

# PGDip Health Science (Cardiac Ultrasound)

Ellen Woodcock



**CSANZ New Zealand  
Annual Scientific Meeting**

Energy Events Centre,  
Rotorua | 23-25 May 2025

[www.csanzasm.nz](http://www.csanzasm.nz)

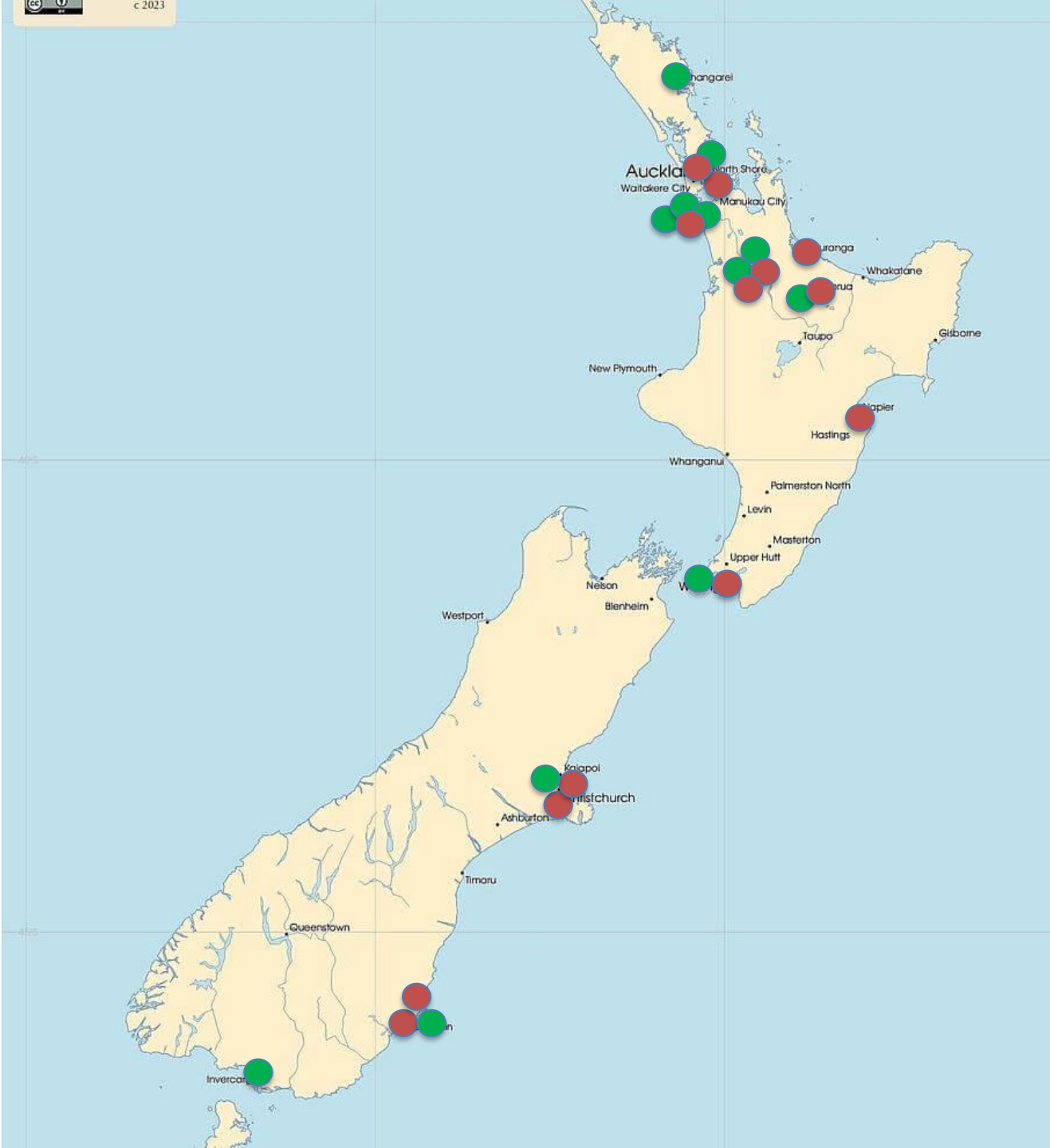
I have no disclosures



# Thank you!!







● 1<sup>st</sup> year students

● 2<sup>nd</sup> year students

# Thank you to the clinical supervisors!!

- Your feedback is important
- Overlap in content MEDIMAGE 724 and 725
- High work load
  - Case studies incorporated as assignments
  - Reduced number of progress reports/ reflections (2 per semester)

# Block course teaching and/ or content development

- Scott Reffell
- Ashlee Glucina
- Leighton Jones
- Abigail Devine
- Wilma Fernandes
- Jonathan Mok
- Gillian Whalley
- Danielle Gelbart
- Leah Wright
- Skakiya Ershad
- Rosie Claridge
- Miriam Wheeler
- Vicky Nassau-Reffell
- Rentia Van der Wal
- Michelle Klenner
- Marizaan van Schalkwyk

# UoA team



Sibusiso  
Mdletshe

Post-Graduate  
Director/ Senior  
Lecturer

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Allanah  
Harrington

Co-Specialisation  
Lead / Professional  
Teaching Fellow



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McCann

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Lauren  
McCann

Professional  
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Claire  
Heffernan

Professional  
Teaching Fellow

# NZ Qualifications and Credentials Framework

Level	Qualifications
7	Diploma Bachelor's Degree Graduate Certificate Graduate Diploma
8	Bachelor Honours Degree Postgraduate Certificate Postgraduate Diploma
9	Master's Degree
10	Doctoral Degree

# NZ Qualifications and Credentials Framework

Level	Qualifications
7	Diploma
	Bachelor's Degree
	Graduate Certificate
	Graduate Diploma
8	Bachelor Honours Degree
	Postgraduate Certificate
	Postgraduate Diploma
9	Master's Degree
10	Doctoral Degree

DMU

QUT Grad Dip Cardiac Ult

UoA PGDip Health Sci



Year 1	S1	S2
MEDIMAGE 717 – Ultrasound Imaging Technology (15 pts)	✓	✓
MEDIMAGE 722 – Introduction to Cardiac Ultrasound (15 pts)	✓	
MEDIMAGE 702 – Professional Issues in Medical Imaging (15 pts)	✓	✓
MEDIMAGE 724 – Ultrasound Assessment of Heart Disease 1 (15 pts)		✓
MEDIMAGE 725 – Cardiac Pathology (15 pts)		

# MEDIMAGE 717 S1 and S2

## Ultrasound imaging Technology

- Ultrasound physics
- With general ultrasound students
- Can be enrolled prior to obtaining a trainee position

# MEDIMAGE 702 S1 and S2

## Professional Issues in Medical Imaging

- Cultural competency & safety,
- Communication
- Ethics
- Other medical imaging students (US, CT, MRI etc)

# MEDIMAGE 722 S1

## Introduction to Cardiac Ultrasound

- Standard windows and associated anatomy
- 2D, m-mode, colour and spectral Doppler
- Basic measurements and calculations

# MEDIMAGE 724 S2

## Ultrasound Assessment of Heart Disease 1

- LV systolic and diastolic function
- Hypertensive heart disease
- Ischaemic heart disease
- RV function
- Pulmonary HTN



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MEDIMAGE 717 – Ultrasound Imaging Technology (15 pts)	√	√
MEDIMAGE 722 – Introduction to Cardiac Ultrasound (15 pts)	√	
MEDIMAGE 702 – Professional Issues in Medical Imaging (15 pts)	√	√
MEDIMAGE 724 – Ultrasound Assessment of Heart Disease 1 (15 pts)		√

Year 2		
MEDIMAGE 726 – Ultrasound Assessment of Heart Disease 2 (15 pts)	√	
MEDIMAGE 727 – Introduction to Congenital Heart Disease (15 pts)	√	
MEDIMAGE 728 – Advanced Concepts in Cardiac Imaging (15 pts)		√
CLINIMAGE 724 – Cardiac Ultrasound Clinical Practice (15 pts)	√	√

MEDIMAGE 726 S1

## Ultrasound Assessment of Heart Disease 2

- Valvular heart disease
- Prosthetic valve function and complications
- Infective endocarditis

# MEDIMAGE 727 S1

## Introduction to Congenital Heart Disease

- ASD, VSD, PDA
- Coarctation, Bicuspid aortic valve
- Transposition of the great arteries (CC-TGA and D-TGA)
- AV canal defects, Tetralogy of Fallot (TOF)
- Heart transplant, LVAD

# MEDIMAGE 728 S2

## Advanced concepts in Cardiac Imaging

- Contrast, bubble studies, stress echo
- TOE/ CT/ MRI/ Nuclear med
- Cardiomyopathies
- Cardiac Tamponade

# CLINIMAG 724 S1 and S2

## Cardiac Ultrasound Clinical Practice

- Integrating previous learning
- Cultural safety/ competency
- Case study write up/ Interpreting research
- Clinical portfolio
- Clinical Competency Mastery Test



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MEDIMAGE 702 – Professional Issues in Medical Imaging (15 pts)	✓	✓
MEDIMAGE 724 – Ultrasound Assessment of Heart Disease 1 (15 pts)		✓

Year 2		
MEDIMAGE 726 – Ultrasound Assessment of Heart Disease 2 (15 pts)	✓	
MEDIMAGE 727 – Introduction to Congenital Heart Disease (15 pts)	✓	
MEDIMAGE 728 – Advanced Concepts in Cardiac Imaging (15 pts)		✓
CLINIMAG 724 – Cardiac Ultrasound Clinical Practice (15 pts)	✓	✓

# Tuakana-Teina Mentoring Program

- Tenia - the 'younger' 1<sup>st</sup> year student
- Tuakana - the 'older' 2<sup>nd</sup> year student
- Pairing was based on
  - level of experience/ scanning time
  - Location region vs main centre



# Tuakana-Teina Mentoring Program

- Students met face to face at the block course
- One group zoom session per semester
- Encouraged to zoom/ message at least 3 times during S1
- Overall goal of expanding networks, connections and fostering community

# Tuakana-Teina Mentoring Program

- Opportunity for qualified sonographers to mentor new graduates in 2026
- MTRB CPD points



# HeartLab collaboration

- Case studies
- Case based assessment
- Pathology library
- Measurement practice/ examples





# PGDip Health Science (Cardiac Ultrasound)

- Continue to refine the content and structure
- We value your feedback
- First graduates end of 2025
- MEDIMAGE 702 & 727 can be taken for CPD
- Please consider being a mentor in 2026