

THE INSIDE STORY

Issue 43, May 2021



Welcome back Graduation, we missed you!

Graduation made a welcome return to the Otago campus when the University hosted four graduation ceremonies in May. They were the first formal University graduations to be held in the city in 16 months after Covid alert level restrictions postponed the May and August 2020 graduations and a threat of serious harm forced the postponement of all December 2020 graduations.

But 2021 is a new and hopefully improved year, and the Department of Anatomy was delighted to hold a celebratory function to acknowledge its students and all they have achieved in their studies in the department.

Students graduated in programme degrees ranging from undergraduate Bachelor of Science and Bachelor of Biomedical Science through to postgraduate Bachelor of Science with Honours, Diploma for Graduates, Masters of Science and Doctorate of Philosophy.

While some were unable to attend the department's celebrations, a happy group of graduands and staff assembled on the steps of the Lindo Ferguson Building, in the balmy Dunedin sunshine(!), to mark the occasion.

We wish our graduands every success for the next exciting steps in their careers. A full list of our graduands can be found on page 2.

From the HoDs desk



Prof Lisa Matisoo-Smith

Kia ora tātou!

How can it be that we are already nearly in June? And what a year it has been already. As always, we share our joys and celebrations as well as our challenges and sorrows, and this is one of the things that makes this Department such a joy to be in. This newsletter is surely a demonstration of that. I would like to thank you all for being part of this wonderful Anatomy family and helping each other and our students get through a series of events in the last year that we will never forget. As our whakatauki from the Thursday morning tea on May the 6th reminds us: **Anei tātou nā ko te pō, anā tātou nā he rā ki tua**, or Here we are in the night, but day is on the way. (There is light at the end of the tunnel.)

I would like to offer my own personal congratulations to the following people who graduated in May with their degree through the Department of Anatomy.

Kia kaha, Lisa

BSc in Anatomy

Angelica Clarke, Rosie Elliott, Rees Guise, Liana Hall, Amy Hunter, Connor Kennedy, Lai Wa Ma, Emily Nicholson-Sell, Mahboobah Rahimi, Amy Robinson, Shaun Rooney, Gerson Santamaria Guerrero, Laura Simpson, Daniel Staka, Jorae Takai, Analitta Tolai-Faumatu

BBiomedSc in Reproduction, Genomics and Development

Finlay Reese, Laura Wilkinson, Sarah Woods

BSc(Hons) in Anatomy

Edward Moody

BSc(Hons) in Neuroscience

Emma Bultitude, Sophie Cawood, Nikyta Chesney, Paul Cromb, Chanel Sullivan

DipGrad in Anatomy

Mirjana Moffat

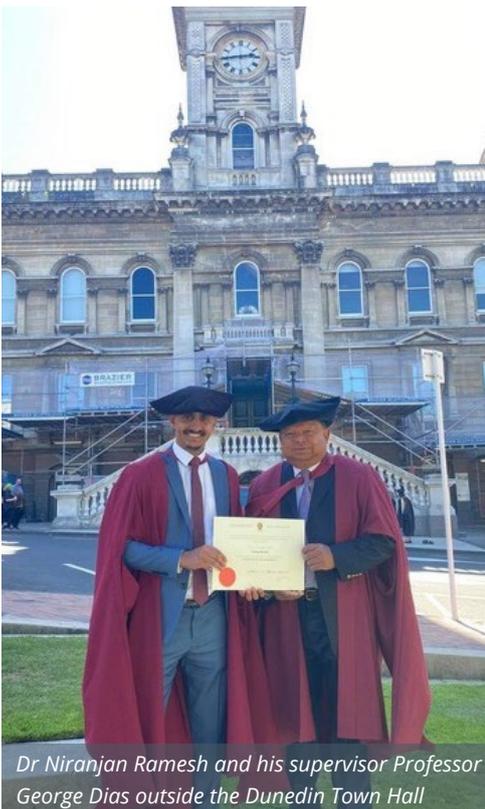
MSc in Anatomy

Lewis Forrester, Asha Mamgain

PhD

Marion Kennedy, Zhaoyang Xu

Fourth time lucky for PhD grad!



Dr Niranjan Ramesh and his supervisor Professor George Dias outside the Dunedin Town Hall

It was a case of fourth time lucky for Dr Niranjan Ramesh when he finally got to graduate in person with his PhD at the Dunedin Town Hall in March.

Niranjan had originally planned to graduate in May 2020, however the Covid pandemic forced the University to postpone all May graduation ceremonies. Undeterred, he applied to graduate in August, and everything was looking promising until a Covid outbreak forced Auckland to go into Level 3 lockdown, and the rest of the country into Level 2. Restrictions on social distancing for large gatherings and events saw the August graduations also postponed.

Surely nothing would stop the December graduation from going ahead. With graduands and staff excitedly gathering outside the Dental School for the first graduation parade to begin, and his family back home in India staying up late to watch the live-stream, Niranjan thought he was going to be third time lucky.

But it was not to be. At the very last minute the University was forced to cancel all events after receiving threats specific to the graduation ceremonies.

It is a credit to Niranjan's eternal optimism that he signed-up to graduate at a special March ceremony, arranged by the University for the hundreds of students who were not able to graduate in person in 2020. The ceremony went off without a hitch, and Niranjan says it was worth the wait as he and his family and friends were finally able to party, just like it was 2020!

Niranjan's doctorate is entitled "Novel bioactive hydroxyapatite composite from New Zealand sourced bovine bone for bone tissue engineering".

Students present summer research projects

The role of estrogen in males

Research undertaken by summer student Joanna Mainwaring is contributing to the understanding of the role estrogen plays in male sexual behaviour.

Joanna studied the impact of estrogen deprivation on male sexual behaviour, using an animal model. She received a 2020/2021 Summer Research Scholarship to complete her research in the department over the summer period, and recently presented her findings at the Otago Medical School Research Society's 257th scientific meeting.

Her research has a clinical implication for male populations who are estrogen-deprived, such as men with aromatase gene mutation, and breast cancer patients on estrogen receptor modulator. Joanna found that estrogen deprivation prolongs the sexual refractory period (a time when males typically cannot be re-aroused after an ejaculation), and reduces the number of ejaculations. In addition, males in a refractory period usually can get re-aroused upon introduction of a new sexual stimulus. However, this ability is dampened in estrogen-deprived males.

Joanna grew up in Christchurch before moving to Dunedin to study at the University of Otago in 2018. She completed a Bachelor of Science majoring in Anatomy in 2020. Her summer research project in the Department of Anatomy was supervised by Dr Erik Wibowo. This year, she is studying for a Diploma for Graduates endorsed in Psychology.



Joanna Mainwaring

Te Tipani Project - Pacific students' understanding of sexual and reproductive well-being

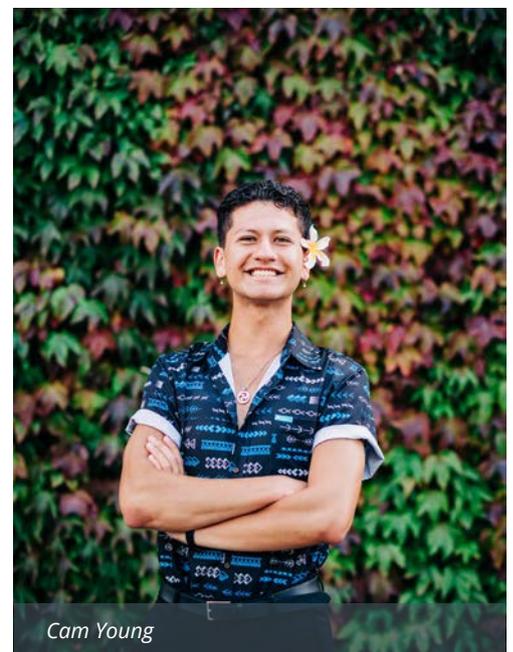
Kia orana and warm Pacific greetings!

Cam Young is a third-year student completing a BSc in Anatomy and Pacific Islands Studies. Cam was raised in the sunny Hawke's Bay and is of Cook Islands and Sāmoan heritage. He received the School of Biomedical Sciences' Pacific Peoples' Scholarship for the summer of 2020/21. His project in the Department of Anatomy was supervised by Dr Rebecca Bird and Dr Jane Girling, as well as Dr Mele Taumoepeau (Psychology) and Dr Bryndl Hohmann-Marriott (Sociology, Gender Studies, Criminology). Cam recently presented his research at the Otago Medical School Research Society's 257th scientific meeting.

Te Tipani Project is named after the vibrant tīpani (frangipani) flower of the Cook Islands, and reminds Cam of his mother's strength and resilience. His study employed the Tongan Kakala methodology to investigate Pacific students' understandings of sexual and reproductive well-being. Through a mixed-methods online survey and a series of talanoa interviews, Cam aimed to explore various sociocultural and religious factors influencing their understandings.

He discovered that Pacific students have holistic understandings of health and comfortably demonstrate help-seeking behaviours. Pacific students were competent in their knowledge of sexual and reproductive well-being, but were generally limited in their scientific vocabularies. As expected, cultural and societal expectations greatly influenced their perspectives of these tapu topics. Past sexuality education greatly disadvantaged Pacific students by failing to create culturally safe environments to learn within.

This research has implications for enhancing contemporary sexuality education, with the expectation that enriched education will improve Pacific peoples' sexual and reproductive health outcomes. Recommendations in the form of a Te Tipani Framework are being formulated for the Department of Anatomy to promote more culturally responsive learning environments for Pacific learners.



Cam Young

Need help? Who you gonna call?

Course Advice

If you are unsure about any aspect of your study we have dedicated course advisers here to help you.

Our course advisers can help you to plan your study, choose the degree and papers that are right for you, and look at your career aspirations and how your study fits in with that. They can also make sure that you've got the right combination of papers to meet regulations, and guide and provide solutions if there have been difficulties with the progression of your course.

If you'd like to set up a time to meet with an advisor, or you'd just like to ask a quick question, please email the team:

[Undergraduate Course Advice](mailto:undergraduate@otago.ac.nz)

[Postgraduate Course Advice](mailto:postgraduate@otago.ac.nz)

Disability Support

The first port of call for any student with an injury, disability, impairment or medical condition which affects their ability to study is the University's [Disability Information and Support](#) team. They can provide learning support, advice, advocacy and information to students with permanent, recurring or temporary impairments.

If you would like to talk to someone in the Anatomy Department regarding an impairment relating to your study in Anatomy, please contact our [Disability Support person](#).

Kaiāwhina Māori

The department is part of an extended Māori support group within the Division of Sciences, the Sciences Kaiāwhina Network. This rōpū is made up of staff from the University's science departments who can help you with course advice, connect you with academics or paper coordinators within the department, support Māori development and are a friendly face for you to visit. Our Anatomy kaiāwhina are:



Dr Rebecca Bird

rebecca.bird@otago.ac.nz

+64 3 471 6277



Dr Charlotte King

charlotte.king@otago.ac.nz

+64 3 470 3401



Mr Tim McLennan

tim.mclennan@otago.ac.nz

+64 3 471 6277

Please feel free to contact Rebecca, Charlotte or Tim if you feel you need help choosing the right papers for you, or if you just want to touch base with someone in the department for a friendly chat. They're there for you.

Pacific Island Support

The department extends a warm Dunedin welcome to all our Pacific students studying anatomy through Medicine, Dentistry, Physiotherapy, Physical Education or the Sciences. Dr Latika Samalia and Dr Erik Wibowo share the Pacific Island support role in the department. Dr Samalia, who comes from Fiji, will be very familiar to those studying in the health sciences. Dr Wibowo, originally from Indonesia, teaches into the 200- and 300-level ANAT science papers as well as undergraduate medicine. Both are members of the Pacific Strategic Framework Group in the School of Biomedical Sciences.

Please reach out to Latika or to Erik if you need help or guidance with your studies, or if you just need to chat with someone.



Dr Latika Samalia

latika.samalia@otago.ac.nz

+64 3 479 5145



Dr Erik Wibowo

erik.wibowo@otago.ac.nz

+64 3 470 4692

Associate Professor Gina Forster

Researcher, Teacher, Wife, Mother

It is with great sadness that we acknowledge the passing of our dear friend and colleague, Associate Professor Gina Forster, on December 23rd 2020, after her short battle with cancer. From the moment she arrived in 2018, Gina was a valued member of the Department of Anatomy and an incredible asset to us.

Gina came to us from the University of South Dakota (USD) in the United States, where she was a tenured Professor and an award winning researcher and teacher, taking up her position at Otago in order to return home to New Zealand and to the University of Otago.

She received her BSc (Hons I) in Psychology from the University of Otago in 1997, winning the TPH McKellar Award for the top student in Psychology. That year she joined the Department of Anatomy as an Assistant Research Fellow. From Anatomy, Gina then moved to Australia to start her PhD at Macquarie University, which was awarded in 2002. It was there that she met Mick Watt, her partner in life and in research.

Gina and Mick moved to South Dakota in 2002 where Gina progressed to full Professor in the Division of Basic Biomedical Sciences, Sanford School of Medicine, and was the Director of both the Center for Brain and Behavior Research (CBBRe) and the South Dakota Center for Genetics and Behavioral Health. Their daughter Fiona was born in 2012.

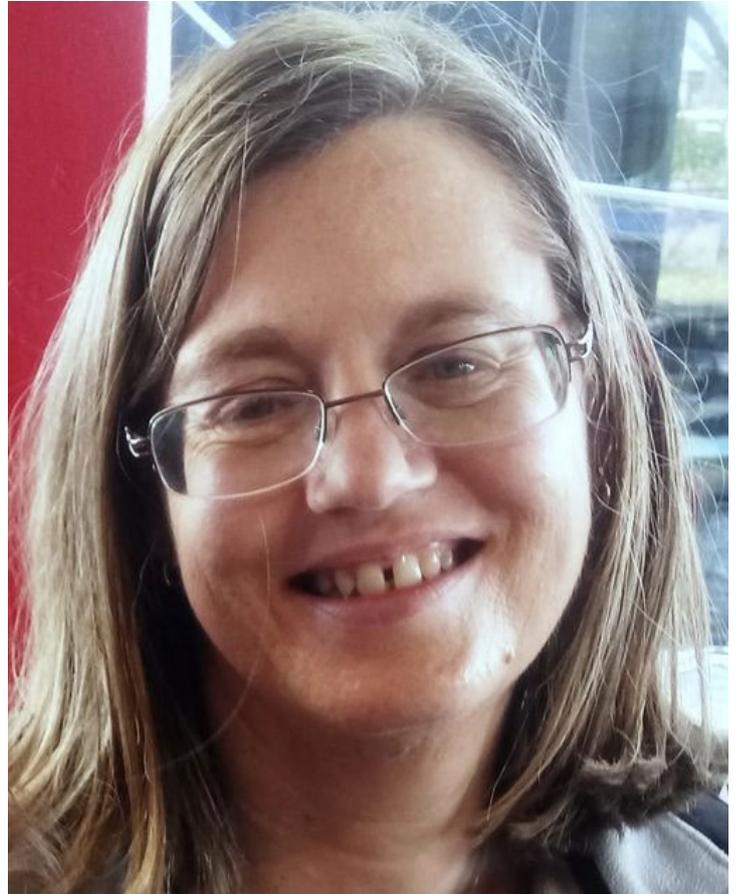
Gina was an outstanding teacher and a highly respected researcher, using multi-disciplinary approaches to study the neurobiological bases of psychiatric disorders in relevant rodent models and in at-risk human populations, and publishing more than 75 papers and chapters on this research. She was also Principal Investigator on several major grants from the US National Institute on Drug Abuse (NIDA), Department of Defence, and National Science Foundation. In addition, Gina was the first Director of the NIDA-supported Summer Program for Undergraduate Research in Addiction, a program that continues to this day at USD. She directly supervised a multitude of undergraduate and postgraduate students, most of whom are now successful researchers and physicians.

Gina's significant teaching experience brought new ideas and strengths to Otago and the Department of Anatomy's teaching program. She contributed much valued leadership within our Department, particularly regarding postgraduate teaching and supervision. She was a member of the Brain Health Research Centre, had begun working with the Neurological Foundation of New Zealand and was the President of the Otago Chapter of the Society for Neuroscience (USA).

Gina loved being with family, cooking, gardening and the outdoors, and always sought to help others achieve their goals ahead of her own. She will be greatly missed by students, colleagues, and friends around the world.

Mick and Fiona will be organising a memorial service for Gina in the near future, and we will keep everyone posted on details when they become available.

Kia okioki ia i runga i te Rangimarie - may she rest in peace.



Relay a night to remember

It was a dark and stormy night; the rain fell in torrents - except at occasional intervals when it was checked by violent gusts of wind and impressive flashes of lightening. No, this isn't the beginning of a badly written novel by Edward Bulwer-Lytton (ref *Paul Clifford* published in 1830) but the beginning of the University's student-led Relay for Life held over the 24th and 25th of April.

A hardy team of eight people represented the Department of Anatomy at the twelve-hour Relay event. Congratulations to John Reynolds, Lisa Matisoo-Smith, Josh Houlton, Meriam van Os, Melanie Laird, Kyle Richardson, Brent Smith and Jane Reynolds who braved the wintry conditions to complete the Relay. Together they raised an amazing \$2,588 to help support the wonderful work of the Cancer Society in the Otago region.

The team worked under very trying conditions - cue lightening and rain - to set up the gazebo which would become 'home' for the next twelve hours (thank you to Ruth Napper for providing the gazebo!). While it was a cold night for those walking the relay circuit around campus, departmental spirit, sleeping bags, blankets and good humour triumphed and got everyone over the finish line at 6am on the Sunday morning.

Relay for Life has become an important event in the department's calendar. It is a time to remember those we have lost; a time for the department to connect with the community around us; and a time to support the good work of the Cancer society and all that they do for our community.

If you would like to add to the team's fundraising you can do so by visiting the team page on the [Cancer Society's website](#) and click on a donation box on the right-hand side of the page.



Team Anatomy (from left to right): Lisa Matisoo-Smith, Brent Smith, Jane Reynolds, Josh Houlton, John Reynolds, Meriam van Os and Carrie Reynolds.



Service of Thanksgiving



The Department will hold a Thanksgiving Service in September to honour those who have donated their body to the department for medical science teaching and research. Family and friends of our donors will be invited to attend, along with students and staff of the Department.

The service will be held in the Glenroy Auditorium at the Dunedin Town Hall complex, on Monday 13 September, beginning at 7pm.

Anyone wishing to take part, or who would like to receive more information about the service, is encouraged to contact the [Body Bequest Liaison Officer](#).

Researcher elected Royal Society Fellow



Distinguished Professor Neil Gemmell has been elected a Fellow of the Royal Society Te Apārangi. He is one of twenty-seven new Fellows and Honorary Fellows to be recognised by the Society for their distinction in research and contributions to the advancement of science, technology or the humanities.

Professor Gemmell's research contributes to the fields of genomics, evolutionary biology, conservation biology and reproductive biology. His research has introduced pioneering genetic advances to help in the control of invasive species and to enhance the conservation of some of New Zealand's rarest species, most notably the whio and kakī.

Professor Gemmell's recent achievements include being named a Fulbright Senior Fellow in 2018; a publication in *Nature* in 2020 on the tuatara genome project; and the use of environmental DNA to investigate the existence, or otherwise, of the Loch Ness Monster, and more recently the monitoring of wastewater for traces of Covid-19.

In 2019 Professor Gemmell was named a Distinguished Professor by the University of Otago, and in 2020 he was awarded the Royal Society Te Apārangi's Hutton Medal for his contributions to science.

Professor Gemmell was formally inducted into the Society at an event in Wellington on 29 April.

[Click here](#) to read more about all the researchers and scholars elected to the Society.

Working with the dead



Djuna Elkan (left) and Ellie Stevens (right) give their presentation at a packed Ombrellos Kitchen & Bar.

Working with human cadavers (bodies) is not everyone's idea of a dream job. But for anatomy technicians Djuna Elkan and Ellie Stevens, it's not only what they do, it's what they love to do.

They recently gave an insight into their 'normal' working day at a Thirst for Knowledge public seminar hosted by the Department of Physiology and the Otago Museum.

The curious and the not-so-squeamish were in for a treat as they talked about the body donor programme, and answered all those questions everybody wants to know about body donation, but were perhaps too afraid to ask!

They covered the process of registering a bequest (before death) to the department, the exclusion criteria which may mean we are not able to accept a body at the time of death, what we actually do with the bodies, the specific roles they play in the body donor programme, and the misconceptions that surround body donation (no, we don't swap our bodies with Australia!).

For anyone working alongside Ellie and Djuna it is easy to see how much they enjoy their jobs, and the respect they have for the amazing people who donate their body to the department for medical science teaching and research.

Ellie's main domain is the dissection room where she prepares and sets up material required for practical classes, cares for the cadavers, and maintains the collection of prosections which are used for teaching and research. Djuna also helps to set up classes and maintain prosected material, but her real focus is actually creating the amazing prosections we use for teaching which show anatomical structures in such beautiful detail. They are both also involved in the embalming of the bodies and are active members of [AIAS](#), the Australasian Institute of Anatomical Sciences, an organisation formed to enhance and disseminate the skills of those engaged in medical embalming, tissue preservation and conversion, prosecting, and anatomy laboratory management in Australia and New Zealand.

Making a Last-ing impression



Medical Illustrator Mr Robbie McPhee is a happy man. In August he will finally get his hands on a book he has been helping create for the past eight years. *A Companion Guide to Last's Anatomy*, co-authored by Dr Ali Mirjalili (University of Auckland) and Associate Professor Quentin Fogg (The University of Melbourne), will be launched on 1 August 2021.

As the title suggests, the *Companion Guide* has been designed to complement the revised ninth edition of *Last's Anatomy Regional and Applied*, the leading anatomy text in Australia and New Zealand for junior surgeons preparing to take the Generic Surgical Science Examination (GSSE). The *Companion Guide* provides a summary of anatomy relevant to each section in *Last's Anatomy*, and includes many useful diagrams and prosection images to help students studying anatomy.

Mr McPhee has designed around fifty of the anatomical colour illustrations and diagrams that appear in the Guide. He has previously created illustrations for other publications over the years, including an illustration which appeared in perhaps the most famous anatomy text of them all, *Gray's Anatomy* (40th edition, published in 2008).

Last's Anatomy is the recommended anatomy text by the Royal Australasian College of Surgeons (RACS) and is also the recommended text for those undertaking the department's Postgraduate Diploma in Surgical Anatomy (PGDipSurgAnat).

Mr McPhee hopes the *Companion Guide* will be added to the recommended textbook list, and become a useful guide and reference for student and practitioners.

A Companion Guide to Last's Anatomy will be available in hardcopy and in digital format from August 2021.

Helping to protect our native birds

Dr Lara Urban is going to be very busy over the next couple of years. She has received funding for two research projects that focus on the conservation and monitoring of two of our native bird species - the takahē (*Porphyrio hochstetteri*) and the kākāpō (*Strigops habroptilus*).

Takahē genomics project

Lara has received a grant from the Revive & Restore Wild Genomes Catalyst Science Fund, worth US\$53,750, for her takahē genomics project. She is assessing the genomic diversity of the takahē species by creating a reference genome, and sequencing a representative subset of the remaining population to understand the impact of inbreeding and deleterious mutations on the species' overall fitness.

She is collaborating directly with members of the Department of Conservation's Takahē Recovery Programme so her results will be directly translated into the conservation management of the species.

The flightless takahē is now found in only two areas of the South Island - Fiordland National Park and Kahurangi National Park in the Tasman district. Today, takahē are classified as Nationally Vulnerable, with a population of just over 400 birds.

You can visit the Department of Conservation Te Papa Atawhai website to learn more about the [takahē recovery programme](#).



Dr Urban releases a takahē back into the wild



Dr Lara Urban holds a native kākāpō

Kākāpō environmental DNA project

Lara has also received a BirdsNZ grant for her kākāpō environmental DNA (eDNA) research project. She is working in close collaboration with the Department of Conservation's Kākāpō Recovery Team. Together they are benchmarking how accurate non-invasive monitoring of kākāpō is, based on DNA extracted from environmental samples such as soil and water. This research is helping to monitor the kākāpō population, and might even help the team to find remaining kākāpō in the wild - if they still exist.

The nocturnal and flightless kākāpō is critically endangered, with a population of just over 200 in the wild. The entire known population was transferred to predator-free islands surrounding Stewart Island and Fiordland in the 1990s.

To learn more about the [kākāpō recovery programme](#), visit the Department of Conservation Te Papa Atawhai website.

Dr Lara Urban is a Research Fellow in Professor Neil Gemmill's research lab. As well as her takahē and kākāpō research, she is also involved in metagenomics and biodiversity (eDNA) research within the Gemmill lab.

You can follow Lara on [Twitter](#) and on her own [webpage](#) to keep up-to-date with her research adventures!



Long serving staff farewelled

Over the past few months the department has farewelled four long-standing members of staff who have each, in their own ways, contributed to the life and achievements of the Department of Anatomy.

Dr Ruth Napper, Senior Lecturer

Dr Ruth Napper – researcher, Senior Lecturer, mentor and friend – has retired after forty-three years in the department. The following is taken from Professor Lisa Matisoo-Smith's and Professor Dorothy Oorschot's farewell speeches given at Ruth's retirement morning tea.

Ruth joined the Department in 1978 as a Scientific Officer. I wonder, would she have had the slightest inkling, or expressed disbelief if informed at that time, that her academic career would flourish at Otago and, as she progressed to the role of Senior Lecturer, that she would become a highly valued, long-serving academic member of staff in the Department and University.

It would be impossible to highlight all of Ruth's accomplishments throughout her full career. She has been an excellent Departmental citizen, a supportive colleague and a friend to many.

There are some international scientists who, if they were here, would be giving Ruth resounding applause. I am thinking of Professor Hans Jorgen Gundersen, for example, the stereology guru.

Ruth's PhD was on the quantitative anatomy of the normal rat cerebellum. This required stereological methods. It resulted in three publications in the *Journal of Comparative Neurology*, a prestigious journal for neuroanatomy and the oldest neuroscience journal. These papers have hundreds of citations, which is a testament to their contribution. In addition, the three papers are in *the same volume* of the journal and are published *consecutively* - imagine the work involved in achieving this!

Ruth also co-authored a review on the cerebellum in another high ranking journal, *Progress in Neurobiology*. This also has many citations.

She went on to study the effect of alcohol on the developing cerebellum, and other brain regions. One of the earliest newspaper articles we found documenting Ruth's research, publication date estimated to be in the mid-late 80's/early 90's, was in a tablet headed "University A World Leader in Research". The article provided a window to the research undertaken by leaders in research at Otago at that time. Among those documented was Ruth and her research into the damaging effects of alcohol on the developing foetal brain. Although results from research on alcohol-related brain damage in the USA at that time had been published, no corresponding data was available for New Zealand alcohol-related brain damage. The article went on to say that Ruth's research included a joint project with the Universities of Indiana and Illinois, focusing on the brain cells that hadn't been killed off after alcohol exposure. Ruth's research has seen her work with collaborators from Universities in the United States (Iowa, Delaware, Maryland), Germany (Tübingen), and Canada (Canadian Centre for Behavioural Research), to name just a few.



Dr Ruth Napper holds one of her art-neuroscience exhibits

When it comes to foetal alcohol spectrum disorder (FASD) and its broader effects, Ruth is a strong supporter of research into, and the education of both students and public alike, particularly the younger generation. More recently she has lobbied for children with FASD. For example, in a paper published by Anita Gibb, another academic at the University of Otago, in 2017 titled "Putting FASD on the map in New Zealand" it is written 'Dr Ruth Napper ... has been a determined advocate for families with an FASD [child] in Dunedin, and has helped raise funds to set up Dunedin's first assessment and diagnosis team.'

With her BSc (Hons) in Zoology, Ruth has also worked with colleagues at this University on the honeybee brain. This work has resulted in a publication in the prestigious *Journal of Neuroscience*. She has used the technique of electron microscopy, especially transmission electron microscopy, throughout her forty-year career and has invaluable expertise. She has used this technique because it's needed to see the synapses between nerve cells. The synapses can then be quantified. Ruth is currently championing a new serial block face (SBF)-scanning electron microscope for Otago Micro and Nanoscale Imaging (OMNI). This microscope has been purchased and is on its way here. This is one of the areas we hope Ruth will continue working on in her retirement.

With Ruth's valued contributions to neuroscience, in electron microscopy and in stereology, her legacy will live on.

In seeking comments from long-serving staff members on Ruth's career, Emeritus Professor Gareth Jones remarked "What struck me about Ruth was her desire to use the research data to benefit real people in the midst of trying clinical circumstances. At no point was she satisfied with science that failed to improve people's lives".

Over the years, Ruth has not only been active in presenting her research findings at conferences and through published papers, she has also presented it via pillowcases. When Gareth finished his term as Head of Department, Ruth gave him pillowcases with some of her favourite neurons on it. She felt Gareth

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needed some education in a population of neurons, Purkinje cells, outside his own area of interest. Apparently, they served their purpose well for a number of years as pillowcases if not as scientific educators.

Another amusing anecdote, recalled by former member of staff Associate Professor Nancy Tayles, comes from early in Ruth's career. Because of her high energy in practical classes, the students had nicknamed Ruth 'VelociNapper'. An energy that has accompanied Ruth throughout her academic career. Ruth can leave one exhausted just watching her engage with her fellow academics, students and, when the opportunity arises, the general public both young and not quite so young.

Ruth has proven herself a highly committed lecturer, teaching into Science papers and Medicine histology. As an undergraduate course advisor, she always took a keen interest in the student's proposed career and the proposed academic pathway by which they eventually hoped to reach their goal.



Dr Napper receives flowers from Professor Lisa Matisoo-Smith

In July 2013, a collaboration between the Brain Health Research Centre and the Otago Polytechnic School of Art resulted in the Art in Neuroscience exhibition. The exhibition was the brainchild of Ruth and, with the help and support of Polytechnic Art History Senior Lecturer Peter Stupples, her idea to use art as

a medium for attracting people to science was converted into reality. It would be safe to say, that when Ruth is on a mission one should step out of the way.

Ruth's passion for art and science continued and in 2016 she helped with the organisation of the 4th annual Art and Science Exhibition, themed Art and Space, at the Otago Museum. Ruth also contributed, as a scientist, to the work of Esther Ritter, an Honours student at the Dunedin School of Art, who exhibited her FASD themed painting in Art & Science Project 16.

Ruth has worked hard to maintain a balance between academic life and her outside interests. Her organisation of science-art projects have reflected her dual passions: neuroscience and creative expression, which can be seen in her jewellery designs.

Ruth has always kept her focus on what really matters, and that is people. Whether it is students, her colleagues or the wider community – she is always thinking about others and making sure that they are ok.

And so, it comes as no surprise that Ruth has shifted the balance to favour that of her creative side and she leaves academia, not so much to put her feet

up, but to use another medium, that of metals, as the means to present her thoughts and passions.

We will miss her whirlwind presence; however, we do wish her great happiness and the very best in all her future endeavours.

Brynley Crosado, Prosector

Brynley joined the Department of Anatomy in 1997, however his connection with the department began before then when, as a medical student, he studied Anatomy as part of the undergraduate medical degree programme.

He very much enjoyed learning the complex and intricate systems of the human body. Classes in the Dissection Room were a particular highlight.

Brynley decided not to continue studying medicine and got a job in the Dunedin Public Hospital Department of Pathology as a Mortuary Technician. When he had the opportunity to assist in autopsies, a whole new world opened up for him.

It was a career move that would eventually see him join the Department of Anatomy in the role of Gross Anatomy Curator. His extensive knowledge of anatomy and pathology saw him become the department's "number one" embalmer, and its first full-time Prosector.

Prosection is the precise dissection of a cadaver, or part cadaver, in order to show specific anatomical structures. The creation of a prosection is a labour of love, some may even call it an art-form, with many hours and intense concentration required to produce a specimen that show-cases anatomical structures, often miniscule in size.

Over the years Brynley has created hundreds of beautiful prosections that showcase the anatomical structures of all regions of the human body from calvaria and the brain down to knees, feet and ankles, and of course all areas in between (trachea, heart, lung, pelvis etc).



Mr Brynley Crosado

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Brynley's prosections are widely used as teaching aides in practical undergraduate classes for dentistry, medicine, physiotherapy, and some science papers, as well as postgraduate classes and workshops for clinicians and other health professionals.

In the early years the department used a formaldehyde-based embalming fluid to preserve bodies donated to its Body Bequest programme. In order to maintain the condition of the material, specimens had to be fully immersed in a tank filled with an ethanol solution, exposure to which could be volatile and hazardous to those working with the material.

To reduce the level of formaldehyde and phenol staff and students were being exposed to, Brynley researched and developed a new 2-phenoxyethanol based embalming fluid. This new fluid, appropriately named 'Crosado Mix', was adopted by the department in 2000 as its preferred mix for embalming. Crosado Mix enables specimens to be stored without needing to be fully immersed or refrigerated.

Cadavers embalmed with Crosado Mix show no discolouration of tissue, and are softer and easier to dissect than those embalmed with a formaldehyde-based fluid. Crosado Mix continues to be the department's (embalming) fluid of choice today.

Brynley has definitely left his mark on the department. Without his skill, knowledge and dedication, the department would not have such a wide range of valuable resources for students and researchers to utilise.

While Brynley has left us to take early retirement, his name will continue to feature in the department for many years to come.



Dr Brad Hurren, Professional Practice Fellow

We recently bade a sad farewell to Dr Brad Hurren who left the department after an almost twenty-year affiliation.

Brad first appeared in the department in 2002 as a second-year BSc student majoring in Anatomy and Structural Biology (as the department was known way back then). We must have made a good impression on him because not only did he complete his BSc, but he stayed on to complete a Postgraduate Diploma in Science, a Master of Science (with Distinction), and a Doctorate of Philosophy (PhD) conferred in 2013.

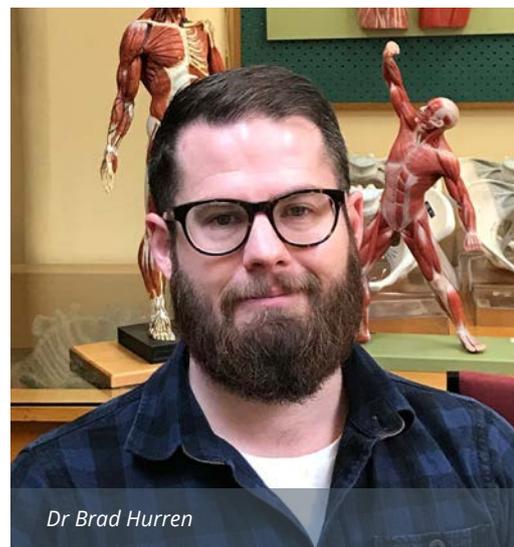
His love for teaching began in 2004 as a student demonstrator. He quickly progressed in successive roles as a senior demonstrator, a course administrator in the HUBS programme, Teaching Fellow, and in 2017 he became a Professional Practice Fellow.

Over these years he contributed to teaching 200- and 300-level ANAT papers, a 200-level PHTY paper, HUBS 191 and 192 papers, and was a constant and valued contributor to curriculum development.

He wasn't only passionate about teaching. He also had a strong ethic in working with students and supporting their well-being. Whether it be extra tutorial sessions, one-on-one time in the lab, or alternative arrangements for assessments, Brad was always available and willing to help any student.

In 2016 he took on the role of Kaiāwhina Māori in the department, providing valuable support for Anatomy's undergraduate Māori students.

His skills in teaching were evidenced by strong teaching evaluations and numerous awards and recognitions over the years, culminating in receiving a University of Otago Teaching Excellence Award in 2017, and a Sustained Excellence Award from Ako Aotearoa.



Dr Brad Hurren

His research transitioned from the lab bench to educational research, with a particular focus on how students approach learning anatomy and how teachers can improve the learning experience of students. He was a co-founder of the department's ASERT (Anatomical Sciences Education Research Team) research group which focuses on, and promotes anatomical sciences education.

Over the years Brad was involved in many outreach activities, taking his love of anatomy into the community through open days, public (animal) dissections, public talks and school visits.

We wish Brad the very best of luck as he takes up the position of Academic Developer at the University of Canterbury in the Future Learning and Development team.

It is no understatement to say we will miss Brad's contributions to life in the department. We will certainly not be able to look at a checked-shirt ever again, without thinking of Brad Hurren ... and his world famous (in Otago) beard.

Dr Vivek Perumal, Professional Practice Fellow

Vivek took up the position of Professional Practice Fellow in Clinical Anatomy at the end of 2010. He was involved in teaching clinical anatomy in the undergraduate and postgraduate medical courses, including FRACS papers.

During his time in the department Vivek also managed to fit in some study at the University of Otago, completing a Postgraduate Certificate in Higher Education (specialising in Clinical Education) in 2013, and graduating with a PhD in 2019. His doctoral thesis was entitled "Clinical and surgical anatomy of the ligament of the head of femur."

Findings from his PhD study received several awards including the Keith and Marion Moore Blue Box Award from the American Association of Clinical Anatomists for his paper on the clinical anatomy of the ligament of the head of femur published in the prestigious journal *Clinical Anatomy* in 2018. In fact, Vivek's list of awards is quite long, counting more than 20 for his teaching and research works, including a Distinguished Professional Practice Fellow Award, and the OUMSA Best Demonstrator Award consistently for the past ten years!

And his talents didn't end there ... in 2019 he received two grants from the University of Otago in support of his development of an on-line educational game aimed at medical students in their



Dr Vivek Perumal with the award presented to him by The American Association of Clinical Anatomists

2nd and 3rd years of study to aid in the learning of anatomy. And in December 2020, he was awarded the prize for the Best Anatomical Art Work at the ANZACA conference in Canberra, Australia; a copy of that artwork can be seen in the W.D. Trotter Anatomy Museum.

Vivek left the department to take up a Lectureship position in Anatomy at the Lee Kong Chian School of Medicine in Singapore. He says he is looking forward to utilising all the skills he learnt at Otago in his new position.

Now for a bit of fun ...

How well do you know the Medical School? Click on the link below and place the pieces of the puzzle together to discover what the image is.

