peer reviews of teaching, to delineating expectations for student learning with meticulous clarity, approaching teaching as a skill to be honed over a career in the classroom. His contributions were recognised by a Prime Minister's Supreme Award at the 2004 Tertiary Teaching Excellence Awards.

Gary was a defining presence in the early days of the Academy's Symposium, contributing to both the intellectual debate and the social events. His impact on other Academy members was recognised at the 2009 Symposium, when after a significant number of us in the room realised that we had been taught by him, he was given a special award by the Academy recognising his role in educating a generation of later award winners.

In 2008 Gary put together his thoughts about teaching for his Ako Academy teaching profile. Two of his key pieces of advice were:

- 'You've got to feel passionately about your subject. I'm still entranced by the beauty and simplicity of physics, and it is a privilege to stand in front of a class attempting to pass this on'
- 'You've got to approach your teaching with friendliness, humility and absolute honesty. More, much more is required, but students will also forgive much in those in which they sense at least these attributes, and they will sense them very fast'

One of the most remarkable things about Gary was the fidelity with which he lived up to the values he espoused; the tributes from his former students all recount his passion and enthusiasm for his subject, and his care and concern for his students. Within hours of the news of his passing, dozens of members of our world-wide alumni community had written to express their sorrow and recall the impact he had on their lives.



ACUR: promoting undergraduate research

Eric Pawson, University of Canterbury

The Australasian Council for Undergraduate Research (ACUR) was set up in 2012. It runs an annual undergraduate research conference at which students can give presentations on research that they have completed or which is in progress. It has also organized a Posters in Parliament event in Canberra, in line with the annual 'Posters on the Hill' run by the much older American body, the Council for Undergraduate Research (founded in 1978).

ACUR has a steering group on which most universities in this region are represented, and a small executive. Two members of the Ako Academy are executive members: Rachel Spronken-Smith (University of Otago), the New Zealand representative, and Eric Pawson (University of Canterbury), the newsletter editor. Rachel is also involved with the Council for Undergraduate Research.

I have been to the two most recent ACUR conferences, at the University of Adelaide 2017, and at La Trobe University in Melbourne in 2018. They stand out amongst academic meetings for presenters who are well-organised and enthusiastic, and able to stick to time and a dress code! To see undergraduates at the front of a room, often speaking without notes, about their own work, is to be reminded of some of the reasons why we are in the profession to begin with. They have a lot to teach us.

Undergraduate research is a growing movement worldwide, and the second World Congress on Undergraduate Research is to be held at Carl von Ossietzky University Oldenburg, in Germany in May 2019. It has been highlighted by George Kuh as one of ten 'high impact educational practices' for its effect on student engagement. Emeritus Professor Angela Brew, the chair of ACUR, has described how 'engaging in research is one of the most effective ways to prepare students for the challenges they face as professionals in the twenty-first century workplace'.

We now have a wealth of student voice in the twice-yearly ACUR newsletter (available at www.acur.org.au) to back up this claim. Tyler Philp, of the University of Queensland, says of ACUR 2018 that 'The opportunity to network with such a wide variety of fellow undergraduates was a highlight for me'. Janita Ruhle, of the Central Queensland University, says 'First year at university and I never thought I would end up at a conference in Melbourne showcasing my research!'

Mark Poskitt, then at the University of Canterbury, now of the University of British Columbia, sums up what undergraduate research is about for the student when he says that 'what I will take away most from ACUR 2017 was the amount of fun I had researching for my paper, and the knowledge that there is another way to learn which is strongly at odds with how undergraduate courses are often taught. This provides much stronger motivation than I have ever had for doing something that someone else wants me to do or learn'.

Angela Brew will be at the Talking Teaching symposium in Christchurch later this month. ACUR plans to run another Posters in Parliament in Canberra soon, and is keen to support a parallel event in Wellington. We also want to encourage more institutions to enable their students to benefit from ACUR. As Harry Carey of Macquarie University says of ACUR 2018, 'In talking to this audience, I was forced to communicate neuroscience concepts from a deeper, more intuitive level. ACUR has been an instrumental experience in giving me science communication skills which I will always value'.



Review of the Tertiary Teaching Excellence Awards

Ian Rowe, Regional Manager, Ako Aotearoa Central Hub

On 16 October, the Tertiary Teaching Excellence Review Team met for the second time, in Wellington. Team members had already received four draft TTEA criteria for sub-sectors of the tertiary education spectrum. These were Adult and Community Education, Private Training Establishments, Wananga and the Industry Training Sector.

The driver for commissioning draft criteria for those sub-sectors was to differentiate the hallmarks of excellent teaching from existing TTEA criteria. The review team deemed the existing set of criteria to be too prescriptive as well as heavily focussed on components usually found in university courses and some of the academic programmes at larger polytechnics. As such, they seem to favour those organisations and could have been a factor in the declining number of nominations received from elsewhere in tertiary education.

Phil Ker, Chief Executive of Otago Polytechnic and current chair of the TTEA panel, prepared a second paper received by the review team. It focused on Teaching Excellence Awards for Organisations. The purpose of that award would be to promote teaching excellence by supporting, recognising and celebrating organisations which value and promote excellent teaching and which achieve excellent outcomes for learners.

An outcome of the meeting is that Helen Lomax, the Director of Ako Aotearoa, will convene a small group of Ako staff to advance the recommendations of the review team to the next meeting of the Ako Board. One recommendation will propose a model for the awards that is prescriptively inclusive and which acknowledges sustained excellent teaching across the component parts of our system. Another recommendation will endorse the need for and spell out a process for recognising excellent tertiary education organisations.

News from the Ako Aotearoa regional hubs

SOUTHERN HUB

Neil Andersen, Regional Manager, Southern Hub

The Southern Hub was again well represented at the Tertiary Teaching Excellence Awards, with five of the ten winners in this year's round, maintaining a proud record of success for the region. The awardees are Dr Rebecca Bird, Associate Professor Sheila Skeaff, and Professor Michelle Thompson-Fawcett, all of the University of Otago, Associate Professor Ekant Veer, of the University of Canterbury, with Faumuina Associate Professor Fa'afetai Sopoaga, of the University of Otago, winning not only a General Excellence Award but also an Endorsement Award for Excellence in Supporting Pacific Learners and the Prime Minister's Supreme Award.

I am looking forward to the Academy's 'Talking Teaching Conference' on November 28-30 at the University of Canterbury. The programme provides a wide range of topics from which to select. Congratulations to the organisers of this conference on their work in planning such an interesting conference. In support of the event, the Hub's new administrator, Kate Vernon, will be in touch through our contact database to encourage registrations. Kate is based at the Hub Office at 51 Solway Avenue, Christchurch: (03) 364 2504, kate.vernon@ako.ac.nz

NORTHERN HUB

Ruth Peterson, Regional Manager, Northern Hub

This year's Tertiary Teaching Excellence Awards were again recognised by the Northern Hub with invitations to previous recipients and Hub Advisory Group members to welcome new members of the Academy. In Hamilton, we had lunch with Donella Cobb of the University of Waikato. Sam Honey came from Tauranga to represent the Toi Ohomai Academy members. Donella has taught primary school children across the globe, including in Rwanda, and told us about her involvement with Unicef later this year focusing on the needs of New Zealand children. We discussed a Spotlight on Teaching event for early next year.

The following day we held another lunch, at Old Government House in Auckland. Ksenija Napan and Martin East, along with some members of the Hub Advisory Group, came to welcome the new recipients, Manuka Henare and Christine Woods. Although in the end they could not attend, that didn't stop us from celebrating their success! We had a beautiful lunch and a very rich discussion, particularly about using a variety of formats for presenting great teaching ideas in a Spotlight on Teaching early next year. Watch for an invitation to participate!

Academy Executive

The current Executive has eight members. Feel free to contact them at any time with any matters related to the Academy.



Marc Wilson,
Victoria University of Wellington
President
(marc.wilson@vuw.ac.nz)



Adrian Woodhouse,
Otago Polytechnic
(adrian.woodhouse@op.ac.nz)



Gail Harrison,
Whanganui Learning Centre
(gail.wlct@gmail.com)



Marie McEntee,
University of Auckland
Vice-president
(m.mcentee@auckland.ac.nz)



Bradley Hurren,
University of Otago
(bradley.hurren@otago.ac.nz)



Charles Fleischmann,
University of Canterbury
(charles.fleischmann@canterbury.ac.nz)



Selene Mize,
University of Otago
(selene.mize@otago.ac.nz)



James Oldfield,
Unitec Institute of Technology
(goldfield@unitec.ac.nz)



Warwick Murray, Victoria University of Wellington, resigned from the Executive in October 2018. Warwick served for two years. The remainder of the Executive would like to thank him for his valuable contribution to the Academy in that time.

Limelight Contacts

Limelight Editor

Eric Pawson, University of Canterbury
eric.pawson@canterbury.ac.nz

Limelight Administrator

Amy Patté
amy@flowevents.co.nz

