MedTech CoRE is New Zealand’s Centre of Research Excellence in medical technologies.

Our focus:
• Translational research for improved healthcare outcomes and economic growth
• Postgraduate training to develop a pipeline of talent for the medtech industry

The Consortium for Medical Device Technologies (CMDT) is the external engagement arm of MedTech CoRE. It builds engagement with industry, investors and government.

Our investigators are well connected in academia, industry and the healthcare community in New Zealand and globally.
The future of healthcare is affordable, personalised medicine accessible by all. The overarching vision of MedTech CoRE is to create next generation healthcare solutions to support the shift in the way healthcare will operate.

MEDICAL TECHNOLOGIES CENTRE OF RESEARCH EXCELLENCE (MedTech CoRE)

**AREAS OF RESEARCH FOCUS**

**DIAGNOSTICS & THERAPEUTICS**
- Physiological models for diagnosis and enhanced treatment
  - Digital lung model to manage/predict interventions to disease
  - 3D bioprinted scaffold that can be used to grow cells
- Minimally invasive techniques and multi-scale simulations to predict outcomes and optimise treatment strategies
  - Gastric electrical pacemaker to enhance digestive functions
- Computer-based therapy games and handheld device systems for upper limb training

**INTERVENTIONAL TECHNOLOGIES**
- Rehabilitation options to support recovery and improve quality of life (stroke, traumatic brain injury)
  - New technologies enabling end users to keep track of their health
- Therapeutic scaffold products for bone and tissue repair
  - Digital lung model to manage/predict interventions to disease
- Minimally invasive techniques and multi-scale simulations to predict outcomes and optimise treatment strategies

**ASSISTIVE TECHNOLOGIES**
- Rehabilitation options to support recovery and improve quality of life (stroke, traumatic brain injury)
  - New technologies enabling end users to keep track of their health
- Physiological models for diagnosis and enhanced treatment
  - Digital lung model to manage/predict interventions to disease
  - Computer-based therapy games and handheld device systems for upper limb training
- Minimally invasive techniques and multi-scale simulations to predict outcomes and optimise treatment strategies

**DIAGNOSTICS & THERAPEUTICS**
- Minimally invasive techniques and multi-scale simulations to predict outcomes and optimise treatment strategies
  - Gastric electrical pacemaker to enhance digestive functions
- Computer-based therapy games and handheld device systems for upper limb training

**TELEHEALTH & HEALTH INFORMATICS**
- Empowering and motivating patients
- Data integration and analysis to support clinical decision-making
  - New technologies enabling end users to keep track of their health

**TISSUE ENGINEERING FOR REGENERATIVE MEDICINE**
- Therapeutic scaffold products for bone and tissue repair
  - 3D bioprinted scaffold that can be used to grow cells
- Minimally invasive techniques and multi-scale simulations to predict outcomes and optimise treatment strategies

**TAKING PROJECTS FROM CONCEPT TO COMMERCIALISATION**

MedTech CoRE seed funding
- Developing new networks and partnerships
- Taking proven basic research into clinical application with potential commercial outcomes
- Accelerating commercial opportunities
- External investment for promising projects and spinouts through the CoRE’s networks

MedTech CoRE spinouts:
- FlexiMap
- MTech Games
- Physiological Systems NZ
- Objective Acuity
- Formus Labs
- Surgical Design Studio

Helping grow companies:
- MARS Bioimaging
- Complay Health
- OssAbility
- Millar
- Exsurgo Rehab
- Rex Bionics
- Tiro Medical
- CerebralFix
- Kaha Sciences
In all of its areas of work, MedTech CoRE continues to strive towards the metrics of scientific, clinical and commercial excellence.

Our outputs since inception in 2015:

- **232** JOURNAL PUBLICATIONS
- **124** POSTGRADUATE STUDENTS
- **27** PATENTS FILED BY CoRE RESEARCHERS

GET IN TOUCH WITH US:
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