

Celebrating 25 years of Tuākana in Science



THE UNIVERSITY OF
AUCKLAND
Te Whare Wānanga o Tāmaki Makaurau
NEW ZEALAND

SCIENCE



Contents

Foreword – Michael Steedman	Page 4
Tuākana in Science - a combination of parts	Page 5-7

Departmental snapshots

Each of our schools and departments have had their own unique journey toward becoming a part of the Tuākana in Science programme. This section will provide a brief snapshot as to what their journey has been, and introduce you to some of our esteemed alumni doing great things out in their community.

Sport and Exercise Science	Page 7
Biological sciences	Page 8-9
Chemistry	Page 10-11
Computer Science	Page 12-13
Environment	Page 14-15
Mathematics	Page 16-17
Physics	Page 18-19
Psychology	Page 20-21
Statistics	Page 22-23



Foreword – Michael Steedman

In 1997 while in the middle of my third attempt at passing Central Concepts of Biology 101, I was doing some lab work when someone came up behind me and tapped me on the shoulder.

I turned around and it was then that I met Professor Mike Walker for the first time. He let me know about some extra tutorials he was holding and wanted to know if I'd be interested in going along. Given that I had been struggling to get through this paper and needed it to complete my degree (as well as the fact that an academic had approached me personally) I decided to give it a go and attend.

It's worth noting that this was something quite out of character for me back in those days, when I had actively tried to avoid "standing out" or "getting involved" in extra activities during my time at Uni.

But, I was pleased I did as that additional support played a big role in helping me to pocket a B+ in BIOSCI 101 – a paper I'd struggled through twice before. I went on to get capped, and came out of Uni feeling pretty good about things, and banked that experience as a life changing moment.

This was my first exposure to the Tuākana programme as a student and I now have the privilege of working alongside its many members and forms within and external to this Faculty.

In a sense some of the work of Tuākana was already occurring in different ways here but there has been great value in amalgamating those approaches under the umbrella of Tuākana in Science as a way of creating a recognisable entity that Māori and Pacific Island students can see as being one of support and academic success.

Tuākana in Science is a gateway for our students to connect with a familiar community in an unfamiliar place for many and to ascend to the heights that we know they are capable of.

The Kaiārahi role which I currently occupy was established in 2010 following discussions between Dick Bellamy, Mike Walker and then Grant Guilford when he arrived as Dean of the Faculty. Its core aim is to lead the Faculty's Māori and Pacific strategy. Once it was established a Māori and Pacific Governance group was also formed to support the position along with important advocacy from people such as Alan Lee, Margaret Goldstone, Hana Mata'u, Linda Thompson and Departmental heads to name a few.

A more recent addition was that of our Māori and Pacific Pastoral care coordinator, Lynn Su'a, which added another contact layer of support as our students arrived through the front door of the Faculty.

Lastly, the other key people of course are the Tuākana in Science community. Their tireless work and commitment to the programme is beyond inspirational and has supported students into the thousands over the past 25 years. This book is a short glimpse into their stories which they can tell themselves. It is and has been an honour to be working and learning alongside these spectacular people.

Nga mihi,

Michael Steedman
Kaiārahi





Tuākana in Science - a combination of parts

The Tuākana programme has not always been the centrally supported programme that we know and see today. Instead, it is the result of many stories and initiatives that have been weaved together by passionate individuals who recognised the need to ensure our Māori and Pacific Island students felt a sense of 'belonging' and place here at the University.

Discussions around this, along with ways to better attract and retain Māori and Pacific Island students into the Sciences, started to gain ground in the Faculty in the early 1990's. Led by Professor Michael Walker in the School of Biological Sciences, support initiatives were developed and the early stages of the Tuākana programme started to take shape.

The result was a number of school and departmentally run initiatives being established throughout the 1990's, that offered support specific to the unique curriculum needs and learning styles of their academic programmes. These programmes, though independently run, were unified by the desire to foster a sense of

community that engaged our Māori and Pacific Island students and helped them to realize their potential and ability to succeed.

25 years later, Tuākana has evolved into a university-wide initiative, that provides support to thousands of Māori and Pacific Island students each year. It is through the collective effort of many inspirational staff and students that we see the strong, cohesive programme that is in place today.

In the Faculty of Science, while all departments and schools come under the collective umbrella of the 'Tuākana in Science Programme', they still remain largely independent and in control of how their own programme is run. They are unified in that the key objective is the delivery of content in tutorials and revision sessions across the semester – but how they do that is dependent on the needs and demands of the students that they deal with. Social occasions and an engagement strategy also form an important part of the programme, providing students with the opportunity to make connections early on in their programme of study

– something that has proven to help motivate and retain our Māori and Pacific students.

The programme is also bulk funded by TECEP funding which is managed centrally by the Equity office. Each year, our schools and departments must apply for funding to deliver their own programme that has been adapted to meet the needs of the students in their curriculum area. The programmes generally are led by one or two coordinators, usually with the oversight of a senior departmental staff member who has time allocated in their job description to support of the programme.

The tutors are usually senior students, mostly Māori and/or Pacific Islander, who exemplar the type of necessary approach needed to be successful at university. They are normally former recipients of the programme themselves, and are given the opportunity to play a leadership role and help younger students adapt to University.

So, as you can see, the programme we use today is the result of many contributors over the past 25 years. It is still developing, as we continue to develop ways of connecting with and delivering a positive education experience for new Māori and Pacific island students coming into this faculty. From Mike Walker who introduced the moniker of Tuākana which has now largely been adopted by the other university programmes, to a myriad of current and former staff who had a role in the wider development of support programmes in the faculty such as John Craig, Mere Roberts, Fiona Cram, Margaret Goldstone, Mel Wall, Lyndsay Blue, Bill Barton, Sina Greenwood, Pat Riddle, Clark Thomborson, Shane Wright, Ross Ihaka, Max Jones, Erana Cooper, Jason Turuwhenua, Dick Bellamy, Alan Lee, Grant Guilford to name a few.

This book is an acknowledgement to them, as well as the many unnamed individuals who are committed to student success here in the Faculty and the principle of manaakitanga embedded in the Tuākana in Science.

Thank you for being a part of this celebration with us.



Sport and Exercise Science

The 'teina' of the Tuākana in Science programme

The Department of Sport and Exercise Science has a nascent Tuākana programme in place with a dedicated Tuākana Mentor to support 'teina' in their first year. This was borne out of the need to establish a support system that models the Tuākana in Science programme.

However, one of the major challenges that prevents the SES Tuākana programme from expanding to a well-established formal programme (with multiple student mentors/tutors and a dedicated space) is the relatively small number of new enrolments they receive each year. Of the annual 40-60 new enrolments, typically only 10-15 of those are Māori and Pacific Island students. An additional challenge is that the Department (and senior students) are based at Tamaki campus, while the majority of Stage One classes are conducted in the City and Grafton campuses.

As an alternative to student mentors and tutors, Professional Teaching Fellow (and Undergraduate Coordinator) Waruna Weerasekera has been acting as both an academic and pastoral support person for Māori and Pacific Island students, with some fairly good results so far.

Waruna has made himself available to Māori and Pacific Island students for academic support, by running regular drop in sessions and Tuākana tutorials for core first year papers (e.g. MEDSCI 142 and BIOSCI107). These sessions are very informal, and are not only an opportunity for Māori and Pacific Island students to ask questions about their courses, but to also come together and form friendships – a very important part of the Tuākana in Science programme.

As the key contact for pastoral support in the department, Waruna is also already the person that first year students (including Māori and Pacific Island students) come to when they are struggling and would like to seek some advice.

While these early steps to implement a Tuākana programme are unique to the department, there is also an important commonality with how our more established schools and departments first become involved in the Tuākana in Science programme – that is, following a path that meets the unique requirements of the students studying in their programme.

The Department of Sport and Exercise Science are in many ways 'teina' of the current Tuākana in Science programme, and it will be an interesting and exciting journey to see how their programme develops over time.



School of Biological Sciences

Where it all began

In 1991, Professor Michael Walker pulled together a class of undergraduate Māori and Pacific Island students, took them to the recently opened University Marae, and put the question to them – what was it that they felt they needed in order to stay at University and feel like they could succeed?

This was in response to the poor representation of Māori and Pacific Island students studying the sciences at the time, along with the poor retention rate of those students who did manage to step through the University gate at the start of semester.

The general consensus among these students was that they did not see the University as having a place for them – they felt they were coming to a city of strangers where they were different and did not belong. These observations were an important revelation from which the very early foundations of the Tuākana programme were built – with the goal of providing Māori and Pacific Island students with a sense of community and belonging within the University setting.

And the resulting actions from this initial conversation spoke for themselves. By bringing Māori and Pacific students together and enabling them to ‘see’ that they weren’t alone (and connecting them with students one or two years ahead of them for support), it wasn’t long before staff noticed these once ‘silent’ students were now starting to talk about what they were studying, and were beginning to enjoy being students.

Since then, the Tuākana programme has grown substantially, and now plays a key role for many Māori and Pacific Island students in the School of Biological Sciences (and beyond).

Today, the programme provides support to students from a range of cultural (and generational) backgrounds. It also recognizes that communal learning is an important part of Māori and Pacific Island culture– and so it remains open

to students from other cultural backgrounds who feel they would benefit in this environment.

Tutors are normally not long out of completing stage I courses themselves – ensuring that the content and experience of taking the course is still relatively fresh in their minds when they teach. Seven Stage I courses are supported by the programme, where students have access to one tutorial a week, and ongoing support throughout the semester.

Stage II and Stage III students are also supported, but rather than attending course specific tutorials, students are encouraged to engage in study groups where they can help each other to understand key concepts, while also continuing the friendships they formed in their first year.

Social events are planned to bring students together regularly – starting with a mixer at the start of each semester so that students can meet and make friends quickly, which is important in ensuring we retain Māori and Pacific Island students past the first semester.

For more information on how the School of Biological Sciences has evolved their programme, please visit:

www.science.auckland.ac.nz/Tuākana-stories





Spotlight on Melanie Cheung, a graduate from the School of Biological Sciences

"I am a Senior Research Fellow at Centre for Brain Research here at the University of Auckland, and am currently working as the Principal Investigator for the FightHD project. I work with Mike Merzenich, a pioneer in neuroplasticity, and his San Francisco-based team of neuroscientists and computer engineers developing a novel brain plasticity-based training programme for Māori with Huntington's disease. Turns out that with computer programming, the job is never finished! So our team are continually testing and improving the programme. We are also working with Māori communities to test its effectiveness.

"I manage a team of New Zealand-based scientists and clinicians to test the efficacy of this Huntington's disease treatment. We measure hundreds of biological, magnetic resonance imaging, cognitive and psychiatric markers in our participants from 8 large Māori Huntington's disease families from all over New Zealand (neuroplasticity-based vs cognitive training) and ensure that they are well cared for. Most of my team are world class scientists and clinicians who are much more senior than me. So my biggest challenge is keeping everyone motivated and on task. Emma Lambert who worked with me in SBS Tuākana is our project coordinator. Similarly, another SBS Tuākana alumnus Dr Kimiora Henare supports many of our research activities.

"As a student, the Tuākana programme marked a turning point in my life. I was 24, I had returned to university 4 years after being kicked out for failing all my papers two consecutive years in a row, my life was a mess, so I wasn't exactly a prime candidate to become a tutor. But Mike did ask me to be a Tuākana tutor. It's amazing what a person can achieve when somebody believes in them. It turned out that I love to teach. I found new purpose. I started to work harder in my studies because I didn't want to let my students or Mike down.

I think teaching in Tuākana tutorials really reinforced my identity as a Ngāti Rangitihi woman. For the first time at university, I felt like I belonged. I had finally found my university whānau!"

To read more about Dr Melanie Cheung's journey (including how she used waiata to inspire her students) please visit www.science.auckland.ac.nz/Tuākana-alumni

School of Chemical Sciences

A brief snapshot and acknowledgement of some of the key influencers over the past 25 years

The Chemistry Tuākana programme is one of the longer serving programmes in the Faculty of Science. It was originally established in 1991 by then student Dr Robyn Manuel and Paul Papa with support from Duncan McLennan.

The programme established the provision of tutorials for Māori and Pasifika Chemistry students, emphasising tikanga Māori, culturally safe learning environments and teaching/learning practices that used tuākana/teina relationships, music, drama and real life experiences.

Robyn led this programme between 1991-1996, and since then there have been a number of key staff who have played their part in shaping the programme into what it is today – among them are Judy Brittain, Malini Arewgoda and David Salter.

The programme has enjoyed the support of many student contributors but of particular significance is Joe Peni, who had responsibility for running the day-to-day operations with a focus on student engagement. These duties are now being carried out by Tulele Masoe, a recent graduate. The peer example led by these two and the other student leaders in Chemistry makes for a vibrant environment, where our Māori and Pacific students are part of a passionate and friendly community.





Spotlight on Joseph Peni, a key contributor to the Tuākana in Science programme for over eight years

“I work part-time as a qualified phlebotomist at Labtests in Mangere, where I carry out a variety of investigations as required by GP’s for their patients – from blood samples to urine and faeces samples, and skin scrapings to sputum samples”

“I also continue to work part-time as a Tuākana tutor for Chemistry and Maths at the University – a role that I am particularly passionate about, and alongside my phlebotomist role enables me to encounter different work environments on a daily basis”

“I first became a Tuākana tutor during the second year of my degree, for the core maths paper MATHS108. I continued in this role for eight years, and in 2011 I joined the Tuākana team in Chemical Sciences as both a tutor and a lab supervisor for stage one Chemistry courses.

“My favourite part of being a tutor has been the fact that I can help my younger Māori and Pacific Island peers, and help them to understand key concepts that they at first found difficult. I get great satisfaction when I see a student walk out the door, with a better understanding of maths or chemistry than what they had when they arrived. It’s also been a great privilege to cross paths with some incredible lecturers and tutors in both maths and chemistry, who have given me the opportunity to not only broaden my knowledge but give back in some ways to my community”

“As a student, I also used the Tuākana room a lot – I found it was a great environment to both study in, and make new friendships. I also really enjoyed going along as a student to tutorials – because it was a fun, and relaxed environment that I was comfortable to ask for help in”

Joseph Peni graduated with a Bachelor of Science in Chemistry and Applied Mathematics in 2008.

Department of Computer Science

Offering both academic and pastoral support, and scholarship opportunities to their students

The Department of Computer Science runs their Tuākana programme based on a model inherited from the Department of Mathematics – where a Coordinator (who is an academic within the Department) oversees a group of tutors, mentors and liaisons who deliver the programme to the students.

The programme offers dedicated tutorials for first year computer science courses, with a strong focus on COMPSCI 101 and COMPSCI 105, as these are the ‘first hurdles’ that most Computer Science students need to pass in order to progress through their studies – however support is also provided for COMPSCI 107 and most recently COMPSCI 230. Tutors and mentors are also available to assist with queries relating to other courses as well.

Similar to other schools and departments, Computer Science focuses not only on academic assistance, but also on providing students with opportunities to meet and make new friends. Social events are organised, and a student-led

Facebook Group was set up this year to allow students to ask questions, arrange study groups and interact with one another outside of university.

As an additional layer of support, a Tuākana Bursary Fund was established in 2002, with financial support from the Department of Computer Science and the Vision Mātauranga programme of the Ministry of Research, Science and Technology (now MBIE). In the first awards ceremony, seventeen Maori and Pāsifika students received a total of \$3950.

When the governmental grant finished in 2007, the Department made the decision to continue the bursary. Originally the selection was handled by the Department, however since 2010 it has been managed through the Scholarships Office. The Department’s Maori and Pacific Island Coordinator sits on the selection committee.

For more a detailed look at the Computer Science Tuākana programme, please visit:

www.science.auckland.ac.nz/Tuākana-stories





Spotlight on Computer Science graduate, Kisina Finau

"I am currently the Technology and Systems Administrator for the Accommodation Services department at the University of Auckland. In my role, I am responsible for maintaining and developing the StarRez database, which involves reviewing processes, investigating potential enhancements, and making recommendations based on what I find. In my role I work closely with the University IT Services team, as well as third party vendors and the Hall of Residences.

"Prior to this, I worked as an analyst programmer for the IT development company Agility CIS Limited, and then moved into running my own IT systems repair and support business where I was contracted as a System Administrator for Pasifika Technology Ltd."

"As a student, I was involved in the Tuākana programme both as a teina and as a mentor. The highlight for me was meeting fellow Māori and Pasifika students who shared my interest in Computer Science, and some are still great friends today. As a mentor, it was also a huge privilege to be in position where I could offer support to those students who struggled with asking for help due to their cultural upbringing and influences– but with my experience, I was able to be a go-to person for them."

Kisina Finau graduated with a Bachelor of Science in Computer Science in 2013

School of Environment

Looking back to understand the present

The School of Environment was formed through mergers of Geography and Environmental Science in 2002, and Geology in 2006, weaving together different strands of support for Māori and Pacific students that had emerged in the former departments. The roots of the Environment Tuākana Programme extend back to the early 1990s, paralleling activities elsewhere in the University. Initial proponents in Geography included Margaret Goldstone, Mel Wall, Steve Britton, and Lyndsay Blue. Support tutorials for first year students were the primary focus, conducted by staff and senior students. These early steps paved the way for and influenced subsequent efforts to enhance the academic performance of Māori and Pacific students.

In 2000, Geography established a dedicated Māori and Pacific student space (Te Pūnanga Huihuinga Wānanga) and committed to annually appoint two post-graduate students as Kaiāwhina and Pasifika Advisor, to assist students across all years and help foster their sense of community. From 2003 Geography and Geology, led by Lyndsay Blue and Dan Hikuroa respectively, expanded their activities under the auspices of the University Tuākana Programme Network.

Following formation of the School of Environment, the Geography and Geology Tuākana programmes were integrated, providing assistance to Māori and Pacific students across the School's disciplines. The Environment Tuākana Programme initially emphasised mentoring, 'drop-in' academic assistance, and social activities for stage 1 students, but soon developed a stronger academic focus and gradually included stage 2 students. Targeted academic and pastoral guidance is offered to all stage 1 and 2 Māori and Pacific students through course-specific, weekly study groups run by high-achieving students employed as tuākana. The Programme now supports 23 courses: 11 stage 1 and 12 stage 2.

The Environment Tuākana Programme aims to provide a friendly, supportive and inspiring learning environment. It takes an integrated approach to developing participants' skills, knowledge and confidence to help them reach their full academic potential. It cultivates networking among students at all levels, as well as alumni, and provides a platform for scholarship and employment advice. In 2012 the Environment Tuākana team was awarded a University of Auckland Equity Award for 'Sustained Commitment to Excellence in Equity'.

From 2003 to 2015, 88 Māori and Pacific students were employed as tuākana, several becoming Programme coordinators. Many have completed post-graduate study, including PhDs, and are pursuing a variety of careers in a range of locations as members of a global Environment Tuākana diaspora.

To find a more detailed overview of the Tuākana programme in Environment please visit www.science.auckland.ac.nz/Tuākana-stories





Spotlight on Dr Daniel Hikuroa, a graduate from the Department of Geology.

"I am currently the Research Director for Ngā Pae o te Māramatanga (NPM) – New Zealand's Māori National Centre of Research Excellence (www.maramatanga.ac.nz), and have been since mid-2011. My key responsibility is implementing the NPM Research Strategy."

"I am also involved in a number of community roles, including ; hāpu representative member on both the Waitomo Caves Management Committee and Waitomo Caves Environmental Advisory Group; independent scientific advisor for Ngāti Makino and on the Science Advisory Panel for the 'SouthSci' Participatory Science Platform project. I also serve on the Advisory Board for the International Science in Society Journal and corresponding conference."

"As a student, I was involved with the Tuākana programme both as a teina and as a mentor. Back then (in Geology), the programme was run on an 'aroha' basis, where Stage four students would mentor and provide practical tutorial type assistance to the Stage three students; Stage three students would mentor and provide practical tutorial type assistance to the Stage two students, and so on."

"One of the benefits of this approach was that the students who had most recently sat the tests and written the assignments were best placed to assist."

"We never had large numbers of Māori in Geology, so another benefit was that it encouraged a real whanau atmosphere."

"While it is impossible for me to quantify whether my involvement in the Tuākana programme has contributed to my career trajectory, I can definitely say that it assisted me in achieving my degree, and some of the skills I learnt as a Tuākana I continue to use today."

For a more detailed look at Dr Hikuroa's journey since graduating, please visit www.science.auckland.ac.nz/Tuākana-alumni

Dr Daniel Hikuroa graduated with a Bachelor of Science in Geology in 1996; a Postgraduate Diploma in Science in 1999; and a PhD in Geology in 2004

Department of Mathematics

Facing the ongoing challenge of a transient student cohort.

The Tuākana Programme in the Department of Mathematics faces the challenge of having a transient student cohort, whereby many first year students are only in the department to take one or two papers that are required as part of another academic programme outside of science.

This makes it especially difficult for the department to create a sense of community for their Māori and Pacific students, when the students themselves don't necessarily feel connected to the subject of maths. This is a challenge that the department is still working to solve, however there have been a number of positive changes and developments since 2001 that have shaped the Tuākana Maths Programme that we see today.

In the early years, the programme was based on a mentoring model where all new Māori and Pasifika students were assigned a mentor, and each mentor was assigned 10 first year students. Mentors then provided ongoing pastoral support as well as some academic tuition to their students as required throughout their first year of study.

Over time however, it became clear that what students really wanted was academic tuition to help them get through a subject that is generally seen by non-maths majoring students as being quite difficult.

So, the programme switched to a more tutoring focused model (developed over time based on feedback from students as well as regular monitoring of participation.)

Today, the programme offers two three-hour tutoring sessions each week (with pizza provided every Wednesday), and tutors (often second or third year students) being assigned to specific courses which they are responsible for. All undergraduate maths papers are covered in the

programme to ensure that all skills levels in maths are catered to – and one on one tutoring is also offered.

To facilitate social engagement between students, social gatherings are regularly arranged. The CoMPaSS event at the start of the year which brings together students from Computer Science, Maths, Physics and Statistics, is a great place for students to see that their Māori and Pacific peers are involved in a broad range of science programmes, while also getting enrolment advice about which courses to take – and regular social lunches are held to enable students to come together in an informal setting throughout the duration of their courses.

As Maths is a subject that is often perceived as being 'difficult', the programme tries to celebrate achievement and involvement by awarding all students in the programme who receive an A grade in their maths papers with a \$50 book voucher.

While it is not yet clear the impact that these awards are having, the general feel is that they have helped encourage students to work harder, and build a more feel good understanding around the programme.

For a more detailed view of how the Tuākana in Maths programme is run, please visit

www.science.auckland.ac.nz/Tuākana-stories





Introducing Sina Greenwood, Senior Lecturer in the Maths Department.

Sina taught secondary school maths for four years, before returning to the university to complete an MSc and then a PhD, which she received in 1999.

Around that time, Sina became aware that Pasifika students were underrepresented and not passing at the same rate as other students in mathematics, and so became determined to do something about it. She began by trying to bring students together over morning tea, and also became involved in a committee that set up the first room dedicated to Maori and Pasifika mathematics students.

In 2000, she developed a mentoring programme that was launched in 2001 with SSG funding, and also set up the ALDIS scholarship programme which ran for the first time in the summer of 2001.

Sina has continued to be involved in the development and trialling of many initiatives over this time, and has kept up with research and with other programmes as they were introduced. All the while, Sina and others involved in the programme have monitored student participation and feedback, and analysed results. In this way the programme has grown and evolved into the Maths Tuākana programme we see today.

To read more about Sina and her advice for undergraduate students, visit **www.science.auckland.ac.nz/Tuākana-alumni**

Department of Physics

A present day overview

The Department of Physics Tuākana programme is primarily targeted toward first year Māori and Pacific students, with the aim of encouraging them to develop personal and work strategies in order to increase their achievement levels at university.

At the start of each semester, all Physics Tuākana students are invited to a special meet and greet event, where they get to mix and mingle with their fellow students along with tutors and lecturers within the Department. The goal of this initial event is to introduce students to each other so that they can form social connections early on, and so that they can see academics in a more informal setting in order to make the academic environment feel less intimidating.

Throughout each semester, students are invited to a number of social gatherings with both their peers and tutors to ensure their connections within the department continue to grow. They are also offered academic support in a number of ways, including:

Tuākana Tutorial/Drop in sessions;

Students are invited to weekly tutorial and drop in sessions in the late afternoon – timed specifically so that they don't clash with lecture times. The goal of these sessions is to help students work through and complete their assignment work before heading home, as many of our students live in large families where finding a quiet study space can be difficult.

There are also some drop in sessions in the early morning, to cater to those who have commitments in the evening.

Course materials

Most Physics course materials are available online, but to ensure students have access to all essential resources for their courses, there are multiple copies of our textbooks in the Physics Tuākana library.

Exam preparation and special course tutorials

The department organise special course tutorials close to key assessment and exam times, along with exam preparation tutorials to help students best prepare for their tests and exams.

Physics Tuākana Social Media

The department also utilize social media (for example, the Physics Tuākana Facebook page) in order to keep students up to date with key information and support events, and to enable students to connect with each other outside of social gatherings. It's also a great tool for students to connect with tutors and ask questions at any time using a medium familiar to them.

For more on how the Tuākana in Physics programme is run, please visit

www.science.auckland.ac.nz/Tuākana-stories





Spotlight on Physics graduate, Jason Turuwhenua

"I graduated with PhD in 2002 in Physics, looking at light transport in the eye, after having done a BSc and MSc at Waikato.

After my PhD I started working as a lecturer in the Science Faculty, where I had oversight of the Tuākana programme. Following that I took an appointment as a Research Fellow in the Auckland Bioengineering Institute, as well as teaching optics in the School of Optometry and Vision Science

I've always been interested in "building" things and my current work as a researcher looks at how new technologies and engineering methods can be applied to benefit people with vision problems in particular. This means that a lot of my work has a very broad applied focus, which may combine (on any one day) creating measuring equipment, working with data as well as testing out ideas with real people..

During my time in the Tuākana programme, I had oversight of the programme. The most enjoyable aspect of that was working with and getting to know a diverse range of students and staff across the science faculty.

If I were to give any advice to new students coming through it would be:

- 1) Do what you love.
- 2) Balance your time at University - i.e. work hard, but enjoy yourself.
- 3) Please don't be shy, ask questions of your lecturers, and make use of support available to you.

University is a fantastic place for an inquisitive mind, so make the most of it."

School of Psychology

Creative ways to support Māori and Pasifika students today

The Tuākana programme has been running in the School of Psychology since 2002, and has grown into a team now consisting of two coordinators, one Stage I Revision Tutor, four Stage I mentors, one Stage II mentor, one Stage 3 mentor, and the Māori and Pacific Psychology Research Group Coordinator (MPPRG).

A key part of the programme is supporting students as they progress through their study. Mentors stay in weekly email contact with their teina (younger students), and provide regular one on one support for those needing help with assignments, exam preparation and lab reports. Working with the rest of the team, they also provide support in other ways including:

- Organising regular panel sessions where undergraduate students can hear from current postgraduate students about postgraduate study,
- Drop in sessions for students applying for summer internships and scholarships to get advice and help with their application
- Support for undergraduate students who need to attend disciplinary meetings within the Faculty
- Assistance for undergraduate students wishing to submit an application to postgraduate study

The School of Psychology also has dedicated spaces set up for Tuākana students to utilize, including two rooms with computer access and free printing (as well as kitchen essentials), and two small libraries that hold key text books for both undergraduate and postgraduate level courses. These spaces provide a safe space for Māori and Pacific Island students to study in, and access to key resources that ensure they can successfully engage in their courses.

As social relationships are an important aspect of the Tuākana programme, the School of Psychology also hosts a “Welcome kai” each semester which introduces students to mentors and key academic staff, and an “End of Semester Kai” to celebrate the successful completion of a semester for our ‘teina’, and to thank the key staff involved in the programme. There is also a quiz night each semester with Tuākana branded items as prizes – which has proven to be a very popular event.

On top of the academic and mentoring services the team provide, there is also a Māori and Pacific Psychology Research Group that meets twice a semester. This group provides students/teina with the opportunity to present their research and get feedback from the group. Past students are often invited as keynote speakers, and at times these events double as a celebration for newly awarded PhDs.

For more information about the Tuākana programme in Psychology please visit www.science.auckland.ac.nz/Tuākana-stories

For more on how the Tuākana in change to psychology programme is run, please visit [**www.science.auckland.ac.nz/Tuākana-stories**](http://www.science.auckland.ac.nz/Tuākana-stories)





Spotlight on Psychology graduate, Pikihuia Pomare.

"I am currently working as a Clinical Psychologist for the Waitemata District Health Board (DHB), with Whitiki Maurea Māori Adult Mental Health and Addictions Service.

I work alongside a team of nurses, social workers, psychiatrists and taurawhiri (cultural advisors) in order to support adults facing mental health difficulties. My role involves doing psychological assessments, cognitive assessments and talk therapy with tangata whaiora in our service. A key strength of the service is that we have 10 Taurawhiri (cultural advisors) and a Kaumātua and Kuia. We also run Hōtaka Hauora Groups based at the marae, so tangata whaiora get to experience whanaungatanga and to connect with others in a Māori environment.

They also learn skills and positive coping strategies to alleviate their mental health difficulties from within our own Māori paradigms of health."

"As a student, I was one of the original intake of mentees into the Tuākana programme in Psychology and subsequently became a mentor. During my honours year I co-coordinated the programme with the amazing Dr Erana Cooper. In 2006 she left to complete her PhD so I took over as the coordinator."

"One of the best things about the Psychology Tuākana programme was our room in HSB Kōhanga. It was our haven/ safe space where we would debate hot political topics, share notes on our lab assignments, print out lecture slides, warm up our noodles and have hot cups of milo. It was such a wonderful place to discuss our whakaaro (thoughts) on psychology while we were completing our studies."

Pikihuia graduated with a BA in Psychology and Māori Studies, an BA(Hons) in Psychology, and will gain her Doctorate of Clinical Psychology in Spring 2015.

For a more detailed look at what Pikihuia's journey has been, please visit www.science.auckland.ac.nz/Tuākana-alumni

Statistics Tuākana Programme

Capturing students early is the key to success

The Statistics Tuākana Programme has developed into the well-established learning community that it is today thanks to the continued dedication and expertise of key individuals – particularly Susan Wingfield (Ngāti Porou, Ngāti Maniapoto) who has been the Coordinator since 2004, and Dr Heti Afimeimounga (Ha'atafu Tongatapu) who has also been involved with the programme for several years.

While the programme provides some support at stage 2 and 3, the primary focus is on the Department's core stage one paper: STATS 101/108 - Introduction to Statistics. This paper is a requirement for various degree programmes and subject majors. Large numbers of students enrol in this paper each year, many who either have a limited background in Statistics or who are not necessarily passionate about it as a subject.

Consequently, many of our Māori and Pacific students tend to find this paper rather daunting. So it's important to capture these students and get them connected into the Statistics Tuākana Programme as early as possible.

This is where the Tuākana CoMPaSS orientation has made a significant impact. This event is run in conjunction with the Maths, Physics and Computer Science and provides the perfect opportunity for our students (and their whānau) to come together at the start of the semester to connect with other Māori and Pacific students, as well as key support people from the Department and the Faculty.

Those students who choose to be involved with the programme can reap the benefits of the following support activities:

Tutorials – these teaching sessions are led by Susan and Heti. Students are encouraged to work together in groups. Discussion and visual methods are often used to gain understanding of course content.

Test & exam preparation workshops – these are also led by Susan and Heti and follow the exact same teaching style as the tutorials. Lunch is provided, which is something that always goes down well.

One-to-one/small group assistance – individual students or groups of students can arrange a time to receive assistance or support with specific aspects of the paper.

Drop-in sessions – mentors are available to offer peer support with the paper. The mentors are usually senior Māori and Pacific students who were highly successful in the course and who were also involved with the programme. These students make excellent role models for others who are coming through.

Connecting into the Statistics Tuākana Programme early also provides students with an ongoing social and cultural connection – a sense of 'belonging' in a place which can often feel very alienating.

For more information about the Tuākana Programme in Statistics please visit www.science.auckland.ac.nz/Tuākana-stories





Spotlight on Statistics and Computer Science graduate, Richard Hopkins.

"After completing my Honours degree in Statistics at the University of Auckland, I was offered a role at IAG as a Pricing Analyst – a job that I was able to secure thanks to my science degree. When I first started working at IAG, my employer told me that "it's easier to teach business than to teach analytical skills. Your analytical skills are impressive, that is why we hired you".

"As a Pricing Analyst, I use statistical modelling to determine fair premium prices. This ensures that there is both enough money to pay for claims and that the company is making a profit.

"What I really enjoy about this job is the fact that there is something new to do every day. I also enjoy the people; it feels like we all belong to one big family. The hardest part about my job is knowing where to go to find the data that you need. There is a ton of data and it is stored in lots of different tables.

"Outside of work, I am still heavily involved in the church as a youth leader, which involves teaching at Sunday School, and running weekly activities.

"During my time at the University, I was involved in the Tuākana programme as both a mentor and mentee – but the highlight for me was definitely working as a mentor. I really enjoy helping people achieve their goals, and being a mentor gave me the opportunity to meet and help a lot of awesome people"

Richard Hopkins graduated with a Bachelor of Science in Statistics and Computer Science in 2012, and a Bachelor of Science (Hons) in Statistics in 2013.

For a more detailed look at what Richard's journey has been, please visit www.science.auckland.ac.nz/Tuākana-alumni

