

Important updates on Cancer Research

As the ever-changing cancer landscape evolves, so must the Southern Cancer Society. Increasing investment into research and innovation is crucial for discovering new treatments, improving survival rates, and staying ahead of emerging challenges.

Research and innovation are key to ensuring better outcomes and options for future generations.

Dr Morrin attends 2024 United Nations summit

He Taonga Tapu Southern Cancer Society Tissue Bank curator, Dr Helen Morrin, attended the United Nations General Assembly in New York, as part of a team developing ethical principles around tissue use.



Southern Cancer Society's Chief Executive, Nicola Coom, said ***"It was an extremely prestigious invitation and showed the high calibre of the important work undertaken by Dr Morrin and her team at the Tissue bank."***

The Science Summit ran from September 10th to 27th, during the United Nations general Assembly in New York. Dr Morrin worked with a group from US, Italy and Japan, all known as thought leaders in their fields including Law, Policy, Pharma, Bioethics and Research. Their session was devoted to the ethical use of human tissue in research with the aim to see ethical principles developed to promote better ethics in science and serve as a guide for the international sharing of biological specimens and data.

The Science Summit is a prominent global event that brings together leaders in science, policy, and innovation to tackle critical scientific and technological challenges. It serves as a platform for showcasing research, sharing knowledge, and fostering international collaboration, with discussions focused on topics such as climate action, artificial intelligence, biodiversity, and more. All are aligned with the UN Sustainable Development Goals (SDGs) and the UN Summit of the Future.

Training AI to Diagnose Cancer



Southern Cancer Society's He Taonga Tapu Tissue Bank is one of the first in the country and is the only open tissue bank. It began in 1996, leading New Zealand in biobanking development, and provides tissues and data associated with the patients' cancer.

The Tissue Bank supports cancer research using human samples, provided through a collection process that is ethically, legally, and scientifically sound.

New equipment installed at the Tissue Bank is a key tool for providing consistent tissue samples. The new Leica Linear Tissue Stainer will train AI diagnostic tools and support more accurate cancer diagnoses, to help ease the increasing burden of cancer on our workforce and allow earlier access to specialists.



Tissue Bank curator, Dr Helen Morrin said, ***"before the Stainer arrived all the work was done manually, which was labour intensive, and resulted in staining inconsistencies."***

"The machine works very simply by dipping tissue samples into red and purple dyes at the same speed for the perfect length of time. It's necessary to dye tissue samples so the architecture and nucleus of the tumor become visible. The staining machine rules out the possibility of human error." Consistent tissue samples are imperative for training AI diagnostic tools with accuracy.

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The work being undertaken at the Tissue Bank is already supporting many advancements in the understanding of and treatment of cancers. The recent discovery of the P16 tumor suppressing protein with the ability to turn cell division on and off, is just one of them.

He Taonga Tapu Tissue Bank collects from four main cancer surgeries breast, bowel, urological (kidney, prostate and bladder) and gynaecological (ovarian, cancer of the uterus and cervix) but also has a strong focus on the brain, pancreas and paediatric cancers.

To date, **15,000** patients have chosen to become donors and over **12,500** samples have been utilized in innovative cancer research.

“Our aim is to support as many research studies as possible from a single donation to increase research outcomes.”

Dr Morrin was awarded the Bridget Robinson Award for her career in translational cancer research after **23 years at the Tissue Bank** and has seen many advancements in our understanding of cancer during this time.

Advancements in combating the high rates of colorectal cancer that plague New Zealand



Professor Parry Guilford, Director of the Centre for Translational Cancer Research and Research Director of Pacific Edge Biotechnology Ltd, believes a simple non-invasive blood test will prevent people from dying of it.

Parry has been working with fellow Otago researchers to develop the blood test using Oxford Nanopore's DNA sequencing technology.

“The test detects fragments of DNA that have leaked from a cancer into the bloodstream. It allows for very early detection of a cancer.”

“If we can diagnose colorectal cancer consistently and early with a really safe, nice easy blood test, then we are looking at changing the survival rate for that cancer, and that is very achievable.”

Parry said development of the test had been on-going over several years to ensure accuracy and consistency and was about to go through a further round of testing. His aim was to have an affordable and accessible test available within the next five-years, so that people with symptoms of bowel cancer can be diagnosed before the cancer becomes untreatable. He and his team were among many laboratories around the world who have been researching circulating tumour DNA (ctDNA), but they were developing their own methods and their own knowledge.

In Pursuit 
of Cancer Research
& Innovation
Breakthroughs

Cancer Society to host new Cancer Research and Innovation Conference

We are excited to let you know about the Cancer Society's inaugural **In Pursuit 2025** Cancer Research and Innovation Conference, an event focused on the latest advancements in cancer research, treatment and care.

Taking place on the 6th and 7th of March 2025 at the Te Pae Conference Centre in Christchurch, this conference will unite healthcare professionals, researchers, innovators and investors to explore how we can work together to combat cancer.

As a valued supporter of our work, we wanted you to be aware of this exciting event and encourage you to spread the word amongst your networks.



In Pursuit 2025 will be an opportunity to showcase the amazing work cancer researchers are doing both nationally and internationally.

We also hope it will be a catalyst for transformation in cancer care. More than a conference, we want 'In Pursuit' to become a movement. We invite attendees to join us at the forefront of cancer innovation, connect with the brightest minds and contribute to transformative solutions.

For more information and to register, please visit:

cancerconference.co.nz

“The beauty of this simple blood test is that it could be done in labs or GP clinics, freeing up resources of the healthcare system which are under pressure. Ensuring a diagnosis is made early so the correct treatment can be applied. It will change the lives of countless New Zealanders and is also very applicable for those living in the Pacific Islands who don't have the same access to technology and diagnostic tools.”

Parry said bowel cancer was the predominant cancer showing up in younger people as the age of people being diagnosed with cancer lowers.

“The importance of having this test available can't be understated,” he said.

Professor Guildford is a key speaker at the Cancer Society's inaugural **In Pursuit 2025** Cancer Research and Innovation Conference in March next year.

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