



This eNewsletter from the Auckland Bioengineering Institute highlights some of the research made possible by Social Entrepreneurs and Philanthropic support.

Strategic Partnership Manager welcomed

Dr Diana Siew has recently joined the ABI as its Strategic Partnership Manager.

Developing more international partnerships and investor opportunities for medical technology is the focus of Dr Diana Siew's new role as strategic partnership specialist for the University of Auckland's Bioengineering Institute (ABI)



Her role with ABI will contribute to growth of the MedTech Centre of Research Excellence (MedTech CoRE) and the Consortium for Medical Device Technologies (CMDT). She has a strong innovation, research management and relationship management background in New Zealand's medical technology sector.

Dr Siew will retain her role as co-chair of the CMDT that sits alongside the MedTech CoRE. She is also an Associate Director for the MedTech CoRE, responsible for strategic partnerships and seed funding.

Dr Siew is an alumna of the University of Auckland with a doctorate in Chemistry and many years' experience in New Zealand's medtech environment, including past roles with Industrial Research Ltd and Callaghan Innovation.

"My new focus will be working alongside the ABI to progress the MedTech CoRE and CMDT," she says. "Five years ago, ABI's Director, Professor Peter Hunter and I co-founded the CMDT to reduce the isolation of medical technology research institutions around the country."

"Feedback from multi-nationals then was that they found it hard to work in New Zealand with its large number of different research organisations in the medical health technology space," she says. "They sometimes didn't know where to start to find all the people for a particular focus."

Two new Aotearoa Foundation Fellowships awarded



Thanks to a generous \$3 million gift from the Aotearoa Foundation, ABI has recently been able to offer two new Fellowships. One is specifically within the Physiome project and the other an early career researcher. These prestigious fellowships were highly contestable. The funding support is for four years each and also includes a four-year PhD scholarship for each Fellow that will help the Fellow to establish their own research group.

Dr David Nickerson (pictured above left) was awarded the Physiome Aotearoa Foundation Fellowship to work within the Physiome project at ABI. David obtained his PhD in Bioengineering from the University of Auckland. Following a post-doctoral stint at the National University of Singapore, David returned to the Auckland Bioengineering Institute, where he is a Senior Research Fellow and leads the Auckland Renal Physiome project. David is an elected member of the [CellML](#) and [SED-ML](#) editorial boards, as well as being a [COMBINE](#) coordinator. He also develops several software tools related to his work on model exchange as well as being involved in several ABI infrastructural software projects.

ABI is leading the international [Physiome Project](#) for the International Union of Physiological Sciences (IUPS) and is helping to lead the Virtual Physiological Human (VPH) project for the [VPH Institute](#). The Physiome Project aims to establish a standards based framework for multiscale computational physiology and at the IUPS World Congress this year we will launch a new PHYSIOME journal and associated portal in support of this aim. The Fellow appointed to this will be expected to take a leadership role in the VPH/Physiome Project.

Dr Geoff Handsfield (pictured above right) was awarded the Early Career Researcher Aotearoa Foundation Fellowship.

Geoff holds a Bachelor of Science in Physics from East Carolina University, and a PhD in Biomedical Engineering from the University of Virginia. He was made a Whitaker Scholar in 2015, and came to the Auckland Bioengineering Institute to work with Associate Professor Thor Besier and Dr Justin Fernandez in the Musculoskeletal System Group.

Congratulations to both and we wish them all the best for the future.

National Biomechanics Day



The ABI played host for the inaugural New Zealand National Biomechanics Day (NBD) on Monday April 3rd, 2017. Six other sites across New Zealand contributed to this international day of outreach and science, making a strong showing for New Zealand.

The ABI graduate students and staff put on an impressive series of demonstrations, including:

- a computational model of lung mechanics
- a computational heart model
- a demo of Motion Capture techniques
- the iMeasureU jump app demo
- a demo of instrumentation, imaging, and needle-free injection

Over 75 secondary students from 8 different high schools joined us at ABI to participate in demonstrations and learn more about biomechanics and bioengineering.

New Zealand as a whole hosted over 1000 participants and hosted a live-stream of the activities which was broadcast to classrooms in rural New Zealand, as well as in India and Sri Lanka.

Exposing students to elements of Science, Technology, Engineering and Mathematics, the STEM subjects, while they are still at school is critical to ensure that students are taking the right subjects before they start to think about tertiary study. Many rural students do not get the opportunity to get see the wide range of career options in these areas.

This outreach proved to be enormously rewarding for those staff and graduate students involved. They were able to first hand teach students interested in STEM fields and to see their enthusiasm for ABI research. One student from Manurewa High School gave a formal thank you on behalf of her entire school and expressed their gratitude to ABI and our students for their time and efforts on the day.

Congratulations to the ABI graduate students and staff who helped out with this. You may have inspired someone to one day become a future graduate student at ABI.

**Inaugural ABI Public
Lecture – Using science
to personalize healthcare**

NABI will host the first in a series of public lectures on June 22 as part of Health Tech week 19-22 June. Healthcare is becoming increasingly personalised. Come and hear from three ABI scientists about how Science is making this possible.

5.00pm 22 June 2017
Venue to be confirmed

Please register here.

[Check out Health Tech week](#)

