### **CEO UPDATE**

22 February 2021 | 22 Huitanguru 2021





# Thanks for the warm welcome

As we reflect on the anniversary of the 22 February 2011 quake remember to be kind to yourself and acknowledge your own reactions and experiences.

Thank you for your warm welcome to Canterbury DHB. I look forward to visiting and connecting with staff and health system partners over the coming weeks. Thank you for all the work you do every day in support of our community.

While there are plenty of challenges ahead in moving towards an equitable and sustainable health system, I'm confident we can do this as a team.

BE PROUD OF HOW FAR YOU'VE COME.

**ALL RIGHT?** 

ALLRIGHT

#### Canterbury earthquakes – 10 years on

I attended the Civic Ceremony today to mark the 10th anniversary of the Canterbury earthquakes. It was a sobering experience, particularly when the names of the 185 people who lost their lives were read out. The service was attended by members of the public, including families, survivors and people who played significant roles in the aftermath of the quakes and the recovery, along with Canterbury's community leaders.

This event was especially poignant for me as I remember the death of a family member during the February 2011 quake. I was living in Christchurch at the time.

For staff who were here and involved in the response to the 2010 and 2011 quakes, some unexpected feelings might sneak up on you today – just remember that's all right.

This is a week to show compassion and understanding for other people's experiences, and this is also a time to



Prime Minister of New Zealand Rt Hon Jacinda Ardern with Dame Patsy Reddy

be kind to yourself and acknowledge your own reactions and experiences. Be proud of how far you've come. There's been a lot of change for everyone over the past 10 years – both at home and at work.

#### In this issue

- > Regulars Kōrero ai... pg 4-5
- New web portal to help kickstart your research... pg 6
- Portacoms removed from Christchurch Hospital... pg 7
- Blue Mirror's AI software lifts the safe use
  of PPE to the next level... pg 8
- Hard work and dedication the mark of scientific career... pg 9
- "Tireless campaigner" for delivery of quality services retires... pg 10
- Special book delivery for children and teens who face adversity... pg 11
- One minute with... Kym Van Der Heyden, Intensive Care Registered Nurse... pg 12
- > Notices Pānui... pg 13

## Blue Mirror's Al software lifts the safe use of PPE to the next level

COVID-19 continues to throw up many challenges and we can expect more of the same from 2021. It is during testing times like these that innovators come to the fore. In this case to develop a solution to minimise risks to our healthcare workers on the frontline who use PPE extensively.

Having the right PPE is only part of the story, putting it on properly and taking it off safely are also critical to keeping the wearer safe. Health authorities recommend the presence of a specialist observer to monitor the donning and doffing process.

Through a system named "Blue Mirror", leading-edge intelligent vision technologies were adapted to develop a virtual buddy that can assist healthcare workers to correctly and safely put on and take off protective equipment such as masks, face shields, gloves and gowns.

CEO of Fysight Rommie Nunes explains that the automated buddy is a virtual mirror that observes workers 'donning and doffing' PPE, prompting them to follow correct procedures, and identifying and helping them to rectify errors.

"The magical thing about Blue Mirror's AI is that the software learns over time. The more times the buddy is used, the more accurate it becomes," says Rommie.

"Blue Mirror is here to keep healthcare workers and patients safer by providing a virtual PPE instructor. We believe this can become the next level of PPE practice globally, enabling every healthcare worker access to a virtual PPE instructor when they most need it," says Rommie.

Via Innovations approached the Manawa Simulation Centre to trial







Clinical Skills Coordinator Christine Beasley using the Blue Mirror PPE virtual buddy

Blue Mirror in a teaching environment first – partly because that would be one of its ongoing applications, but also because of the need to refine it to ensure it would function optimally in a care environment.

By evaluating Blue Mirror in a hospital-like setting with students and nurses about to head out to Managed Isolation and Quarantine (MIQ) facilities, subtle but important improvements were identified and added during the pilot.

Examples included changing the instruction from "take off your gown" to "without touching the outside of the gown, take off your gown", and developing the app to automatically identify when someone was ready to start, without the user having to touch the device.

Clinical Skills Coordinator at Manawa Christine Beasley explains that the system is easy to set up and operate and you are guided through the whole process with instructions and checks.

"It is so easy! Nurse Educators and Nurse Lecturers have needed only one orientation session to become proficient in setting it up. Trial candidates were enthusiastic to use this education tool, finding it interesting and liking the interactive nature."

The system can be tailored for any PPE requirements, depending on the environment and infection. It can also be configured to meet theatre suite requirements.

"There is also the potential for Blue Mirror to be used to enable visitors to put on PPE safely before visiting people in isolation wards." Innovation Director at Via Innovations Anya Hornsey appreciated Blue Mirror's (the company) professionalism, their responsiveness and their agility in adapting the app to an educational learning environment. "It was great to achieve such a successful outcome during a difficult 2020, where the only constant was change."

Via Innovations, Manawa Simulation Centre and Blue Mirror continue to work together to further validate Blue Mirror's ability to improve frontline healthcare workers' safety.

To learn more about Canterbury DHB's Via Innovations Unit visit Via Innovations or watch these videos:

- > PPE donning
- > PPE doffing

## Hard work and dedication the mark of scientific career

It was a five-week journey on a ship from New Zealand to England that effectively kickstarted Scientist John Lewis' career.

"My wife and I were straight out of university and on our way to the UK to do our OE. When you are on a boat for over a month you have plenty of time to think and we decided that we should apply for jobs in our area of study rather than do pub work."

His wife Rose quickly got a job as a teacher, but John struck an issue when he went for his first interview.

"I was handed a manila folder containing the project I would be working on and it was in an area I wasn't familiar with."

He decided he could manage the role if he put his research skills to good use, and to cut a long story short he was offered the job at Hammersmith Hospital.

"I spent the first two weeks in the library and by the time I left the role I was publishing articles in medical literature."

He says it taught him a valuable lesson about not being phased by technical jargon and the importance of using initiative. The work in the UK helped him obtain a research grant to study cancer markers in New Zealand.

"That led to one or two other things and I was offered a permanent job."

In the 45-plus years since his return to Christchurch, John has been a co-leader in Canterbury Health Laboratory's

Steroids Laboratory and mentored numerous students. He retires on Friday as a former Section Head Steroid Chemistry and will take up an Emeritus role with CHL and the University of Otago.

The highlight of those more than four decades has been "all the fantastic people I have worked with," he says.

"The pinnacle is the Steroid Lab's really loyal staff, many of them have been here for decades. That, and our



John Lewis

contribution to diagnostic medicine. It is what has got me up in the morning."

John is a "scientist's scientist", says Chemical Pathologist and CHL Clinical Director Richard King.

"As a laboratory contributor in the area of steroids, he has published over 150 papers during his career which has had a recent emphasis on the biology of the steroid binding proteins and their application to diagnostic medicine."

His particular interest is in generating monoclonal antibodies to various proteins and understanding how they can be used as tools to investigate function.