



Ōtautahi | Christchurch, Hepetema | September 2024











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# Nau mai, tauti mai | Welcome

Tēnā koutou e ngā kaiwhiwhi tohu paetahi, tohu paerua, tohu kairangi hoki o Te Whare Wānanga o Waitaha. Nau mai, tauti mai ki te hapori mātauranga o te whare wānanga nei.

Greetings to you, the recipients of certificates, diplomas and degrees from the University of Canterbury. Welcome to the community of scholars of this University.

To our graduates and whānau celebrating here with you at this graduation celebration, congratulations on your achievements. After years of hard work and dedication, you have earned your place on the graduation stage.

A graduation celebration is an important occasion, a significant milestone in your life and something you will look back on with pride in the years to come.

We hope your university education, along with the many experiences you've had and the networks you have developed, will open doors for you across Aotearoa New Zealand and around the world. Graduation signifies your transition to the University of Canterbury's Alumni Community, a cohort of over 155,000 people living around the world, as well as our historical alumni of great innovators and history makers. Take your place amongst them and add to our great story, which began over 150 years ago.

We hope to see you back here at the University in the near future, whether it be further study, to engage with students through work experience opportunities or to work with researchers on new innovations and developments.

In our world of online connectivity, it has never been simpler to stay in touch, so please remember to share with us what is happening in your world.

Hon Amy Adams
Tumu Kaunihera | Chancellor





### Te Ranga Āpiha Whare Wānanga University Officers and Structure

#### Tumu Kaunihera | Chancellor

Hon Amy Adams, LLB (Hons) (Cant)

#### Tumu Whakarae Vice-Chancellor

Professor Cheryl de la Rey, PhD (Cape Town), MA (cum laude), BA Hons (cum laude), BA (Natal)

#### Tumu Tuarua Rangahau Acting Deputy Vice-Chancellor Research

Professor Peter Gostomski, PhD, MSc, BSc (Rensselaer Polytechnic Institute)

#### Tumu Tuarua Akoranga Deputy Vice-Chancellor Academic

Professor Catherine Moran, PhD (Cant), MSc, BSc (University of Western Ontario)

#### Te Kaunihera o te Whare Wānanga o Waitaha University Council

Graduates will be doffed at today's ceremony by te Tumu Kaunihera | Chancellor, who is chair of te Kaunihera o Te Whare Wānanga o Waitaha University Council and the ceremonial head of the University. Similar to a board of directors, Council is responsible for the governance of the University, including oversight of the institution's policy, degree, financial and capital matters. Membership of the Council is defined by the Education and Training Act, 2020.

#### Te Ohu Whakahaere Senior Leadership Team

Te Tumu Whakarae | Vice-Chancellor is employed by Council to run the University and is its Chief Executive Officer. The Vice-Chancellor is assisted by Te Ohu Whakahaere Senior Leadership Team, comprised of leaders from the University's faculties and major service units who are responsible for management of their areas and leadership of the University as a whole.

#### Te Poari Akoranga Academic Board

The University's principal academic body, Poari Akoranga | Academic Board coordinates the faculties and is responsible for advising the University Council on all academic matters. It has authority to make recommendations and reports on matters including research, courses of study, students, bursaries and scholarships, prizes and examinations.



### Ngā Hātepe | Order of Proceedings

Türei 3 Hepetema, Hui Whakapūmau i te ata Tuesday 3 September, Morning Celebration

# At approximately 9.45am the piper will herald the entry of the graduates

Please remain seated

Piper: Tom Glover BE (Hons) Grad Dip Management

Brief silence.

Fanfare (composed by Emeritus Professor John Ritchie)

#### Entry of the academic procession

Please stand

Processional March: Cantuariensium – The University Song (composed by Dr J. C. Bradshaw, first Professor of Music). Organist: Nick Sutcliffe

Please remain standing

#### Whakatau (Welcome)

The whakatau recognises the place of Ngāi Tūāhuriri as mana whenua and Te Whare Wānanga o Waitaha | University of Canterbury's commitment to bicultural development.

#### Pao

A call of welcome by a Māori woman representing mana whenua. A representative group of graduates will proceed into the auditorium.

At the conclusion of the pao please be seated.

#### Mihi

A greeting by the Pou Whakarae | Professor Te Maire Tau, or his representative, on behalf of Te Whare Wānanga o Waitaha | University of Canterbury and Ngāi Tūāhuriri.

#### Waiata

A song, Manu tiria, concludes the Māori welcome (words in back of programme and on screen).

Opening greeting by te Tumu Kaunihera Chancellor

Please stand and join in singing E Ihowā Atua – God Defend New Zealand.

Led by Sofia Scales and Qiqi Wang (words inside back cover and on screen)

Te Tumu Kaunihera | Chancellor of Te Whare Wānanga o Waitaha | University of Canterbury, Honourable Amy Adams will open the proceedings.

### Te Whakawhiwhi Tāura ki te Tumu Kaunihera Presentation of Graduates to the Chancellor

### **Doctoral Degrees**

Associate Dean: Professor B. McNeill

Doctor of Philosophy and Master of Science with First Class Honours

James Sandwell Davies, in Biochemistry

Doctor of Philosophy, Bachelor of Science with First Class Honours and Bachelor of Science

Samantha Jane Alloo, in Medical Physics

Doctor of Philosophy and Postgraduate Diploma in Child and Family Psychology

Emma Courtney Woodford, in Psychology

Doctor of Philosophy and Postgraduate Diploma in Clinical Psychology

Hannah Rebecca Rose Jones, in Psychology

#### **Doctor of Philosophy**

Heba Gaber Mahmoud Sayed Ahmed, in Accounting

Etheline Akazong Wonanke, in Biochemistry
Jessica Allan, in Health Sciences
Rebecca Rose Hazel Bodeker, in Psychology
Deborah Jane Bowen, in Health Sciences
Stephen John Compton, in Audiology
Ben Ryan Jack Crichton, in Ecology
Scott Walter Danielson, in Psychology
Andrew Neil Davidson, in Computer Science
Jaime Elizabeth Delano, in Geology
Shnece Mary Kreger Duncan, in Economics
Kerry Domjan Manson, in Mathematics
Nargis Mashal, in Management

Timothy Andrew McKenzie, in Computer Science

Christopher Gerard Meijer, in Ecology
Tonny Miiro, in Biological Sciences
Rajika Madushanee Munasinghe, in Chemistry
Amogh Prakasha Kumar, in Economics
Carlos Rosado de Palacio, in Geology
Sarah Diane Sale, in Biochemistry
Shailendra Kumar Sharma, in Chemistry
Kylie Anne Short, in Health Sciences
Ilayaraja Subramanian, in Marketing
Channell Lisa Thoms, in Environmental Science
Gerald Craig Toft, in Mathematics
Mengjie Wang, in Psychology
Logan Keith Williams, in Management
Weilun Wu, in Economics
Yanxia Yu, in Economics

#### **UC Graduate School**

Associate Dean: Professor B. McNeill

Master of Philosophy

Pravesh Tyagi, in Biochemistry

#### **Faculty of Science**

Executive Dean: Professor S. Young

Master of Science with Distinction and Postgraduate Diploma in Clinical Psychology

Lisa Ying Xin Chen, in Psychology Jessica Momo Fozzard-Costigan, in Psychology Rebecca Elizabeth Holt, in Psychology

#### Master of Science with Distinction

Robin Tino Berl-Deplazes, in Environmental Science

Dana Mallory Bingham, in Child and Family Psychology

Timothy Jia-Ren Chang, in Computer Science
Briar Jane Collins, in Microbiology
Emma Kate Coultas. in Disaster Risk and

Resilience

Sciences

George Reginald Cox, in Biological Sciences Joshua Michael Daglish, in Geology Robb William Eastman-Densem, in Biological

Maia Courtenay Gerard, in Biological Sciences Jade Deana Gibson, in Environmental Science Ruth Hannah Gregoriadis, in Psychology Michelle Sophia Hawinkels, in Ecology Jessie Leigh Henwood, in Geology

Kelly Nicole Herrmann Aspinwall, in Biological Sciences

Patrick Sean Heslop, in Psychology Nathan John Hill, in Ecology Jordan Alyse Hollinshead, in Biological Sciences Sasha Michelle Johnstone, in Child and Family Psychology

Andrew William McCabe, in Biological Sciences
Emma Lea McFerrier, in Geology
Lisabet Morgan, in Child and Family Psychology
Jesse Calvin Satherley, in Physics
Andrew Larson Sinclair, in Physics
Alison Sarah Spera, in Environmental Science
Alexandra Jade Strang, in Biological Sciences

Renaye Claire Taufahema, in Psychology

Megan Cara Taylor, in Medical Physics Shaelyn Estella Treffery Townend, in Geology Kieran James Williamson, in Psychology Jack Anton Rainier Zidich, in Mathematics

#### Master of Science with Merit

Jason Sutherland Alexander, in Astronomy
Brittany Christine Connelly, in Environmental
Science

Frances Ivy James, in Ecology Hannah Rose Langley, in Psychology Mingyuan Liu, in Environmental Science Nikki Angel Malagayo, in Child and Family Psychology

Chrisma Grace Roberts, in Psychology

Madison Brooke Sergent, in Biochemistry

Elizabeth Cara Wagenvoort, in Psychology

#### Master of Science

Thomas Casey Fenton Brownless, in Geology Fergus Roy Dixon Lowen, in Ecology

#### Master of Water Resource Management with Distinction

Desmond Bede Kavanagh McCloy

#### Master of Water Resource Management with Merit

Zane Eric Shadbolt

#### **Master of Water Resource Management**

Hugh Maxwell Blake-Manson Aimee Maree Calkin

#### Master of Applied Data Science with Distinction

Nisha Budhathoki

Giang Huong Bui

Christina Alex Cameron

Sharon Dwilif Kumar

Chih-Cheng Feng

Shubo Feng

Taruki Vidsala Gunawardana

Thomas Ralph Gutteridge

Marina Kukovkina

Sulliu

Ian Fábio Mallmann Mendes

Roman Naumov

Sarah Oong

Dianne Charlene Parry

Gus McMillan Pawson

Kenneth Amit Rosal

Raghunathan Senthil Kumar

Hadleigh Blake Tiddy

Lilian Simone von Kaenel

Uditha Iresh Mayadunna Wijesingha

Mayadunnage

Lucy-Ann Joy Wingrove

Xin Zhang

Zhen Zhang

### Master of Applied Data Science with Merit

Issac Abraham

Arockia Mary Bakiyaraj Arul Santiagu

Thanh Tra Ngo

Swathy Padinjareveliyil Thankachan

Yan Peng

Weixuan Song

Divya Sridhar

Prasanna Venkatesh Venkataramanan

Vanitha Viswanathan

#### Master of Applied Data Science

Yu-Yen Chen

Lizhu Dong

Paloma Gonzalez Gonzalez

Xiaohui Hu

Mualeoā Revival Leo

Mengyao Liu

Anand Murugesan

Menaka Nagarajan

Chaofan Peng

Nathaniel Thomas Stephen Pyle

Rosmin Raju

Naman Rastogi

Nan Wang

### Professional Master of Computer Science with Merit

Yuniie Lu

### Bachelor of Science with First Class Honours

Andrew Ronald Black

Dominic James Ahuriri Budgen

Jasmine Hannah Gabrielle-Hinchey

Sophia Louise Witham

#### Postgraduate Diploma in Applied Data Science

Sandhya Kadirvel Sarmilan Vignaraja Postgraduate Diploma in Clinical Psychology

Roxanna Ariel Brian

Hannah Frances Chapman

Breanne Elyse Ealam

Dena Makarious Bruno Hamish Unger

Postgraduate Diploma in Science with Distinction

Sarah Jane Stewart

Postgraduate Diploma in Science

Rachael Lee Nunns

**Graduate Diploma in Science** 

Madelaine Rose Barbarics

**Bachelor of Science and Bachelor of Arts** 

Emily Jane Mochan

**Bachelor of Science and Bachelor of Laws** 

Kairangi May Margaret Cox

Bachelor of Science, Certificate in Arts and Certificate in Commerce

Michael Ciarán Longden

**Bachelor of Science** 

Joshua Christopher Allan

Farrel Maulana Arsy

Chantelle Aldona Avillanosa

Oscar Lewis Best

Alexandra Rose Blanchet
Aestival Royce Britten

Fraser Donald Rutherford Brown

Sasha Marie Carey Anna Thomson Casey

Christine Stephanie Canlas Castro

Yuliang Chen

Liuyi Cheng

Patricia-Maria David

Argyle Andrew Dempster

Robert James Duggan

Paula Christina Chambers Dumaguin

Claudia Grace Eames

Glenn Angelo Gasmin

James Stephen Gleeson

Alexander Luke Greenough

Jemima Frances Gregory

Kahu Terrence Griffin

Callum Owen Haisman

Idrees Hamid

Artemis Isabella Rose Marie Hingston

Caitlin Adele Howorth

Taylor McKenzie Hunter

Charlotte Gabrielle James

Alexander James Kelly

Junghwan Kim

Megan Caitlin Koppen

Claudia Candice Lassiter

Georgina Rose Lawry

Sean Michael Lee

Hannah Margaret Long

Charles David Henry Macdonald

Sudarshan Malla

Krisharani Manimaran

Benjamin Craig Manning

Witch Hazel Dobson McAlister

Oliver James McGarry-Burford

Lochlan Jacob McKenzie

Cameron David Allan McRobbie

Maria Ana Mita-Stephens

Nur Liyana Binti Mohamed Aris

Marcus Joseph Moody

Daniel George Edward Soliman Nashed

Ella Sophie Nicholls

Caitlyn Mae O'Rourke

Nina Charlotte Parker

Alita Jean Penner

Jacob Robert Pilgrim

Nicholas Craig Plim

Daniel Joshua Regan

Muhammad Akmal Hakim bin Rozliaiani

Rosa May Shaw

Bethany Carole Simpson

Olivia Sirisomphone

Liam Hamish Sluiter

Amber Grace Smallridge

Xiaojiang Song

Adam Fu-Kai Stedman

Hannah Violet Stow

Niamh Barrington Stratton

Thomas James Sunderland

Haoyue Tan

Lily Rose Taylor

Gabrielle Ceri Thomas

Kalan Arama Thomas

Alvssa Florence Thompson

Viliami Tavake-Fai'ana Tohi

James Conrad Suico Unabia

Ruifu Wang

Wenkun Wang

Gemma Margaret Webb

Tarras Regan Weir

Bailey Paige Westrupp

Iacob Samuel Wilkinson

Grace Hannah Williams

Amber Ellen Willis

Zara Willows

Amy Vanessa Woermann

Jessica Toni Wood

Tao Wu

Isabella Selene Zammit

#### Bachelor of Data Science

Grace Tumanako Maihi Cleland-Pottie

George Fredrick Smith-Kolff

Moses Bernard Cabildo Velano

#### Master of Audiology with Distinction

Gemma Louise Anderson

Kira Ann Louise Corbeau

William Zi-Qiang Lee

Xu Liu

Tanya Marie Neame

Stephanie Anna Grace Nuysink

Maya Isobel Panckhurst

Alina Prasai

Sahana Sharma

Hanke Zhong

#### Master of Audiology with Merit

Kea Anne Braund

Jinjin Li

Huimin Ni

#### Bachelor of Speech and Language Pathology with Second Class Honours (Division One)

Hannah Margaret Rose Newell

### Musical performance midway through the presentation of graduates

Please remain seated. No entry to, or exit from, the hall during this performance.

#### **UC Business School**

Executive Dean: Professor P. Ballantine

#### Master of Commerce with Merit

Jenna Simoné Elston, in Marketing Jemesa Clarke Landers, in Economics Lance Knyvett Woods, in Management

#### Master of Commerce

Krysta Angela Wills, in Management

#### Master of Applied Finance and **Economics with Distinction**

Sam James Lind

#### Master of Applied Finance and Economics

Kai Leung Li

Juliana Leima Malasikoto

Maitreyee Anant Mhatre

Ngoc Anh Nguyen

Uatifoti Saofai

#### Master of Business Administration with Distinction

Kieran James Erasmuson

Masayuki Ito

#### Master of Business Administration

Meng Yuan Qin

George David Williams

#### Master of Business with Distinction

Phimchanok Boonphosiri, in Marketing

Jemma Joanna Charteris, in Management

On Kok Leung, in Marketing

Leilliane Edan Whiteley Phillips, in Financial

Management

#### Master of Business with Merit and Bachelor of Criminal Justice

Sasha Grace Norris, in Marketing

#### Master of Business with Merit

Maddison May McConnell, in Financial Management

Olivia Rose Powell, in Marketing

Sai Krupa Rajamani, in Financial Management Nadya Romanenta, in Financial Management

Chutima Sapsuwan, in Marketing Lohitya Sethuraman, in Management James Keith Walton, in Management

Yang Yao, in Marketing

#### Master of Business

Tegar Nuril Islamy, in Marketing

XuYan Liu, in Management

Kalameli Oloa Makalio Tu'ulua, in Management Raja Ahmad Ismail Bin Raja Azman, in Financial

Management

Weiyu Wang, in Management

Yi Yang, in Marketing

Yideng Zhang, in Management

Rui Zhu, in Management

#### Master of Business Information Systems with Distinction

Wai Si Cheong

Duc Viet Doan

Shuan Hong

Anna Soboleva

Ashitha Sreeprakash

Thomas Oscar Stickings

Mepham Zangmo

#### Master of Business Information Systems with Merit

Yiqian Dong

Pranav Jaya Prakash

Paing Khant

Kavya Maaraboina

Vo Xuan An Nguyen

Nur Farah Binti Radzali

Francisco Paolo Llantada Salandanan

#### Master of Professional Accounting with Distinction

Kun Deng

Feihong Sun

#### Master of Professional Accounting with Merit

Jieli Guo

Wenjing He

Kanokporn Tangthamvanich

#### **Master of Professional Accounting**

Ziqing Liu

Xiaohua Wei

### Bachelor of Commerce with First Class Honours

Benjamin William Johnston

### Postgraduate Diploma in Business with Distinction

Oiong Wu

### Postgraduate Diploma in Business with Merit

Tiziana Baldini

Alexandra Margaret MacLeod-Watts

#### Postgraduate Diploma in Business Administration with Distinction and Postgraduate Certificate in Strategic Leadership

David Richard Raven Wood

#### Postgraduate Diploma in Business Administration with Distinction

David Bruce Rowland Proud

### Postgraduate Diploma in Business Information Systems

Thilini Pasan Madhubhashini Panapitiya Panapitiya Kankanamalage

### Postgraduate Diploma in Information Systems and Technology

Nancy Arora

Taehyung Yook

### Bachelor of Commerce and Diploma in Languages

William John Murray

#### Bachelor of Commerce

Sarah Farisya Binti Abdul Razak

Nurin Ainna Binti Abdullah

Sarah Fahad A Aladwani

Ahudha Hamza Ali

Nurwajihah Auni Binti Alias

Joshua Douglas Allcock

Elliott Laurence Andrews

Alya Irdina Binti Anuar

Kurtis Jack Tane Arlidge

Nur Amalina Binti Azharuddin

Aisvah Agila Binti Azman

Nur Alia Ainisa Binti Azman

Reuben Patrick Bannon

Intan Nurasyiqin Binti Fauzi

Hanisah Binti Ismail Fahmi

Nurul Aisyah Binti Mohd Fauzi Mei Imura

Damien Alexandre Bolliger Asmaa Binti Izman Matthew David Cairns Joseph Richard Jagger Louise Angelo Solivar Calsado Madihah Binti Jamian

Bridie Gabites Cameron Hanyu Jin

Madison Kate Johnson Wing Yan Chan

Jessie Chen Khairun Afigah Binti Khairul Azam Zusti

Isabella Rose Christie Dongyeon Kim Emily Jane Clark Taisei Koganezawa Tyler John Clink Hikari Richard Kono Ethan James Cogle Tessen Kumagae

Cameron Trevor Collins Thomas Graham Lambie

Billy Rodney Cook Connor James Menzies Langworthy

Samuel lack Coombe Ethan James Law Olive Harriet Cornwall Tiana Jiunn Li Ling

Mason Robert Pablo Coultas Ho Chu Lo

Hayden John Crocker Joshua Ryan Lovatt Alexander James Love Ritika Dangwal

Pixie Fve Davies Не Ма

Irish Nicole Marquez De Jesus Callum George Mackay-Peters

Matthew John Dennehy Reina Makihara Theo Edward Manji Ruby Hania Sonja Tiscenko Dingle Lucchio Huacan Doddington Harrison Mills Marsh

Patrick Doughty Sofiva Binti Mohamad Nizam Erwan Mar Bin Dzarin Mar Milia Fatihah Binti Mohd Mazalee

Izaak Iohn Edwards Connor-Stuart Munro Nicole Mae Elkhoudt Nur Irdina Binti Nasir Ahmad Nazrul Bin Nazmi Arnie Pangilinan Ferreras

Aimee Jemma Fields Iros Neupane

Iacob William Garnett Elliot Francis Neville Merhawi Tekhlai Gebremichael Adrian Koh Yuan Ngu

Angela Mae Gabrielle Abuel Guda Haruka Oya

Angus Paratene Henare Rochelle Milla Palileo Harsh Vineshkumar Patel Ruijie Huang

**Jackson Robert Hunter** Felicity Marama Emerald Pearce Yige Peng

Solomon Kane Pomare-Edwards

Jade Elizabeth Pope

Thanchanok Rains

Raja Ahmad Eidris Bin Raja Azman

Keerthi Hassan Ravindran

Ruby Sofia de Gruchy Rimmer

Muhammad Zakwan Bin Roslan

Nazifah Alia Binti Rosli

Benjamin Russell

Amrit Sapkota

Syaza Iffah Sazali

Nicholas Samuel Schneideman

William Jonathan Schneideman

Aine Sofea Binti Shaiful

Litao Shen Yuhao Shi

Alessa Aishah Binti Sidek

Amber Gael Speechly

Isabella Mae Spencer

Alexander Kieran Strickland

Muhammad Sufi Bin Sulaiman

Mikee Gaille Miranda Tan

Ashlea Tavla Thomson

Mia Ngawaiata Tietjens

Lavender Rose Turner

Samuel Oliver Wakelin

Mikayla Bailey Walshe

Jung-he Wang

Kengqi Wang

Ziyu Wang

John William Wells

Jordan Clyde Welsford

Xianqing Weng

Jared Hayden Wong

Zheng Wu

Karen Yamagata

Biyao Yang

Nur Fateehah Binti Zaili

Jingwen Zhao

### **Faculty of Health**

Executive Dean: Associate Professor C. Andrew

#### Master of Health Sciences Professional Practice with Distinction

Sharon Maria Bennett, in Health Behaviour Change

Avneeta Chand, in Health Leadership and

Management

Caitlin Briarna McCoy, in Nursing

Samantha Allyson Espiritu Naui, in Nursing

Juliet Cate O'Connell, in Nursing

Caitlin Madison Sears, in Health and

Community

Rhianne Jodie Sharples, in Nursing

Felicity Caroline Blair van der Pol, in Nursing

Claire Elizabeth Morrison Watson, in Nursing

#### Master of Health Sciences Professional Practice with Merit

Andrea Jin Yen Chou, in Nursing

Sandra Elizabeth Cox, in Nursing

Niloufar Darkipour, in Health Behaviour Change

Aleksia Jayne Drain, in Nursing

Olivia Rose Edwards, in Nursing

Ge Gao, in Nursing

Kendall Elizabeth Lister, in Nursing

Gabriella Avril McKellar, in Nursing

Sumin Park, in Nursing

Colin Woodhouse, in Palliative Care

#### Master of Health Sciences **Professional Practice**

Trudy Yitong Liu Cai, in Nursing Leo Agi Chime, in Nursing Huxiang Lan, in Nursing Mena Toma-Asiasiau, in Nursing Jasmine Margaret Trevarton, in Nursing

Wesley Guy Van Gelderen, in Nursing Melissa Anne Young, in Nursing

Postgraduate Diploma in Child and Family Psychology

Brenna Kate Russell

#### Postgraduate Diploma in Health Sciences

Adesanya Chris Adeleye Deepika Karthikeyan Femi Navas Manikathodiyil

#### **Postgraduate Certificate** in Health Sciences

Kimberlev Mary Rhode

#### **Bachelor of Health Sciences**

Zhane Alphea Parawan Axinto Meg Isobella Terese Darby

Atarau Jean Doig

Jane Rachel Douglas

Kelsea Herani Elkington

Amy Victoria Isabella Flood

Ellie Louise Hiscock

Jiexin Li

Olivia Mae Overend

#### **Bachelor of Sport Coaching**

Andrew James Guillen Ruby Maraea Hikuroa Molly Jean Judson Tom Alexander Kean Camryn Lawrence Mabey Forbes Lachlan Isaac McCully Mustafa Rafyee Jennifer Megan Rhodes

Rhys Christopher Watson-Webb

#### **Graduation Address**

Harrison Paul Roth

Delivered by Devin Davies, BSc (Cant)

#### Close of proceedings

Delivered by te Tumu Whakarae Vice-Chancellor

When announced, please stand and join in singing Gaudeamus (words inside back cover).

Please remain standing until the academic procession and graduates have left the auditorium.

Recessional Organ Music: Graduation Festival March (composed by Scotson-Clark).



### Ngā Hātepe | Order of Proceedings

Tūrei 3 Hepetema, Hui Whakapūmau i te ahiahi Tuesday 3 September, Afternoon Celebration

#### At approximately 1.45pm the piper will herald the entry of the graduates

#### Whakatau (Welcome)

### Opening greeting by te Tumu Kaunihera

Please stand and join in singing E Ihowā Atua - God Defend New Zealand.

Te Tumu Kaunihera | Chancellor of Te Whare Wānanga o Waitaha | University of Canterbury, Honourable Amy Adams will open the proceedings.

### Te Whakawhiwhi Tāura ki te Tumu Kaunihera Presentation of Graduates to the Chancellor

#### **Doctoral Degrees**

Associate Dean: Professor B. McNeill

**Doctor of Laws** 

Rex John Ahdar

**Doctor of Education** 

Dean Donald James McKenzie

Megan Frances Taylor

Doctor of Philosophy and Diploma in Global Humanitarian Engineering

Madeline Frances Furness, in Civil Engineering

**Doctor of Philosophy** 

Parash Acharya, in Electrical and Electronic Engineering

María Isabel Andrade Beltrán, in Mechanical Engineering

Young Sil Bae, in Education

Amandine Laure Bosserelle, in Civil Engineering

Marcus James Coll, in Political Science and

International Relations

Sian Alexia Doole, in English

Samuel James Edens, in Chemical and Process Engineering

Rebecca Helene Kehela Emanuel, in Mechanical Engineering

Kathryn Tegan Ford, in Chemical and Process Engineering

Fiona Ann Gilmore, in Education

Lixian Guo, in Mechanical Engineering

Honey Gupta, in Mechanical Engineering

Alexander Reynell Heenan, in Chemical and Process Engineering

John Tamunosaki Iminabo, in Chemical and

Process Engineering

Misel Iminabo, in Chemical and Process

Engineering

Malcolm Neil Irwin, in Sociology

Aditya Avinash Joshi, in Mechanical Engineering

Gholamreza Khorasani, in Transportation

Engineering

Seol-Jong Kim, in Forestry and Biological

Sciences

Laiseni Fanon Charisma Liavaa, in Pacific

Studies

Yang Liu, in Education

Emma Frances Maurice, in Māori and

Indigenous Studies

Lance Jules McBride, in Philosophy

Alexander Declan McHugh, in Bioengineering

and Mechanical Engineering

Tirth Dineshbhai Patel, in Civil Engineering

Yuanjun Pei, in Product Design

Chevy James Rendell, in English

William Han Zhen Sloane, in Electrical and

Electronic Engineering

Shaurya Sood, in Civil Engineering

Karlyn Zezi Ann Tekulu, in Pacific Studies

Tohoa Lita Tetini Timoteo Tetini, in

Anthropology

Eurica Thapa, in Education

Manu Thundathil, in Product Design

Syed Waheed Ul Hasan, in Chemical and Process

Engineering

#### **Faculty of Arts**

Executive Dean: Professor K. Watson

#### Master of Arts (Thesis) with Distinction

Chelsea Natasha Avery, in Psychology Meg Keelin Reeves Elliott, in Psychology Tamara Maria Syme, in Psychology Georgia Rose Marie Iris Wells, in Child and Family Psychology

#### Master of Arts (Thesis) with Merit

Joanne Leigh Mason-Sievers, in Anthropology

Ana Marie Munro, in Sociology

### Master of Arts (180 points) with Distinction

Communication
Jacob Andrew Poff, in Philosophy
Sarona Janelle Stirling, in Japanese

Sophie Maree Hill, in Media and

#### Master of Arts (180 points) with Merit

Regina Evelyn Rhoda Fisher Van Der Veen Dilloway, in Classics

### Master of Applied Translation and Interpreting with Distinction

Urupikia Apryle Moaho Minhinnick Wladimir Esteban Padilla Silva Robert James Pugh Soon Hwa Song

### Master of International Relations and Diplomacy with Merit

Jonty Michael Curry

### Master of International Relations and Diplomacy

K Mudiyanselage Geethanjali Premila Kumari Tennakoon

#### Master of Linguistics with Distinction

Cecilia Candelaria Gomez Echenique

#### Master of Māori and Indigenous Leadership with Distinction

Brent Clinton Tohiariki

### Master of Policy and Governance with Distinction

Larissa Grace Middleton

#### Master of Policy and Governance

Hamza Altaf Qureshi

#### Master of Writing with Distinction, Bachelor of Music and Bachelor of Arts

Rebecca Ashley Harris

#### Master of Writing with Distinction

Angela Lyon Armstrong
Anna Catherine Bishop
Madeleine Alice Howard
Fiona Robin Mackenzie
Catherine Isobel McCarthy

#### Bachelor of Arts with First Class Honours and Bachelor of Arts

Alice Samantha Cooper

#### **Bachelor of Arts with First Class Honours**

Tessa Moana Boraston Belinda Anne van Noorden

### Bachelor of Arts with Second Class Honours (Division One)

Jessica Karen Klausen

#### Postgraduate Diploma in Arts with Merit

Jueun Im

Ainul Fatini Syakirah Mohammad Haida

#### Postgraduate Diploma in Art Curatorship with Distinction

Kirsten MacFarlane

### Postgraduate Diploma in Translation and Interpreting with Distinction

Hiroki William Nishioka

### Postgraduate Certificate in Māori and Indigenous Leadership

David Apirana Douglas Crawford

Anahera Renee Merito

### Postgraduate Certificate in Translation and Interpreting with Distinction

Waad Alsaid Bingdi He Xiaochen Luo

Oian Xie

### Postgraduate Certificate in Translation and Interpreting with Merit

Hongmin Chen Rongwei Lu

#### Postgraduate Certificate in Translation and Interpreting

Sela Manoa

#### **Graduate Diploma in Arts**

Trevor Richard Nesbit

#### Conjoint Bachelor of Arts and Commerce

Maia Mary Evelyn Brown

#### Bachelor of Arts and Certificates in Arts

Nicole Maria Niles

### Bachelor of Arts and Bachelor of Communication

Jeb Roman Lytollis

#### Bachelor of Arts

Eliza Eugenie Adriaens

Abdifitah Ali Ahmed

Raichel Louise Mortega Alonso-Green

Christopher Garth Atkinson Flynn Alexander Barlass Georgina Mary Beaven

Shaylah Jennifer Carmody

Gideon Yu Hum Chan

Nathan Childs Kayla Jean Clarke Mitchell Graham Coles

Maria Cooper

Samantha Louise Darrell Susan Elizabeth D'Ath Karen Rachael Davidson

James John Davies

Samantha Leigh Dempsey Iahreese Isaac Dowdle

Holly Hannah Renee Dowler

Georgia Hayley Easter

Teresa Frances Edge Hannah Jane Ferguson Eleanor Judith Field

Austin Scott Perriton Forrester Abigail Jacquline Frickleton Nicholas Michael Fuller

Aki Eleanor Gillespie

Saskia Terina Gray

Natalie Rose Halder

Maya Sofia Hogan

Bridget-Anne Helena Horgan

Jacyntha Joseph Michael

Kartikey

Alex Olivia Lockett

Shamila Arita Lysa

May Mabonga

Thomas George Masson McHutchison

Bryant James McIntyre

Keagan Vaughan McLean

Max Giles Mitchell

Michael Hemi Nicol

Fatma Wanjiku Nyaga

Rion Ormandy

Isabelle Florence Painter

Laura Emma Powell

Joshua William Henderson Pugh

Briar Jennifer Reed

Ronjay Marini Ayag Reforial

Manakore Putiputi Rickus-Graham

Jessie Ellen Robb

Haydn Michael Rose

**Emily Charlotte Sharp** 

Siena Jane Shotwell

Sophie Anne Rose Smith

**Emily Kate Speirs** 

Joanna Stacey Squires

Griffin Nathaniel Swensson

Francesca Saxby Rose Teague-Wytenburg

Okirano Tilaia

Emma Rose Ward

Olivia Jayne Welsh

Lily Charlotte Natalie Wenmoth

Leah Brooke Grant White

Charlotte Daisy Wilkinson

Stephanie Jane Williams-Holmes

Annabelle Grace Williamson

Ellie Eve Withers

Mae Elizabeth Woods

Kanwal Yousaf

#### Bachelor of Social and Environmental Sustainability

Sophie Helen May McKenzie

Isabella Alice Anne Morrow

#### Diploma in Languages

Eric Anton Kleiner

## Certificate in Arts and Certificate in Education and Learning

Zoe Grace Gilling

### Master of Strategic Communication with Distinction

Ella Rose Bond

Shenyl Grazel Salvador Gueco

Neisha Joan Livermore

Luke Dylan McDonald

Eloise Kathleen Pengelly

Cassia Bernadine ten Hove

Divya Vaidyanathan

### Master of Strategic Communication with Merit

Megan Elizabeth Roberts

Shiori Yoshimura

#### **Bachelor of Communication**

Alan Michael Hammersley

Georgia Louise Harvey

Max Henry Killoh

Kei Minamiyama

Paige Joy O'Brien

Brigham MacDonald Te Ra Riwai-Couch

Matthew Hamish Welham

#### Master of Fine Arts with Distinction

Lewis John Brogan Robertson

#### Bachelor of Fine Arts with First Class Honours

Quanxin Zhen

### Bachelor of Fine Arts with Second Class Honours (Division Two)

Fergus Antony Duncan

#### Master of Music

Matthew Graeme Harris

#### **Bachelor of Music**

Gabriel William Temple Baird

#### **Faculty of Education**

Executive Dean: Professor J. Nuttall

#### Master of Education (Thesis) with Distinction and Postgraduate Diploma in Education with Distinction

Hanako Tomita, in Teaching and Learning Languages

#### Master of Education with Distinction

Robert Gordon Joy, in Curriculum and Pedagogy Samantha Rachel Stevenson, in Leadership

#### Master of Education with Merit

Nicole Deniese Forster, in Inclusive and Special Education

Yanan Li

Hoa Thi Thanh Phan, in Literacy

Yingdan Ren

#### Master of Education

Xinchen Zhang

### Master of Education (180 points) with Distinction

Safra Maree Bacchus, in Literacy

Jocelyn Louise Kidd

Sarah Jane Lester, in Teaching and Learning Languages

William Daniel Viggers, in Digital Education Futures

### Master of Education (180 points) with Merit

Emma Kate Davison, in Leadership

Rebecca Anne de Waal, in Digital Education

Bonita Elizabeth Fowler, in Inclusive and Special Education

#### Master of Education (180 points)

Angela Clare Martin, in Leadership

Yan Wang, in Teaching and Learning Languages

#### Master of Hōaka Pounamu | Māori Bilingual and Immersion Teaching and Learning with Merit

Latu Isimeeli Lolohea

#### Master of Teaching and Learning with Distinction

Ben Michael O'Sullivan, in Secondary

#### Master of Teaching and Learning with Merit

Matthew Joseph Praat, in Primary

### Master of Teaching English to Speakers of Other Languages with Distinction

Simon Leslie Lloyd Quynh Nhu Nguyen

### Master of Teaching English to Speakers of Other Languages with Merit

Yusha Shang Wengi Zhu

Yidi Wang

#### Postgraduate Diploma in Education with Distinction

Aleta Mohini Chowfin

#### Postgraduate Diploma in Education

Seema Sachdeva

### Postgraduate Diploma in Teaching and Learning with Distinction

Mikayla Olivia Gardiner

#### Postgraduate Diploma in Teaching and Learning

Tamara Rose Sikuri

### Postgraduate Certificate in Teaching English to Speakers of Other Languages

Layla Elizabeth Moutrib

#### Graduate Diploma in Teaching and Learning

Samuel Anthony Ermerins Joshua Martyn Hardy Nathalie Simone Lacaze Emily Louise Marck Millie Roz Thompson

### Graduate Diploma in Teaching and Learning (Early Childhood)

Xiao Zhang

#### Bachelor of Teaching and Learning (Early Childhood)

Renee Emily Hair Valery Ee Rou Ngu Amber Ellen Smith

#### Bachelor of Teaching and Learning (Primary)

Rebecca Marie Atkinson
Martha Elisabeth Cooke
Sophie Pauline Davis
Sorcha Emily Ellison-Jones
Rebekah Margaret Holland
David Roland John Keehan
Ayla Jane Preston
Lucy Rose Southorn
Beverley Wing

#### Bachelor of Youth and Community Leadership

Caitlin Nicosha Briggs Imogen Leenders

### Musical performance midway through the presentation of graduates

Please remain seated. No entry to, or exit from, the hall during this performance.

### **Faculty of Engineering**

Executive Dean: Professor S. Sinha

#### Master of Architectural Engineering with Merit

Sayali Rane, in Integrated Building Design Paola Andrea Rojas Saavedra, in Integrated Building Design

#### **Master of Architectural Engineering**

Aliasgar Hasnain Lokhandwala, in Integrated Building Design

#### Master of Civil Engineering with Merit

Margaret Abraham

Sanjeevsankar Jayanandan, in Construction Management

Vishwajeeth Robin Kalathil, in Construction Management

Parameswaran Kamalanathan

Sairaj Avinash Karmalkar

Qigang Liu

Tanmaykumar Hasmukhbhai Patel

Jorge Leonardo Ramirez Rodriguez, in Construction Management

#### **Master of Civil Engineering**

Ramya Ganapathysundar Viswanathan, in Construction Management

Sharul Jose

Shannon Pius Joseph, in Earthquake Engineering

Pranvil Vion Menezes

Samrudhi Shet

Amarthya Kurkimutt Shivaprakash

Senai Tadios Fesshaye

Magi Thomas, in Construction Management

#### Master of Engineering with Distinction

Piers Joseph Walter Landon-Lane, in Electrical and Electronic Engineering

Gordon Alexander Lay, in Mechanical Engineering

Connor Sheridan McKay, in Chemical and Process Engineering

Kakati Te Kakakura Royal, in Civil Engineering

#### Master of Engineering with Merit

Mackenzie Graeme Caughey, in Mechanical Engineering

James Thomas Sinclair, in Bioengineering

#### Master of Engineering and Postgraduate Certificate in Engineering

Aston Thomas Taylor, in Electrical and Electronic Engineering

#### Master of Engineering Studies with Merit

Nitin Bhaskar, in Fire Engineering Zhuofu Cai, in Fire Engineering

Tara Susanna Fernandez-Ritchie, in Fire Engineering

#### **Master of Engineering Studies**

Juan Sebastian Ararat Perez, in Renewable Energy

Ashitosh Rajesh Varne, in Mechanical Engineering

Yang Zhang, in Fire Engineering

### Master of Mathematical Sciences with Merit

Joseph Harrison Kent, in Mathematics

#### Master of Human Interface Technology with Distinction

Felipe Andres Figueroa Flores

Alexander Kim Hobson

Ren Ren

Amali Udayangani Seneviratne

Anna Treffer

#### Master of Human Interface Technology with Merit

David John Hardie Turton

Wenliang Yin

Yue Zhao

#### Bachelor of Engineering with First Class Honours and Bachelor of Science

John-Paul Robert Williamson Lay

### Bachelor of Engineering with First Class Honours

Samantha Rose Couper

Kate Joy Edwards

Michael James Winsley

# Bachelor of Engineering with Second Class Honours (Division One)

Alexandra Dawn Henderson

David Ni

Charlotte Vida Louise Osborn

Jayden James Pooley

Jemma Elisabeth Walker-Arnet

Eva Rose Wiles

### Bachelor of Engineering with Second Class Honours (Division Two)

Okoko Storm Anainga

James Edward Bai

Dean William Banks

Boyu Feng

Jarod Luke Fisher Alex Scott Fourie

Jacob Telfer Henry Franklin

Thomas Linton King

Luke Lafferty

Joshua William Miller

Ishwaar Raveenthar

Daniel Ernest Rickerby

Jeremy Stephen Roberts

Emily Laura Deborah St John

Finn Callum Stokes

Junkeng Su

Dafa Mostafa Saleh Sun

Alexander William Sutcliffe

Laylin Van der Merwe

Lucas David Wheadon

#### Bachelor of Engineering with Third Class Honours

Ryan Seamus John Bain

Matthew Allison Bayley

Louis Cameron Bishop

Linda Henrietta Bos

Xiaoran Dong

Benjamin Colin Freeman

Shou Yick Ho

Jay Jay Huang

Xingyu Ji

Sarah Lee

Yuxiao Liu

Lucas McTavish

Wasim Akram Taj

Tabokai Douglas Tausi

Roger Lo-Wei Tsao

Caleb Sunia Vuli

#### **Bachelor of Engineering**

Arcel Joseph Cabanday Seville

#### **Bachelor of Forestry Science**

Elijah Edward Goodkind

Keenan Jason Koks

Max Costley Paku

#### Master of Product Design with Merit

Andre Paul Fremaux

Kate Leah Hutchinson

### Conjoint Bachelor of Product Design and Science

Mia Mignon Swart

#### **Bachelor of Product Design**

Cameron John Bergin

Oliver William Cochran

Nathan John Edwards

Leander Maximilian Hach

William James Wall Harvey

Iosh Kearton Holmes

Xu Huang

Anna Yao Jiang

Kiana Emi King-Te Amohanga

Xinwei Li

Haoxuan Lin

Ashley Hannah Lowe

Sarah Aisha Stewart

Lachlan James Welch

**Jacob Samuel Woods** 

### **Faculty of Law**

Executive Dean: Professor P. Butler

#### Master of Laws with First Class Honours

Katy Joy Wallace

## Master of Laws with Second Class Honours (Division One)

Liam Austin Cartwright

### Master of Laws (International Law and Politics) with First Class Honours

Maria Victoria Enriquez Martinez

Pratish Raj

#### Bachelor of Laws with First Class Honours and Bachelor of Arts

Megan Daisy Blackwood

### Bachelor of Laws with First Class Honours and Bachelor of Criminal Justice

Stella Rosemarie Smith

#### Bachelor of Laws with First Class Honours

Grace Margaret Hooper

### Bachelor of Laws, Bachelor of Arts and Certificate in Science

Annelise Margaret White

#### Bachelor of Laws and Bachelor of Arts

Melanie Joy Aitken

Maggie Josephine Davies

Emily Rose Gunn

Alistair Geoffrey Keay

Isabella Dinah Grace Meikle

Isabella Grace Peacock-Price

Katrina Elizabeth Riley

Lily Amy Sawyer

Jack David Walton

### Bachelor of Laws and Bachelor of Criminal Justice

Logan Joshua Fewer Madison Georgia Fewer

Jessica Ann Forrest

Abby Frances McKinstry Grace Kendall Mellish Robert John Methven

### Bachelor of Laws and Certificate in Criminal Justice

Lily Alexandra Harbidge

#### Bachelor of Laws and Bachelor of Commerce

Georgia Catherine Bason

Oliver Stanley Brew Wilfred James Griffiths Jeremy Murray Hanrahan

Lena Hochbruegge Benjamin John Jackson Yassmin Maria Kharoubi

Madina Miyakhel

Hamish Antony Procter Johnny Samuel Sparks

### Bachelor of Laws and Bachelor of Communication

Spencer Michael Hayes

#### Bachelor of Laws and Bachelor of Science

Nellie Tamzin Molloy Evison Isabella Louise Simons

#### **Bachelor of Laws**

Samuel James Alexander Blackmore

Andrew John Blay

Nathan Michael Collins

Tamara Huirangi Crequer

Majenta Rose Dale Edmonds

Adam Anthony Drake Danielle Jade Etches

Francesca Katelyn Fisher

Kiranjeet Kaur Gill

Dean Paul Leslie Harris Georgia Ellen Hintz

Hayley Grace Anne Hutchinson

Amy Bernice Lassche Jones

Eden Kelly-Marie Kenny

Prue Marie Lange

Hannah Alison Lavoie

Mimi Rose Dorothy Le Lievre

Rogan Daniel McNamara Benjamin Thomas Myers

Ra Kaleb Neilsford-Jones

Laura Helen Newth

Angus Guang Jie Oh

Annaliese Fleur Reynolds

Thomas Henry Russ

Nicholas Sebastian Slegers

Louise Heath-Anderson Te Hiko

Kristiana Elisabeth Wilson

Jeremy Alan Wright

Nikita Nicole Yates

#### Master of Criminal Justice

Rutvi Bhardwaj

Caitlin Margaret Gay

#### **Bachelor of Criminal Justice**

Reece Akuhata

**Emily Cara Burrows** 

Shannon Jordan Dobson

Isabella Grace Margaret Field

Zara Grace Flint

Madison Belle Griffiths

Charlotte Rachel Haines

Shiloh Jake David Henderson

Paige Laylita Hookham

**Daniel Zachary Howes** 

Tanisha Monique Letia Ieti

Eun-Jin Kim

Charis Rose Knowles

Andrea Jane Mahon

Charlotte Mckenzie Martin

Lucy Cate McGregor

Claire Bridget Melrose

Sanah Mohammadi

Danielle Angel Nicholson

Alexandra Judith Petrini

**Emily Rose Pickering** 

Zara Kate Frances Stankovich

Mackenzie Brie Stewart-Martin

Taina Qagaidua Waga Vakamacawai

Victoria Joy Williams-Freeman

Caitlin Joy Wright

#### **Certificate in Criminal Justice**

W M Pavitra Sasikala Madubashini Bowatte

Natalia Jane Clarke

Katrina Joy Duncan

#### **Graduation Address**

Delivered by Eli Matthewson, BA (Cant)

#### Close of proceedings

Delivered by te Tumu Whakarae Vice-Chancellor

When announced, please stand and join in singing *Gaudeamus* (words inside back cover).

Please remain standing until the academic procession and graduates have left the auditorium.

Recessional Organ Music: *Graduation Festival March* (composed by Scotson-Clark).





### Thesis descriptions

#### Parash Acharya

Coordinated Voltage Control Strategy in a Low Voltage Distribution Network

With various Distributed Energy Resources (DERs) like solar panels connected at the individual households, there is a two-way power flow, which will create more challenges in maintaining the power quality. This research focussed on developing a coordinated voltage control strategy through various DERs within the distribution networks to maintain the consumer level voltage within acceptable limits (±6% of 230 V in New Zealand).

#### Rex John Ahdar

"Render to Cæsar the things that are Cæsar's, and to God the things that are God's" (Mark 12:17). This research is in the field of Law and Religion. The research was undertaken from a Christian worldview. a perspective investigated in "Worlds Colliding: Conservative Christians and the Law". A particular notable contribution is "Religious Freedom in the Liberal State" (Oxford University Press), the leading work in the British Commonwealth on religious liberty. Other contributions include an edited collections on God and Government, Shari'a in the West and Research Handbook on Law and Religion.

#### Heba Gaber Mahmoud Sayed Ahmed

Sustainability reporting assurance practice in New Zealand: An accountability enabler or a managerial supplement?

This thesis aims to provide a comprehensive understanding of sustainability assurance practice in New Zealand. The study employed a qualitative approach and data was collected from 35 semi-structured interviews. The study finds that the assurance practice exists in New Zealand in the form of a weak model: an internal management practice, which fails to fulfil the promise of stakeholder accountability due to the existence of managerial and professional capture. This is the first study that considers the three parties involved in the assurance engagement and the findings will prove beneficial to practitioners, standard setters, and policymakers.

#### **Etheline Akazong Wonanke**

Inhibiting menaguinone biosynthesis protein

The search for potent drugs that could alleviate bacteria infection is crucial. Respiration is important for all living things, making the components involved in respiration interesting drug targets. The bacteria of interest in this study: Staphylococcus aureus (Sau) and Mycobacteria tuberculosis (Mtb), both use menaguinone synthesized via the classical pathway as the electron transporter in their electron transport chain. Some commerciallypurchased and collaborator-synthesized compounds were tested against an indispensable menaquinone biosynthesis protein, MenD<sub>Sau</sub>. These compounds along with additional collaborator-synthesized compounds targeting Mtb ATP synthase were tested against Sau, Mycobacteria smeamatis (in place of Mtb), Escherichia coli and Pseudomonas aeruginosa growth.

#### Jessica Allan

Investigating the feasibility of a supervised, personalised exercise programme, during the first 12-months of primary treatment, for people with early stage breast or colon cancer, in a Christchurch, New Zealand clinical setting

Despite evidence supporting the benefits of exercise for individuals with cancer, such programmes are not provided. This study explored the feasibility of a 12-week individualised exercise programme for individuals with early-stage breast or colon cancer in Christchurch, New Zealand. A multi-method study assessed recruitment, compliance, adherence, safety, dose response, and acceptability with qualitative feedback from participants and field diary analysed. Feasibility was demonstrated and no serious adverse events occurred. Participants reported emotional and physical health benefits along with programme acceptance. Recommendations include a community-based setting and a combined-exercise approach that is flexible to meet the needs of the individual.

#### Samantha Jane Alloo

Multimodal Intrinsic Speckle-Tracking: Complementary, Rapid, and High-Resolution X-ray Imaging

This research developed a novel X-ray imaging technique capable of generating three highresolution images, each of which captures unique and complementary information to provide a comprehensive understanding of the object that is imaged. This technique introduces a piece of sandpaper after the x-ray source and then tracks how the imaged object changes the speckles created by that sandpaper. A mathematical algorithm called "Multimodal Intrinsic Speckle-Tracking" is developed which recovers the three complementary images from images captured with the sandpaper. It is anticipated that this

research will allow speckle-based imaging to become a user-friendly method suitable for multiple applications.

#### Maria Isabel Andrade Beltran

A High-Granularity, Non-Invasive, and Low-Cost Method for Quantifying Panel Radiator Operation (Occupant Heating Behaviour) in Single-Occupant Office Spaces

Space heating accounts for 36% of building energy demand, largely met by district heating systems with panel radiators. Occupant behaviour significantly impacts heating energy use, highlighting the potential for reducing waste through behavioural changes. Current methods to quantify this behaviour are either inaccurate, intrusive or prohibitively expensive. The Radiator Heating and Temperature Measurement (RHTM) technique addresses these issues using two metrics: Time-at-Temperature Difference (TTD) and Cumulative Temperature Difference (CTD). A case study demonstrated the effectiveness of the method in capturing individual data on radiator use, enabling better assessments of energy consumption and facilitating the design of targeted energy-saving interventions.

#### Young Sil Bae

Mourning as an open-ended kin-making encounter: (Re)storying multispecies lives and deaths through Daoist philosophy and Haraway's ideas

Drawing from Haraway, Daoist philosophy, decolonising studies, affect theory, and feminist new materialist theories, this thesis engages with a sustained and thoughtful mourning practice and elaborates on what this mode of mourning practice teaches us about the rich and complex material-semiotic realities of interdependent multispecies lives and deaths on Earth. This multispecies autoethnographic

study inhabits the time and space of mourning as an ongoing and relational kin-making encounter (Haraway, 2008) where a more ethical and convivial mode of thinking and becoming with more-than-human kin may emerge.

#### Rebecca Rose Hazel Bodeker

Effects of Methamphetamine on Behavioural Measures of Impulsivity in Rats

This thesis investigated how rats would respond to methamphetamine in a novel behavioural task where conditions differed according to delay, probability, amount, or signal for reinforcement. Methamphetamine dose dependently reduced control over responding by the most salient contingency that changed across sessions, resulting in both reduced and increased impulsivity. The results of this research confirm that the procedure provides a viable measure of rapid choice acquisition in rats, as well as demonstrating that methamphetamine can reduce the influence of existing contingencies, which may provide insight into the seemingly incongruous behavioural choices of methamphetamine users.

#### **Amandine Laure Bosserelle**

'Sea-Level Rise Effects on Coastal Shallow Groundwater Dynamics in the Built Environment'.

From small coastal settlements to large cities, communities are exposed to both the direct and indirect consequences of climate-changeinduced sea-level rise. Above and below the ground surface, short- and long-term sealevel rise effects may cause extensive coastal damage. Groundwater flooding, a hydrological hazard results from the process of water table rise, where the groundwater surface intersects or goes above the land surface due to changing conditions. This research provides insights into the dynamics of coastal shallow groundwater,

urban monitoring networks, simulations of water table rise and the issues posed by shallow groundwater changes driven by sea-level rise on infrastructure assets.

#### Deborah Jane Bowen

Intergenerational Parenting and Wellbeing of Pacific Families in Aotearoa | New Zealand: A Strengths-based Quantitative Investigation

This study investigated the impact of time, culture, and immigration on intergenerational behaviours of Pacific mothers and children in Aotearoa New Zealand. Analysing longitudinal data from the Pacific Islands Families Study. it explored how parenting and local context influence behavioural development across three generations. Findings revealed that optimal maternal parenting practices had enduring positive associations with prosocial behaviours and self-perceived social competence. Additional social determinants highlighted the importance of agency and social support in reinforcing adaptive intergenerational parenting patterns. This underscores the critical role of culturally responsive support for primary caregivers in maintaining family wellbeing and improving population health equity.

#### Marcus James Coll

The Price of Peace: A Narrative Study of two Aotearoa New Zealand Civil Society Activists for Nuclear Disarmament

Using a narrative approach, this research explores the experiences of two individuals within a small grassroots non-governmental organisation, the Disarmament and Security Centre, run from their home in Christchurch. New Zealand. This husband-and-wife team formed a unique partnership: a music teacher turned peace campaigner, and a retired British Royal Navy Commander who once operated nuclear weapons. In advocating for nuclear disarmament, they gained significant influence at home, abroad, and at the United Nations. Through in-depth storytelling and audiovisual content, this study provides a more holistic, nuanced view of how activists shape and are shaped by the movements they lead.

#### Stephen John Compton

Mixing Live Sound Culture with Hearing Management

Audio engineers play a pivotal role in shaping live event experiences, impacting participant well-being, and overall event success. This study investigated live sound culture, examining the interplay between subjective, objective, and social factors in sound management. Through international and New Zealand surveys, Delphi studies, and action research, the project developed recommendations for improved personal and venue hearing management and audio-related practices. The findings aim to optimise the balance between artistic integrity, audience satisfaction, and safety, providing valuable insights for venues, events, musicians, audio engineers, other event participants, and future research in the field.

#### Ben Ryan Jack Crichton

Whitebait fishery effects on the population and trophic dynamics of kokopu

Understanding how harvesting alters species interactions, population stability, and community composition within freshwater ecosystems is crucial for obtaining a robust evaluation of fishery sustainability. This research investigated how fishing of migratory post-larvae ('whitebait') of three endemic kōkopu species affects population dynamics and broader freshwater fish communities. Results identified the significant role of densitydependent interactions, such as competition and fishing-influenced whitebait availability, in shaping kokopu demographics and local food

webs. This thesis highlights the importance of adopting ecosystem-based fisheries management approaches that incorporate intricate predator-prey and density-dependent interactions and the requirements of all life stages to ensure population persistence.

#### Scott Walter Danielson

It takes a village: Three ways your community can influence your moral thinking

Does moral goodness come from within, or from those around us? Humans are social creatures and our minds are built for affiliating with others, yet we do morally wrong things. Why? This thesis demonstrates three ways that our prosocial minds can lead us to doing bad. Large cities make people feel invisible and can lead people to exploit others more so than a small rural town, groups with clear rivals can construe antisocial actions as good if it is directed at the rival, and bias about wartime enemies can lead people to endorse airstrikes that harm civilians.

#### Andrew Neil Davidson

Feature-Based and Deep Learning Segmentation of RNAscope Stained Breast Cancer Tissues Using Whole Slide Images

RNAscope staining of breast cancer tissue allows pathologists to deduce genetic characteristics of the cancer by inspection at the microscopic level. However, manually analysing the tissue samples is time consuming and there is a lack of verified supporting methods for quantification. This thesis covers the development of methods to annotate and process image data from whole slide images of breast cancer tissue, and then to accurately segment and quantify the RNAscope dots from this data using texture features and deep learning techniques. These methods were able to produce accurate, consistent results which could lead to better diagnosis of patients.

#### **James Sandwell Davies**

Trapped in an Elevator: Structure and Function of the Tripartite ATP-Independent Periplasmic Transporter Family.

This thesis provides a structural basis to better understand the Tripartite ATP-independent Periplasmic (TRAP) transporter family. TRAP transporters are found in bacteria and archaea, where they function as uptake systems for organic acids. Here, I present two of the first cryo-EM structures of TRAPs. Alongside functional data, it is proposed that TRAPs operate via a new "elevator-with-an-operator" mechanism, where a substrate-binding protein is an operator that 'presses' the button of the elevator. As TRAPs are not found in humans and have established links to bacterial colonisation and virulence, these data provide a starting point for the rational design of therapeutics.

#### Jaime Elizabeth Delano

The past, present, and future of coseismic coastal deformation in Aotearoa New Zealand

Earthquakes can generate coseismic uplift and subsidence that changes the relative sea level and impacts other hazards (e.g. flooding, tsunami). This research reviewed historical earthquakes that deformed Aotearoa New Zealand's coast and investigated specific events and fault sources to understand how variations in earthquake behaviour and fault sources generate different coastal displacements, impacts, and geologic records. The first-ever probabilistic coseismic vertical displacement hazard model was built to understand the likelihood of coast-deforming earthquakes. Overall, this research examines how earthquakes can alter the coastlines at multiple spatial and temporal scales and serves as a launching point for future displacement hazard investigations.

#### Sian Alexia Doole

The Maternal Form: The Maternal Subject of Lyric Poetry

This thesis looks at both maternal as form, and the form of lyric poetry to suggest new ways we might rethink subjectivity. The maternal experiences of the five selected poets – Jennifer Givhan, Ada Limón, Traci Brimhall, Aracelis Girmay, and Claire Wahmanholm - inform their poetic practice; their personal knowledge of inhabiting a reproductive body alters the way they formally engage with subjectivity. This formal engagement, it is suggested, is indicative of the importance of thinking through the maternal as a way of reimagining the subject, as well as the creative potential of using poetry as a theoretical medium.

#### **Shnece Mary Kreger Duncan**

The Economic Burden of Dysphagia in New Zealand: Exploring Prevalence, Costs, And Risk-**Sharing Arrangements** 

This thesis explores the economic impact of impaired swallowing function (i.e, dysphagia) in New Zealand. It is estimated that 1.5% of the New Zealand population were living with dysphagia in 2020, increasing to 2.6% of the population by 2073. It was found that dysphagia increases hospitalisation cost on average by 56%, largely driven by longer hospital stays. The significant prevalence and cost associated with dysphagia means the condition imposes substantial financial burden on our health system. This research provides a solid grounding for the development of targeted interventions and optimal resource allocation to improve outcomes for the dysphagic population.

#### Samuel Edens

Adsorbent selection and process modelling for fluidised bed temperature swing adsorption

This work investigated fluidised bed temperature swing adsorption to reduce the energy usage of bulk gas separations while overcoming the limitations of traditional fixedbed adsorption processes. Pure and mixed gas adsorption kinetics of ethylene and ethane were measured experimentally, indicating kinetics was unlikely the limiting factor in the process. Simulations of propylene/propane and methane/nitrogen separation revealed that a counter-intuitive recycle design is superior to the typical stripping gas design. Energy usage estimates also indicated promising performance when compared to the current industrial standard of cryogenic distillation. Future work looks to expand these findings through the operation of an experimental prototype.

#### Rebecca Helene Kehela Emanuel

Development and Evaluation of Machine Learning Tools to Process an Internet Forum for Clinical Research of Polycystic Ovary Syndrome

This thesis explored the possibility of gaining useful clinical insight from internet forums. It specifically researched a medical condition called polycystic ovary syndrome (PCOS) using the PCOS subreddit (hosted on Reddit). Due to the large volume of posts and comments within the subreddit, text classification machine learning was used to extract key information from the forum data. This culminated in an organised 100,000 user dataset detailing symptoms and treatment experiences surrounding PCOS. Thus, this thesis culminated in a novel PCOS dataset, insight into treatment outcomes, and evidence that processing internet forums with machine learning can be useful for medical research.

#### Kathryn Tegan Ford

Ultra-High Temperature Molten Oxide Electrolysis: Investigating Simple Binary Oxide Systems Towards Metal Production of Critical Metals

This thesis investigated simple binary oxide systems to determine if metal production was feasible for titanium, tantalum and neodymium via molten oxide electrolysis (MOE). Two systems were experimentally tested, with thermodynamic predictions made where data was available on TiO2-Na2O and  $Ta_2O_5$ - $K_2O$ . Major outcomes from this thesis highlighted the importance experimentally validating stability and crucible compatibility of binary oxides selected for performing MOE, and the need to expand on available thermochemical and physical properties data of oxide systems to predict real solution behaviour and indicate potential systems where MOE may be viable for producing desired critical metals.

#### Madeline Frances Furness

The Biofactory: Implementing a Life Cycle Sustainability Assessment Decision Making Tool for Ouantifying Integral Sustainability Benefits of the Wastewater Circular Economy in Chile

The wastewater circular economy (WW-CE) enhances global water and sanitation management, but transitioning from traditional wastewater treatment plants (WWTPs) to circular models requires understanding of their sustainability impacts. This research used Life Cycle Sustainability Assessment (LCSA), integrating environmental, social, and economic impact assessments with a Multi-Criteria Decision Making (MCDM) model. Two Chilean WWTPs, transformed into Biofactories, served as case studies under three scenarios: no sanitation, conventional WWTPs, and Biofactory WW-CE configurations. Results showed the WW-CE transition improved sustainability. The study highlights the need for sustainable decision-making to enhance sanitation coverage and sustainability globally.

#### Fiona Ann Gilmore

Exploring the Teaching of Writing through the Self-Regulated Strategy Development Approach in Years 5-8 Classrooms

Students in later primary years face more complex writing tasks, yet there is limited research about teaching writing strategies such as revision. Supported by the researcher, eight teachers implemented a focus on teaching writing revision strategies in their classrooms. Using a convergent mixed methods research design, this study explored the influence of this self-regulated approach on student writing achievement, on student and teacher perspectives, and classroom teaching practices. Findings included the key role of teacher modelling of revision strategies, the regular and deeper student use of revising, increased student writing achievement, and the importance of facilitator support throughout implementation.

#### Lixian Guo

Numerical studies on enhancing heatdriven acoustic output characteristics and investigating nonlinear acoustic behaviors of the thermoacoustic engine

Thermoacoustic engines (TAEs) present significant potential for energy recovery and sustainable development. This thesis focuses on the design and optimization of high-performance TAE, addressing structural limitations and thermal-viscous losses. Key contributions include: 1) developing accurate full-scale numerical TAE models, 2) investigating nonlinear phenomena within the flow and acoustic fields, and 3) enhancing acoustic output and thermoacoustic efficiency through geometric and operational parameter studies. The research demonstrates improved performance in cryogenic liquids-driven standing-wave TAEs, highlights optimal conditions for twin SWTAEs, and explores the impact of forced perturbations and turbulence models on TAE behavior, achieving significant efficiency gains and computational time reductions.

#### **Honey Gupta**

Bioaerogels derived from canola protein and their use in the delivery of bioactive compounds

This thesis explores the use of canola protein aerogels for delivering bioactive compounds, focusing on their development through supercritical drying technology. This thesis investigates the production of these aerogels, the relationship between processing, structure, and properties, and their application in bioactive delivery. Various gelation methods were used, including pH-controlled, ionic crosslinking, and heat gelation. The resulting aerogels showed high specific surface areas and promising mechanical properties. Canola protein aerogels effectively loaded up to 65.80% pine bark tannin, with controlled release patterns observed. This work highlights their potential for use in food and pharmaceutical industries for bioactive compound delivery.

#### Alexander Reynell Heenan

Development of the Electrochemical Carbon Dioxide Reduction Reaction on Copper Based Electrodes

This thesis addresses the urgent need to mitigate climate change impacts by advancing electrochemical reduction of carbon dioxide using copper-based electrodes. Despite copper's potential to convert carbon dioxide into valuable products like ethylene and ethanol, improving its efficiency and selectivity remains a crucial challenge. Key findings include optimizing experimental techniques such as iR compensation and surface treatments, as well as exploring the role of electrolyte dynamics and ionomer binders. These insights aim to enhance our ability to harness renewable energy for reducing atmospheric carbon dioxide levels, contributing to sustainable solutions amidst escalating climate challenges.

#### Ailsa Mary Humphries

Response biases in visual processing: the effect of similarity and attention on judgments of sameness

#### John Tamunosaki Iminabo

Hydrogen production via steam reforming and water gas shift reaction of producer gas from the steam gasification of radiata pine

Recently, interest has surged in producing hydrogen-rich gas from biomass using durable and efficient catalysts. This study explored hydrogen-rich gas production from biomass gasification producer gas through steam methane reforming, dry methane reforming, and high-temperature water gas shift reaction experiments. New Zealand titanomagnetite and Nickel-Iron-Cobalt trimetallic catalysts on various supports and ratios were synthesized, characterized, and tested under different conditions in fluidized and fixed-bed reactors. These catalysts achieved higher hydrogen yields compared to a commercial catalyst. Mathematical models based on reaction kinetics and reactor configuration, using the Eiley-Rideal mechanism and two-phase fluidization theory, showed strong agreement with experimental data.

#### Misel Iminabo

High-Temperature Catalytic Pyrolysis of Radiata Pine Wood for Production of High-Value Products

This study explored the potential of converting locally sourced radiata pine wood into highvalue products through high-temperature catalytic pyrolysis using catalysts, such as titanomagnetite, MgO, and CaO. It investigated the effects of pyrolysis temperature and catalysts on various factors including product yield and composition. The research found that at high pyrolysis temperatures of up to 850°C, addition of catalyst increased gas yield and improved gas composition. However, titanomagnetite mixed with MgO or CaO enhanced the production of gas products rich in CO, H<sub>2</sub> and light olefins compared to titanomagnetite alone, making the process a promising pathway for biomass conversion.

#### Malcolm Neil Irwin

Reading on My Knees: Notes Toward a Sociotheo-(ill)logy of Risk-Management, Shit, and 'The Salvation Army.'

Reading out of 'counter[f]actual' encounters between Catherine Booth, the co-founder and celebrated 'Mother' of 'The Salvation Army,' 'Satan,' and social theory, this thesis follows a diffracting line of interrogation: "WHAT HAS FAITH GOT TO DO WITH RISK-MANAGEMENT?" Is faith always contrary to RISK? Is faith not always already a kind of perverse risk-management? Or is faith a matter of RISKING that which cannot (even, should not) be RISKED? These diffractions converge into a crisscrossing, 'intra-disciplinary,' piece-meal-thinking-on-the-page, that 'ends' in what is coined the socio-theo-(ill)logical, a prayerless-prayer for the SCREAMS of the radically negative, the shit that is left UN-READ, UN-REDEEMED, or, in the foundational posturing of 'The Salvation Army,' thought to be the 'WORST.'

#### Hannah Rebecca Rose Jones

The Association Of Temperament And Character And Body Dissatisfaction In Women Without An Eating Disorder, Women At Risk Of An Eating Disorder And Women With Bulimia Nervosa

The current thesis assessed the association of personality (measured by the Temperament and Character Inventory; TCI) with body dissatisfaction in women with different levels of eating pathology—women without an eating disorder, women at risk of an eating disorder and women with bulimia nervosa before treatment and one year after completing treatment. Whether indirect effects were observed through self-esteem and depression both independently and in serial was also investigated. Results revealed that different TCI dimensions were associated with body dissatisfaction depending on the eating pathology of the sample. Indirect effects through depression and self-esteem were found for many of these associations.

#### Aditya Avinash Joshi

Phenomenological modelling of the degradative performance of biodegradable magnesium alloy orthopaedic implants: Applications in craniofacial device design

Titanium-based implants are the current gold standard in the repair of craniomaxillofacial fractures or deformities. However, these devices frequently require removal from the implantation site. Magnesium is a promising material for bioresorbable orthopaedic implants. However, excessive corrosion rates that may cause loss in function of the device before the healing process is complete makes widespread adaptation challenging. The thesis presents a numerical model for predicting the time-dependent corrosion of Mg-based implants; and experimental validation of the numerical model against the biodegradation of the data obtained in vivo testing. Overall. the thesis aimed to improve the design of Magnesium-based bioresorbable implants.

#### Gholamreza Khorasani

Comparison of Macroscopic and Microscopic Modelling for Evaluating Bus Service Reliability

Public transportation plays a crucial role in individual well-being and promoting economic growth and productivity in society. Therefore. a reliable bus service is vital to encourage people to opt for public transport over private vehicles. Given the inherent complexity and stochastic behaviour of bus services. understanding the factors contributing to service unreliability is of utmost importance for transport authorities. This research adopted a before-and-after study focusing on the evaluation of performance indicators, investigating the existence of correlation in bus travel time components, and conducting a comprehensive comparison between different aspects of macroscopic and microscopic modelling approaches to evaluate the operation and reliability of bus service.

#### Seol-Jong Kim

Population Genomic Study of a Eucalyptus bosistoana Breeding Program

The New Zealand Dryland Forests Initiative (NZDFI) aims to establish high-value timber plantations on New Zealand's east coast, focusing on Eucalyptus bosistoana. Seeds from Australia have been used in breeding trials since 2009. This research analyzed the genetic structure and diversity of E. bosistoana using 1455 leaf samples. Results showed no significant inbreeding, weak genetic structure, and evidence of hybridization. Pairwise relatedness coefficients indicated more prevalent self-fertilization. Additionally, a weak but positive correlation between genotype and phenotype was found. This study is the first population genetic analysis of E. bosistoana and is valuable for informing the breeding program.

#### Laiseni Fanon Charisma Liavaa

LOTU AND FELUPE: Reimagining a new and unifying approach to climate resilience in Tonga

Pacific islands are on the frontline of the climate crisis, and Tonga is the second most vulnerable nation on the globe to be affected by natural disasters and effects of climate change. While churches play a fundamental role in Pacific cultures, very little is written on their role in relation to climate change. This research explores and analyses churches' response to climate change, in the context of the notion of felupe, as a new and unifying approach towards climate resilience in Tonga. The findings revealed the diversity of beliefs and values which have underpinned the churches' approach to climate issues.

#### Yang Liu

Contributions of working memory and vocabulary to inference making in Chinese children

The ability to make inferences is fundamental to successful text comprehension. Inference making involves integrating information across the text and combining it with prior knowledge to build an integrated and coherent mental model. This thesis examined within- and cross-language contributions of vocabulary and working memory to inference making in Chinese-English bilingual children through three studies. Oral vocabulary, working memory, word reading and inference making measures were administered in Chinese fifth. sixth and eighth graders. The studies have suggested varying effects of vocabulary, word reading and working memory on inference making across grades and between languages.

#### Kerry Domjan Manson

Mathematical Aspects of Phylogenetic Diversity Measures

Phylogenetic diversity (PD) is a popular measure of biodiversity, with particular applications to conservation management. In this thesis, we explore the mathematical properties of PD and a suite of derived methods using combinatorial and algorithmic approaches. The benefits and flaws of various measures are critically evaluated. This work aims to better understand what is meant by the concept of biodiversity and investigates how that understanding is reflected in the ways that we can best measure this idea. We provide a mathematical perspective, proving a number of new results, complemented by algorithms that enable these discoveries to be put into practice.

#### Nargis Mashal

An investigation into the digitalisation and outcomes of General Practice Medical centres during a pandemic: A New Zealand study

The Covid-19 pandemic impacted many aspects of life, including economic, environmental. and healthcare sectors. It accelerated digital innovation across various fields, notably in primary healthcare. Despite extensive research on technological adoption in healthcare, little focuses on General Practice (GP) medical centres' adoption of digital innovation during a pandemic. This research examined the digitalisation process in New Zealand GP centres during Covid-19, highlighting forced adoption to meet patient needs. Using a qualitative multiple case study approach, findings reveal enablers and barriers within the digital innovation lifecycle. The research offered insights into necessary IT enhancements and suggests further exploration of post-pandemic digitalisation impacts.

#### **Emma Frances Maurice**

Voices Across a Century: Ngāi Tahu Indigenous agency in Letters to the Editor

This thesis is a re-reading of narratives from settler colonial histories, and is the first corpus of Letters to the Editor, by Ngāi Tahu authors, published between 1850-1950 in Aotearoa New Zealand. The corpus analysis draws from Wittgenstein and Anscombe philosophical theories. The corpus provides examples for theories of language, meaning and use, and intentional action. Based on corpus analysis, this thesis defines a theory of Indigenous agency, by presenting three new conceptual frameworks, a) Whakapapa of Indigenous agency, b) Philosophical conditions of Indigenous agency and c) Taxonomy of Indigenous agency. Uplifting Indigenous agency creates potential for us all to become the ancestors our descendants deserve.

#### Lance Jules McBride

The Problematic Self: Groundwork for a New Existentialist Approach to Ethics

Building on MacIntyre's critique of modern normative ethics, it can be demonstrated that a key flaw in our current understanding is our reliance on a substance ontology as the metaphysical basis of selfhood. The hard boundaries thus drawn around the individual set the stage for our seemingly inescapable struggle against solipsism, nihilism, and alienation. Given this, the thesis examines the primary works of selected existentialists as they struggled with these precise issues. While none succeed individually, a synthesis of the unique insights each theorist offers us opens a pathway to a new understanding of both selfhood and normative ethical theory.

#### Alexander Declan McHugh

Enhancing approaches to glycaemic modelling and parameter identification

#### Dean Donald James McKenzie

More than just results! Leadership actions for effective use of assessment information

The New Zealand Ministry of Education expects secondary schools to make effective use of assessment information to guide student learning and achievement. This study investigates how New Zealand secondary schools are responding to the challenge of using data from the National Certificate of Educational Achievement (NCEA) to shape their teaching and learning strategies. The findings reveal inconsistent use of NCEA assessment information and considerable frustration and dissatisfaction from school leaders and teachers. Recommendations are presented to guide practice, including a model to assist school leaders in New Zealand make effective use of NCFA assessment information.

#### **Timothy Andrew McKenzie**

Growing the Understanding of Video Game Development for Improving its Outcomes

This thesis investigated the contexts, success factors, ways of working, challenges, and other outcomes that characterize video game development (VGD) from the perspective of academia and industry. An empirical multidisciplinary VGD domain model, implemented as a text-analytics-driven classification dictionary of the field's terms and concepts, was then developed. The purpose is to facilitate a more coherent and unified understanding of VGD between academia and industry, to support game developers in collaborating and managing their projects (using practices like agile/lean) more effectively to address the problems they face, and ultimately to assist the industry in achieving more successful outcomes.

#### **Christopher Gerard Meijer**

Transitory use of lowland lakes in southern New Zealand by Inanga (Galaxias maculatus) and implications for management

In the Southern Hemisphere, the widespread diadromous galaxiid, īnanga (Galaxias maculatus), has many examples of nondiadromous populations typically associated with lakes. However, there is a notable gap in their distribution with no non-diadromous Thanga populations known from southern New Zealand despite many seemingly suitable lakes. Although the reasons for this absence were ultimately complex, it is shown that introduced species, particularly brown trout (Salmo trutta), and habitat degradation likely play a significant role in limiting Inanga abundance. Restoring freshwater habitats, through instream additions and bankside plantings, provides a cost-effective pathway for simultaneously benefitting inanga and suppressing the impact of introduced species.

#### **Tonny Miiro**

Investigations into the use of gelatin, a biostimulant, in seed priming to enhance crop performance under challenging environmental conditions.

Gelatin has been used in plant science as a biostimulant. The current study focused on using gelatin as a seed priming treatment to enhance germination, growth and yields of Italian ryegrass and peas. This study highlighted that seed priming of Italian ryegrass and peas with gelatin enhanced seed germination, growth and yield parameters, hydrolytic and antioxidative enzymes activities in primed plants. Seed priming with gelatin further enhanced transgenerational stress memory in pea offspring plants growing under heat stress conditions. Therefore, seed priming with gelatin could play a vital role in ensuring crop yields amidst increasing environmental stress factors.

#### Rajika Madushanee Munasinghe

Approaches to Photo-activated Cytotoxins

Our synthetic targets are Zn(II) porphyrin-Co(III) heterodinuclear systems, which have potential uses as photoactivated cytotoxins in chemotherapy. We have been able to synthesise and characterised seven elaborated Zn(II) porphyrin-based electron donor components with the various second metal ion binding

The metal ion complexation ability of those elaborated Zn(II) porphyrin-based electron donor components has been explored using <sup>1</sup>H NMR techniques, and the two model Zn(II) porphyrin-Co(III) heterodinuclear systems have been synthesised. Moreover, the photoactivated ligand release has been demonstrated for the  $[Zn(L1)-Co(en)_2]_3$ + system.

#### Tirth Dineshbhai Patel

Sensor-based automated construction progress measurement of road construction

#### Yuanjun Pei

3D Printed Monolith Adsorption as an Alternative to Expanded Bed Adsorption for Protein Purification

The fluid flow and chromatographic performances of various cellulose 3D-printed Monolith Adsorption columns (PMA) designed using triply periodic minimal surface geometries were compared for efficiency, static and dynamic binding capacities at various experimental conditions. The 40% voidage structure (hydraulic diameter of 203 µm) showed the best performance in all aspects evaluated. PMA allowed for use of a wider range of flow rates and achieved a high level of IgG static binding capacity of over 20 mg/ per mL gel. PMA thus potentially provides an alternative to EBA, retaining the latter's advantages, while eliminating fluidisation issues and minimising both processing time and buffer consumption.

#### Amogh Prakasha Kumar

Economic Impacts of Climate Change on the New Zealand Wine Industry and Adaption Strategies for the Industry

This study investigates three key aspects of New Zealand's wine industry: 1) the non-linear effect of weather on wine quality, finding that while the North Island is too warm for coolclimate varieties, the South Island can sustain them until temperatures rise significantly: 2) the economic implications of adapting to climate change by changing wine varieties, with models suggesting full or partial vineyard switches depending on risk levels; 3) the feasibility of index insurance for frost risk, showing that it offers a practical alternative to costly indemnity insurance, benefiting both insurers and wineries.

#### **Chevy James Rendell**

The Single-Serve Self and the Desire to Desire (or: How I learned to Stop Worrying and Love the Amazon)

The novel is society's way of talking about society and this thesis contributes to the field of literary studies by examining the exploitation of lack—by what is here called the neoliberal sublime—through variations in the relationship between the novel and the individual. In particular, this thesis examines changes within and between novels written in the cusp period flanked by Margaret Thatcher's and Ronald Reagan's election victories and the first decade of the twenty-first century. Novels by Gillian Flynn, Iain Banks, Tom McCarthy, and Kazuo Ishiguro expose the ontological instability of the self sequestered by the (neoliberal) other.

#### Carlos Rosado de Palacio

The Christchurch Coastal Aquifer System: Geological Setting and Groundwater Occurrence in the Onshore-Offshore Quaternary Sequence

This applied research project focussed on investigating and characterising the hydrogeology and stratigraphic architecture of the coastal multi-layered confined groundwater system beneath the Christchurch area and offshore. Key findings include the discovery that coastal confined aguifers extend eastwards tens of kilometres beneath Pegasus Bay, providing evidence for a hydraulically connected onshore to offshore groundwater system. The study also delineated a submarine shore-normal paleochannel in the Riccarton Gravel, which extends to more than 35 km beyond the present-day coastline. Groundwater modelling predicts that the freshwater system may be vulnerable to seawater intrusion under increasing abstraction, challenging assumptions about the system's resilience.

#### Sarah Diane Sale

Lab-grown Rust: An Investigation into the Growth and Response of Rust Fungi on Artificial Surfaces

This thesis investigates the growth and response of rust fungi to flat and heterogeneous artificial surfaces to enhance our understanding of the biophysics underpinning their infection process and make advances towards in vitro cultivation. The heterogeneous surfaces included artificial leaf surface replicas of the fungal host plants. It also optimised a Lab-on-a-Chip device to capture single spores and facilitate their germination to quantify the forces exerted by their germ tubes. This work highlighted the importance of artificial surfaces' physical, chemical, and mechanical components on rust fungal infection when grown in vitro.

#### Shailendra Kumar Sharma

Synthesis and Activation of Metal Cluster-based Electrocatalysts for CO2 Reduction

Atomically precise gold clusters-based catalysts were prepared and studied for electrochemical conversion of CO<sub>2</sub> into valuable fuels. The study revealed that the clusters exhibited high selectivity for CO<sub>2</sub> to CO conversion, achieving up to 90% selectivity. Notably, their activity was dependent on the size of the metallic core and the nature of capping ligands. Additionally, the clusters exhibited substantial structural and electronic changes when interacted with external factors, including immobilisation onto supports, thermal annealing, electrode fabrication, and application of electrochemical potential. Electrochemical measurements and advanced characterisation techniques such as XAS, STEM, XPS and XRD were used to probe these changes.

#### **Kylie Anne Short**

Exploring the heart health knowledge among newly diagnosed cardiac patients in Aotearoa New Zealand: A convergent mixed methods inquiry

This study assessed patients' understanding of their condition after their first acute cardiac hospital admission in New Zealand, using a mixed methods approach across five centres. It found patients had an 'acceptable' knowledge level (63.04±13.38), with variations linked to demographics such as education, employment, smoking, age, and gender. Patients understood risk factors but struggled with medication and exercise guidance. Both patients and healthcare professionals noted the lack of standardised assessments and information overload were both barriers to understanding. The study highlighted the link between cardiovascular disease and mental health, recommending a new model for education focusing on rapid knowledge assessment and mental health screening.

#### William Han Zhen Sloane

Measurement-Based Analysis of Millimetre-Wave Channel Model Advanced Features for Wireless Communications

With the growing demand for faster and more reliable wireless communication, 5G technology is expected to use higher frequency bands, known as millimeter-wave (mmWave) bands, to provide the necessary mobile radio spectrum. However, these higher frequencies behave differently than the lower frequencies used in previous wireless technologies. They experience greater path loss, high diffraction losses and diffuse scattering. This thesis investigates three important concepts in mmWave channel modeling for 5G systems: sparsity, spatial consistency (SC), and crosspolarisation discrimination (XPD). Due to the unique characteristics of mmWave bands, these concepts need to be modeled differently than they were at lower frequencies.

#### **Shaurya Sood**

Geochemical and Geotechnical Characteristics of Slightly-Weathered Tephras in New Zealand

The North Island of New Zealand has been prone to volcanic disasters resulting in tephric materials. An effective utilization of these can be implemented through their usage in geotechnical engineering applications such as compacted backfilling operations. However, very little information pertaining to these deposits is available. Therefore, the relative influences of chemical compositions of heterogeneous tephras on their geotechnical characteristics were established. Many of tomorrow's tephras will be similar, therefore through this study we were able to: (i) fill the knowledge gaps regarding their shear behaviour, and (ii) improve our ability to better plan for future engineering projects.

#### Ilayaraja Subramanian

The transformative potential of refugee-torefugee value co-creation during resettlement: A customer journey perspective

This study addresses the refugee crisis by exploring the role of established refugees in aiding the integration of newly arrived refugees. It highlights that despite the availability of integration services, new refugees often struggle due to unfamiliarity. Established refugees, sharing similar experiences and cultural backgrounds, are positioned to provide effective support. The research includes a systematic literature review and 34 semi-structured interviews, uncovering service-related issues from the perspectives of service providers, newly arrived refugees, and established refugees. Using the motivation, opportunities and ability (MOA) model, the study develops a refugee-to-refugee (R2R) value co-creation framework, emphasising the crucial role of established refugees in facilitating smoother resettlement and improving wellbeing.

#### **Megan Frances Taylor**

Exploring secondary teachers' experiences of collaboration in open plan learning spaces

Recent educational reforms in Aotearoa
New Zealand have introduced open, flexible
learning spaces, requiring secondary teachers
to collaborate in new ways. This thesis
examines their experiences through a multisite phenomenological case study. Findings
reveal that current education policies and
conceptualisations of teacher collaboration
fail to capture its complexity. While teachers
appreciate collaborative work, they struggle
with managing large student numbers and
maintaining positive environments conducive
to learning. The study proposes a conceptual
model of the collaborative teaching ecology,
emphasising the need for alignment among

spatial, socio-cultural, and organisational factors to fully realise the potential of collaborative teaching.

#### Karlyn Zezi Ann Tekulu

Indigenous conflict resolution in a contemporary post-conflict state: The case of the Luqa community in Solomon Islands.

Indigenous conflict resolution methods in the South Pacific, though prevalent, are underrepresented in academic literature. This study addresses this gap by focusing on postconflict peacebuilding in the Solomon Islands, specifically examining conflict management within the Luqa linguistic community on Ranongga Island. It introduces the Kame model, based on Luga's cultural beliefs and practices, and the concept of Maja batu, reframing headhunting traditions. Employing a nested four-layered indigenous research framework, it systematically explores conflict resolution, culminating in critical evaluation of international peace initiatives. Insights from Kame and Maja batu reveal flaws in statebuilding efforts, highlighting conflicts between the state and indigenous sociopolitical structures

#### Tohoa Lita Tetini Timoteo Tetini

'Akarongo, 'Āpi'i, Arataki Listen, Learn, Lead. Exploring the lived experiences and perspectives of Pacific peoples within climate change spaces: an Aotearoa context

Pacific peoples and their communities have continued to endure the consequences and injustice of the global climate crisis. However, their voices, experiences, and stories are often not at the forefront of dominant climate change discourse. This research aimed to explore the multifaceted and intersectional lived experiences of Pacific peoples in climate spaces within Aotearoa New Zealand and sought to identify the challenges Pacific

peoples face whilst navigating these spaces. In doing so, this research aimed to address such challenges by suggesting potential ways forward that could be implemented to ensure the protection of Pacific people's mana, safety, and future generations.

#### **Eurica Thapa**

Understanding the Capabilities of Marginalised Students Within the Context of Teacher Training Programmes in Rural Nepal and Kathmandu

This study drew on the capability approach and concepts of habitus, capital and field from Bourdieu to explore the capabilities. functioning and obstacles of marginalised students in rural Nepal and Kathmandu. The qualitative study used semi-structured interviews with primary and secondary school students, teachers and education development officers who facilitated teacher training programmes. The study found that students did not experience a learner-centred education and highlighted the need for teacher training programmes in Nepal to be robust and train teachers to reflect on their habitus. This would enable them to understand caste-based discrimination and intervene in school-based corporal punishment.

#### **Channell Lisa Thoms**

Assessing the distribution and condition of kākahi (Echyridella menziesii – freshwater mussel) populations in Aotearoa/New Zealand's South Island lotic ecosystems and research towards their use as a restoration tool

Kākahi and other freshwater mussels play an important ecological role in freshwater systems but are threatened worldwide. The reasons for this are complex but include habitat loss, land-use intensification and management. Kākahi are a taonga species highly valued by Māori as mahinga kai. Historically, kākahi were distributed along ara tawhito for sustenance

on long journeys and feature in many proverbs emphasizing their importance. It was found that declines in distribution across the Ngāi Tahu takiwā, though substrate type was not a limiting factor. However, kākahi were efficient filterers, even in turbid waters, making them ideal candidates as biological tools facilitating stream rehabilitation

#### Manu Thundathil

Materials with Character-Designing with Biocomposites

This thesis addresses the challenge of developing sustainable materials from a design perspective by using a consumer perception-centric strategy. Through a mixedmethods approach, the role of various material characteristics in forming consumer perception and the interdependence of various perceptual attributes were established. These findings formed the foundations for a perception framework for biobased composites, which was later developed into a perception prediction model. It was observed that this model predicted consumer perception of biocomposites to a high degree of accuracy and would be a valuable tool for product designers to create new products with sustainable materials.

#### **Gerald Craig Toft**

Two Generalisations of the Wheels-and-Whirls
Theorem

One of the most famous results in matroid theory is Tutte's Wheels-and-Whirls Theorem. It states that every 3-connected matroid has an element which can either be deleted or contracted while retaining 3-connectivity, except for two families of matroids: the eponymous wheels and whirls. The Wheels-and-Whirls Theorem is a powerful tool for inductive arguments on 3-connected matroids. This research develops two generalisations of the Wheels-and-Whirls Theorem.

#### Syed Waheed Ul Hasan

Investigation into Tar Removal from Biomass Gasification Producer Gas by Solvent Absorption and Stripping

This study addresses tar removal from biomass gasification producer gas using solvent absorption. Poly(dimethylsiloxane-comethylphenylsiloxane) and soybean oil were identified as effective solvents. Experiments were conducted with a pilot-scale dual fluidized bed gasifier, examining the impact of temperature and liquid-to-gas molar flux ratio on tar absorption efficiency. An innovative absorber-stripper system was designed, constructed, and tested, achieving significant tar reduction. Additionally, predictive models for tar dewpoint and absorption efficiency were developed and validated. This research offers practical solutions for improving producer gas quality and contributes valuable insights into tar absorption mechanisms.

#### Mengjie Wang

Tweets on the Political Left and Right: A Natural Language Examination of the Spread of Moral and Emotional Messaging During the 2018 US Midterm

Despite numerous studies examining the impact of valence-based content on social media engagement, the specifics of how distinct moral or emotional messaging captivates public attention remain unexplored. Scrutinizing a large Twitter corpus from the US elections, the present research leverages natural language processing combined with machine and deep learning to explore whether certain types of moral or emotional messaging are more effective in garnering attention, and if so, how these patterns differ between Democrats and Republicans online, shedding light on the ways through which political candidates adapt to expand their reach via social media politicking.

#### **Logan Williams**

The Art of Invention: A Conceptual Framework for Successful Research & Development

This thesis investigates methods to improve the success rate of research and development projects, by combining qualitative interviews with subject matter experts, a comparative literature analysis of existing R&D methodologies, and case studies of successful R&D initiatives. Through this multi-faceted approach, the study develops a comprehensive framework aimed at optimizing R&D processes. Key findings highlight the importance of rapid prototyping, cross disciplinary expertise, and continuous feedback loops. The proposed framework offers practical guidelines for organizations and individuals to increase efficiency, innovation, and overall success in their R&D endeavors.

#### **Emma Woodford**

An Investigation into the Effectiveness and Acceptability of Function-Based Behavioural Sleep Interventions for Children with Rare Genetic Neurodevelopmental Conditions

Sleep difficulties are prevalent and persistent among children with rare genetic neurodevelopmental conditions (RGNC), influenced by a range of biopsychosocial factors. This research aimed to review circadian profiles associated with varying RGNC and evaluate the effectiveness and acceptability of behavioural sleep interventions. The study, involving 26 children with RGNC and their families, found behavioural sleep interventions informed by Functional Behaviour Assessment and the principle of less-restriction are effective and acceptable. Interventions led to longterm improvements and modest collateral benefits for both children and parents. The findings underscore the clinical impact of such interventions for children with RGNC.

#### Weilun Wu

Essays on the Relationship Between Income Inequality and Mortality

This thesis investigates the relationship between income inequality and mortality using a meta-science approach. This research replicates the study of Leigh and Jencks (2007), confirming their finding of an insignificant inequality-mortality relationship. One thousand meta-studies are reviewed. addressing challenges in multilevel meta-data and advocating for robust methodologies. These methodologies are applied, showing a moderate impact of inequality on mortality, which becomes insignificant after adjusting for publication bias. The analysis is refined confirming the insignificant relationship. The research concludes that income inequality does not significantly influence mortality.

#### Yanxia Yu

Essay on the Effectiveness of Carbon Pricing

How effective are carbon pricing policies, namely, carbon taxes and emission trading schemes, in reducing CO<sub>2</sub> emissions? This thesis explored the answer through the following attempts: 1) replicating the results of a prize-winning (The 2022 AEJ: Economic Policy Best Paper Award) paper; 2) conducting primary research using the most updated regression techniques; 3) conducting meta-analyses to synthesize the effect sizes from related papers. Three carbon pricing regimes were inspected. The results can be summarized as: carbon pricing policies work, though the effect may be context-specific and heterogenous.

### The tradition of graduation

University graduation ceremonies are part of a tradition stretching back to the 12th century when the first universities appeared in Europe. Te Whare Wānanga o Waitaha | University of Canterbury, established as Canterbury College in 1873, was based on the English Oxbridge model and its graduation ceremonies follow that tradition while incorporating elements of tikanga Māori.

The first Canterbury degrees were conferred in 1878 in the Canterbury Provincial Chambers. The ceremonies moved to the College Hall, after its completion in 1882, known as the Great Hall at the original university campus, now home to the Christchurch Arts Centre.

The early graduation ceremonies, known as Diploma Days, were decorous affairs but by 1884 discordant notes sounded in the form of 'tootings on a very unmusical instrument'. Clashes between exuberant graduands and the ceremonial party developed, and capping ceremonies were briefly replaced by a college function before an agreed format was reached whereby short speeches and songs were alternated.

Graduation ceremonies were not held during the First World War but when they resumed in 1921, banter, songs and interjections interrupted proceedings and the College resorted to mailing out diplomas and arranging only a reception for graduates. By 1930 the ceremony had returned to a quieter, more orderly proceeding.

Pressure of numbers forced a move in 1946 to the Civic Theatre, the first year an academic procession through the city was held. This format continued, apart from three occasions when it was held in the St James Theatre. until 1962 when further growth of numbers prompted a move to King Edward Barracks.

In 1968 the ceremony was divided into morning and evening proceedings and in 1971 it was made voluntary.

The Christchurch Town Hall became the venue in 1973 and a further change to three afternoon ceremonies was made in 1987. Four ceremonies became necessary in 1994, growing further in 1997 to five ceremonies; four in autumn and one in summer.

Recent decades have seen a resurgence in the popularity of graduation with steadily increasing numbers of students choosing to receive their degrees in person.

As a result of the merger between the University and the Christchurch College of Education on 1 January 2007, the number of graduation ceremonies continued to increase and included one held in Rotorua.

In the aftermath of the February 2011 earthquake, the April 2011 Graduate Celebrations were held in a marguee on Ilam Fields, and then moved to Christchurch Arena. April 2019 saw ceremonies return to the fully restored Christchurch Town Hall for the first time since the earthquakes almost 10 years earlier. In 2022 graduation celebrations moved back to the then Christchurch (now Wolfbrook) Arena to allow for the growing numbers of graduates and their guests.

# Graduation celebrations today

Today, the University opts for graduation celebrations instead of traditional ceremonies. This change stems from the University Council's practice of verifying and endorsing the qualification requirements of graduating students before the celebration, a formal process called conferral – the legal awarding of the qualification. Since conferral occurs before graduation, we refer to the event as a celebration rather than a ceremony.

The celebration begins with a procession of the graduates led by a piper to the door of the auditorium. Once the graduates are seated, fanfare from the organ heralds the entry into the auditorium of the academic party led by the Bedel, a ceremonial role, carrying the University mace, the symbol of institutional authority. The banner bearers follow, then academic and professional staff, followed by the Deans. then members of the University Council and the three Officers of the University, Tumu Kaunihera | Chancellor, Tumu Whakarae | Vice-Chancellor and Pouroki | Registrar. The mace rests on a stand during the celebration.

Today's UC Graduation celebrations include elements of tikanga Ngāi Tahu. A representative group of graduates is welcomed into the auditorium with pao (a call of welcome), and this is responded to by the kaikaranga (caller) leading the group in. This exchange of karanga between senior Ngāi Tahu women opens the proceedings.

The pao is followed with a mihi or speech of welcome, from a Ngāi Tahu man, and that in turn is followed with a waiata. In this small way the University honours its relationship with mana whenua. Ngāi Tūāhuriri, its commitment to bicultural development. and its responsibilities under Te Tiriti o Waitangi | Treaty of Waitangi.

After the National Anthem te Tumu Kaunihera Chancellor opens the proceedings with the words: "I now convene a ceremony of the University of Canterbury to celebrate our graduates on the completion of their certificates, diplomas and degrees."

Te Tumu Kaunihera | Chancellor then hands over to te Tumu Tuarua Akoranga | Deputy Vice-Chancellor Academic who introduces te Amo Rangahau | Executive Dean of Postgraduate Research and Ngā Amo | Deans of the Faculties, who in turn present the graduates.

When all graduates have been capped and collected their testamur (certificate) there is a short speech before all in attendance rise and sing Gaudeamus. The academic party then leaves the auditorium, followed by the graduates.

# The Bedel and the mace



At each ceremony the procession of graduates and staff is led by the Bedel carrying the University mace, the symbol of institutional authority. Historically the Bedel had a number of functions but in a modern university only the ceremonial role at graduation survives.

Used for every graduation ceremony since 1957, the University of Canterbury's mace provides a tangible link with the College of Christ Church at Oxford University, where it was designed and made. The shaft of the mace is made of an oak beam removed from Tom Tower when the bell was rehung in 1953. Even in 1680, when the beam was installed in the Sir Christopher Wrendesigned Tower, the timber was described as 'well-seasoned'.

There is a tohu Māori (Māori design) carved on the shaft between two silver ferrules. The silver bowl at the head of the mace is joined to the staff by a fluted silver collar and ends in a Tudor rose. The petals embrace the coat of arms of Canterbury University College, executed in coloured enamel. Engraved at the foot of the mace is the Cardinal's Hat of Christ Church.

### Coat of Arms

The formal, heraldic description of the University of Canterbury's coat of arms reads: "Murrey a Fleece Argent in base a Plough on a Chief wavy Or an open Book proper bound Murrey edged and clasped Or between a Pall Azure charged with Four Crosses Formy Fitchy Or and a Cross Flory Azure".

The base of the shield comprises a silver fleece, symbolising the province's pastoral pursuits, and a golden plough, symbolising agriculture, set on a murrey-coloured (purple-red, derived from mulberry) shield. The murrey-coloured, golden clasped book in the centre of the top section symbolises learning. On its right (observer's left) is an azure bishop's pall charged with four golden crosses, and on its left is an azure cross. The two crosses symbolise the province's ecclesiastical connections. The wavy line separating the two sections represents lands overseas.

The coat of arms, approved and authorised by the British Kings of Arms in Letters Patent dated 10 May 1965, was based on an earlier unauthorised version which was in turn adapted from the Canterbury Provincial Government's arms of the 19th century. That earlier Coat of Arms is still visible on the clock tower and above the entrance of the Arts Centre on the corner of Hereford Street and Rolleston Avenue.

# A brief history of the University



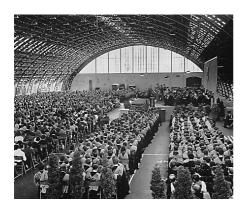
Canterbury College was the second university institution in Aotearoa New Zealand when it was established as a constituent college of the University of New Zealand in 1873.

Housed in graceful stone buildings on a central city block, the College was supported by rents from high country reserves, endowed by the Canterbury Provincial Council for this purpose.

It was modelled on English and Scottish universities, but with one major difference; the three foundation professors admitted women to the College from the beginning.

In 1876. Helen Connon became the first woman to study at the University, then known as Canterbury College. Connon graduated with a BA in 1880 – the second woman arts graduate in the British Empire. When she gained her MA with first-class honours in English and Latin in 1881, she became the first woman in the British Empire to be awarded a degree with honours.

Lord Ernest Rutherford, one of our most distinguished graduates, studied at Canterbury College in the 1890s and discovered his scientific ability during two years of postgraduate research before taking up a scholarship to Cambridge University.



Tā Āpirana Ngata of Ngāti Porou graduated from Canterbury College in 1893 with a BA in political science. Tā Āpirana was the first Māori graduate from any university in Aotearoa New Zealand.

Bessie Te Wenerau Grace (Ngāti Tūwharetoa) was the first Māori woman to graduate from university. She graduated from Canterbury College in 1926 with a BA and went on to complete an MA with first-class honours in modern languages from the University of London.

Today, the portraits of Lord Rutherford and Tā Āpirana grace the nation's \$100 and \$50 bank notes, respectively, while suffragist Kate Sheppard features on the \$10 note. She attended Canterbury College's School of Fine Arts as a student in 1882 and 1883. Her former home, Te Whare Waiutuutu Kate Sheppard House, nestles beside the modern University's Ilam campus.

The institute became known as Canterbury University College in 1933 before assuming the title of the University of Canterbury in 1957.

Faced with increasing space pressures, it was decided in 1949 to transfer the University, in stages, to a new campus on farmland bought for the purpose in what became the suburb of Ilam. Between 1960 and 1974, a time of rapid growth, the University was split between its town and Ilam campuses. After the town site was vacated in 1975, it was donated to the city of Ōtautahi Christchurch and is now home to the Arts Centre.

The University has returned, in part, to its former site, with Classics and the School of Music moving to the former Chemistry building in the Arts Centre. It also includes the Teece Museum of Classical Antiquities, which houses the Logie Collection of Greek and Roman antiquities.

Following the earthquakes of 2010-2011, the University undertook significant redevelopment providing modern, cutting-edge facilities.

The modern University occupies attractively landscaped 76-hectare campuses in Ilam and Upper Riccarton comprising libraries, lecture theatres, laboratories, halls of residence and a range of student services surrounded by playing fields, woodlands and the renowned Ilam Gardens

As well as the innovative, purpose-built facilities on campus, the University operates several major field stations, including: the Cass Mountain Research Area, Kawatiri Westport Field Station, Ōtehīwai Mt John Observatory. The most remote field station is located in Nigeria, at the edge of the diverse and ecologically important Ngel Nyaki Forest Reserve.

### Academic dress



The various types of academic dress worn by graduates have evolved from the daily dress worn by university students and staff in the Middle Ages, which in turn was based on the attire worn by the medieval clergy.

Gowns and hoods were practical wear in those days and while the gown is still worn by some, the hood has become purely ceremonial. The colour of the lining of the hood is strictly controlled and indicates the wearer's university and faculty or degree. The rich variety of academic dress worn by the academic staff reflects the many universities represented; the dress of American and European universities differs markedly from that of Commonwealth universities

The gowns for Te Whare Wananga o Waitaha University of Canterbury bachelor's and master's degrees are the same as for the Cambridge Bachelor and Master of Arts; the gown for the Doctor of Philosophy degree is as for the Cambridge Master of Arts but with peony red detachable facings for dress occasions.

The hoods are of a standard size and shape with a slate grey exterior. The colour of the lining indicates the degree of the wearer.

The headgear for a bachelor's and a master's degree is a black trencher (mortarboard) with tassel. For all Doctoral degrees the headgear is a black bonnet as for the University of St Andrews.

University Officers wear peony red gowns. Te Tumu Kaunihera | Chancellor's is damask embroidered with gold and gold lace and the trencher is peony red with gold lace and a gold tassel. Te Tumu Whakarae | Vice-Chancellor's gown is damask embroidered with gold and the trencher is peony red with a gold tassel. Te Pouroki | Registrar's gown is silk embroidered with gold and the trencher is peony red with a peony red tassel.

## Degree colours



The colour of the lining indicates the degree of the wearer.

#### The colours are:

- · Arts Baby Pink
- · Commerce Yellow
- Education Brown
- Engineering Violet
- · Forestry Chestnut
- Health Sciences Emerald Green
- Law & Criminal Justice Ice Blue
- Music & Fine Arts White
- · Science Ultramarine
- · Social Work Post Office Red
- Speech & Language Pathology/Audiology Magenta
- Sport Coaching Post Office Red
- · Teaching & Learning Old Gold
- PhDs Peony Red

Honours and master's degrees are distinguished by a border of colour on the exterior of the hood: for an honours degree it is 25mm wide, for a master's degree it is 75mm.

For the Doctor of Philosophy degree, the hood is lined in peony red. For the other doctorates the hood is slate grey.

# **Graduate Women Canterbury**



Graduate Women Canterbury (GWC) is the Trust responsible for the nonprofit organisation, GWC Regalia Hire. Together, both entities focus on furthering tertiary education for New Zealand women, with proceeds from the Regalia Hire used to finance scholarships and awards.

Since 2020 the Trust has partnered directly with the University of Canterbury and other Canterbury tertiary institutions to fund new and existing initiatives in support of women entering, completing and working in tertiary education.

The Canterbury Branch of New Zealand Federation of University Women was originally formed in the 1920s to support women graduates socially and professionally in a time where women tertiary students and graduates were a significant minority.

GWC was established to create opportunities, and to encourage and support equity within tertiary education and beyond.

Contact GWC Regalia Hire for all regalia services and enquiries through their website www.gwcregaliahire.nz or call in to their rooms at Dovedale Campus, Wairarapa Building,

Block ED15, Ilam any Tuesday and Thursday between 9.30am - 2.30pm.

### Manu tiria

Manu tiria, manu werohia
Ki te poho o Te Rāka
Ka tau Rērere
Ka tau mai i Te Ruhi
E tau e koia
Koia, koia
Ko tārarauriki
Kī mai i Māui
Ehara i te whitu, me te waru e
E tau e koia, koia!

This song talks about when to plant kūmara (Ruhi or during January) and when not to plant kūmara (Whitu and Waru or November and December). It also relates to the story of Māui changing into a kererū and following his father into the underworld.

### Gaudeamus

Gaudeamus igitur juvenes dum sumus, Gaudeamus igitur juvenes dum sumus, Post jucundam juventutem, post molestam senectutem, Nos habebit humus, nos habebit humus.

Vivat Academia, vivant professores! Vivat Academia, vivant professores! Vivat membrum quodlibet, vivant membra quaelibet, Semper sint in flore! Semper sint in flore!

Let us rejoice then while we are young When sweet youth's past and crabbed age is done The grave will have us, everyone.

Long live the University, long live the staff! Long live each one, of whatever degree! May they ever so flourishing be!

### E Ihowā Atua | God Defend New Zealand

E Ihowa Atua o ngā iwi mātou rā, Āta whakarongona me aroha noa. Kia hua ko te pai, kia tau tō atawhai. Manaakitia mai, Aotearoa God of Nations, at thy feet
In the bonds of love we meet
Hear our voices we entreat
God defend our free land
Guard Pacific's triple star
From the bonds of strife and war
Make our praises heard afar
God defend New Zealand.



Te Whare Wānanga o Waitaha University of Canterbury Private Bag 4800 Christchurch 8140 New Zealand