

2011

ANNUAL REPORT



Centre for Clinical Research
and effective practice

Creating the future of healthcare



THE MIDDLEMORE TISSUE BANK BEGAN ACCEPTING DONORS IN DECEMBER 2010





THE MIDDLEMORE TISSUE BANK

Report from the Chair

Governance Committee

The formation of a Governance Committee was recognition of the complexity of the processes of tissue banking and the need for constant vigilance in the journey from the patient to the researcher.

Much preliminary work and thinking by Dr Stuart Ryan, Dr Samar Issa and Daphne Mason had gone into the issues with which the committee is now concerned. They have kept the committee well-informed.

Middlemore Tissue Bank's collection of a human biospecimens may be physically small but a donation is of deep significance – to the donor and to the responsibilities of the Bank. Patients who take this generous step play a vital, although largely unseen, role in cancer research. It is an act of trust. So it is for the Bank. We are the guardians of the tissue and take that responsibility sensitively. There is an ongoing duty of care requiring the development of policies to ensure that the donations are used efficiently and effectively for cancer research.

Because researchers will need access to some medical history and health records the Governance Committee needs to be satisfied that all research will be undertaken in accordance with approvals from independent ethics committees.

My experience as New Zealand's first Privacy Commissioner under the Privacy Act in preparing the Health Information Privacy Code was that individuals' concern for their health information is fundamental. Any researcher will have to show the Tissue Bank that this information will be protected to the highest standards.

Ethics committee approval has been given to the collection procedures. The Bank's respect for the patient's health information and the importance of a full understanding in consenting to the donation at a time of personal stress is the basis of our approach.

This is particularly important in a city of diverse races, ethnicities and countries of origin as well as our indigenous Maaori communities.

We have been engaged in developing a strategy for sustainable growth. It is necessary to see a clear path ahead for growth and to connect with communities. This is necessary not only to spread an understanding of our purpose to future donors but also to develop our capability and capacity to continue to grow and mature. That will call for continued support of sponsors and partners and the development of further financial support in the medium term. All this must be achieved while maintaining a reputation for excellence in our scientific and ethical standards.

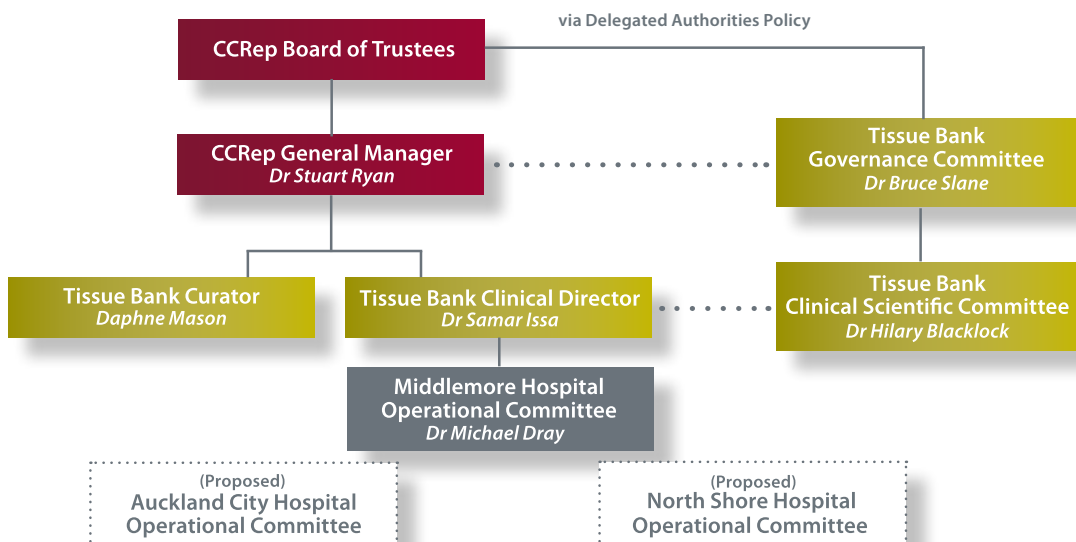
We must not be seen as distant from patient needs nor remote from the imperatives of cancer research. To this end we are intending to add to the committee members to enhance our links with business and Maaori as well as research.

We have been fortunate in having Dr Anne Thompson, executive officer, Victorian Cancer BioBank as a member of the committee – a great example of co-operation across the Tasman.

Committee members have given willingly of their time. They are Gillian Cossey, Adina Halpern, David Mace and Anne Thompson.

Sir Bruce Slane
Chair

Middlemore Tissue Bank Governance Structure



Cancer devastates the lives of thousands of New Zealanders every year.

Despite the great advances in cancer research over the past few decades, unfortunately the aetiology, behaviour of cancer and racial differences in the incidence are still not well understood. Translational research offers us the opportunity to look into cancer causes, diagnosis and treatment in detail. It is such research that made us learn about the chromosomal abnormalities that cause certain cancers like chronic myeloid leukaemia and enabled us to design targeted therapies like Glivec® (imatinib) which blocks these cancer leukaemic cells and offers patients a chance of a long disease-free life.

There are thousands of researchers in hundreds of cancer research laboratories using tissue and cells donated by cancer affected patients attempting to understand the behaviour of these cells with the ultimate aim of finding a cure for cancer. These researchers need tumour tissue, preferably linked to clinical information, to conduct their research. Tissue banks are established to meet these researchers' needs.

The Middlemore Tissue Bank was launched in June 2009 to meet our local cancer researchers' needs and provide them with a diverse collection of tumour biospecimens collected from our local ethnically diverse population. We also wanted to create a comprehensive database with information specific to cancers common in New Zealand. This will eventually attract talented, well-funded scientists to the region and encourage collaborative research projects.

Since the launch the Middlemore Tissue Bank has taken major steps forward. We have obtained ethics approval, established a scientific advisory committee, a Middlemore Hospital operational committee and a governance committee. The operational committee established the processes and then supervised the tumour samples' collection at Counties Manukau District Health Board (CMDHB). This committee also helped draft the patient information sheet and consent form and the information brochure for donors and their families.

A large establishment grant from the Freemasons Roskill Foundation has enabled the Middlemore Tissue Bank to be created. This was followed up with a further generous donation to allow the purchase of a state-of-the-art database and information system, where we can safely store our donors' coded information.

SPECIALISED PROTECTIVE CABINETS KEEP WORKERS SAFE FROM POTENTIAL HARM





THE MIDDLEMORE TISSUE BANK

Report from the Clinical Director (Continued)

Our partnership with the Leukaemia and Blood Foundation of New Zealand (LBF) continued in 2011 with a second generous grant that helped us purchase more equipment vital to the operation of the bank.

The building of the tissue bank facility was made possible by a generous grant from CMDHB. The space is located in the basement of the newly built Edmund Hilary Block and includes a storage area for the -80°C freezers, a sample processing area and an office space.

The Middlemore Tissue Bank opened its doors in December 2010. We were operational and ready to start what we worked hard towards for 2 years – collecting tumour samples. We collected our first specimen from a haematological cancer patient. Since then we have collected samples from 94 patients, mostly blood cancer patients; we also started our solid malignancy collection with 3 soft tissue sarcoma specimens donated to the bank.

Consultations with our Maaori & Pacific stakeholders started as early as the concept of establishing a tumour/tissue bank at Middlemore Hospital was born.

The CMDHB Maaori Research Review Committee approved the Bank and the local Kaumaatua supported our vision; Te Kaahui Ora (the CMDHB Maaori Health Team) contributed to patient information and consent documentation. In 2011 Tainui gifted the name Matatika Koiora to the Middlemore Tissue Bank, it means ethical or right life or bioresearch. Matatika Koiora is now seeking tomorrow's cure. In August 2011 we were invited to attend the Whatapaka Poukai, where we proudly presented Matatika Koiora to the Maaori King, Kingi Tuheitia.

We have translated our brochure and patient information sheet/ consent form into Maaori and Tongan languages and we have been successful in collecting many samples from Maaori & Pacific cancer patients.

A second summer student fellowship granted by CMDHB enabled us to appoint a student who studied and summarised the NZ Ministry of Health cancer registry "cancer projections" document that was published in early 2010 to help guide us in drafting a prospective tumour collection guidelines.

We have designed a webpage and we are looking into improving it by adding a researchers' specific page where we detail the types and number of specimens available to researchers.

We have been invited as guest speakers to talk about our experience with the Middlemore Tissue Bank and tissue banking in general, to many patients, doctors and support group meetings, conferences, symposia and gatherings, locally and regionally. Our aim is to raise awareness and knowledge about why we need a tissue bank.

In summary, we have achieved a great deal in the previous year and our dream became reality when we started collecting our first tumour samples. We are looking forward to the future to serve our researchers, patients and the community.

Samar Issa FRACP, FRCPA
Founding Clinical Director



Dr Stuart Ryan speaks at the official opening of the Middlemore Tissue Bank

Middlemore Tissue Bank Acknowledges the Support of our Partners

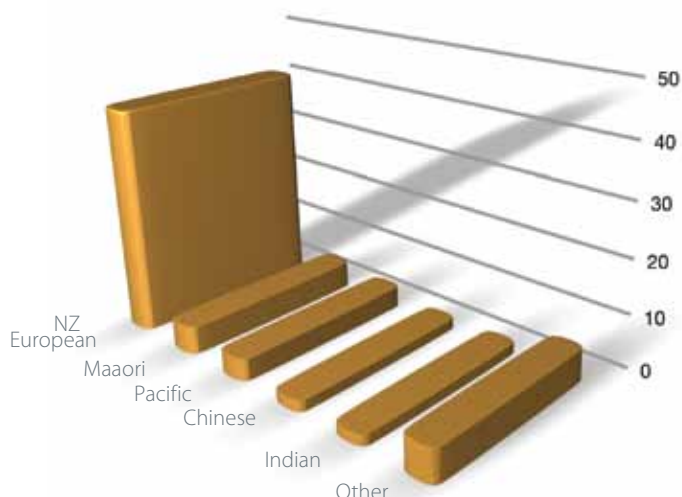


Founding Sponsor





Donors by Ethnicity



The Collection

In the period to June 2011 sixty patients from Middlemore Hospital consented to make a tissue donation (see tables).

Ethnicity

The majority of donors were New Zealanders of European decent. The percentage of Maaori and Pacific donors is pleasing although it is less than the proportion that each group represents in the South Auckland population. We are planning additional initiatives to further support Maaori and Pacific people with their decisions around tissue donation.

Tumour Types

Our initial collection strategy has been to focus on one tumour type until we have the resources to collect simultaneously from a range of areas. As a result the majority of the donors (58) have provided specimens from haematological malignancies. More recently we have started collecting bone and soft tissue tumours in association with the surgical team and Pathology Department at CMDHB. Further expansion is planned as resourcing allows.

Biospecimen Types

Haematological malignancies have yielded:

- white blood cell pellets (from bone marrow and peripheral blood)
- serum
- EDTA plasma
- snap frozen tissue

We also collect repeat bone marrow aspirates from patients as their treatment progresses. At June 30, 2011 two such 'serial' donations had been banked. One patient also donated solid tissue (lymph node) thereby creating a 'set' of tissue which is very useful for research.

Tissue Biospecimens Collected by Tumour Type

<i>Tumour Type</i>	<i>Snap Frozen Tissue</i>	<i>Fresh</i>
Haematological	2	0
Sarcoma	9	0
Total	11	0

Blood Biospecimens Collected by Tumour Type

<i>Tumour Type</i>	<i>Serum</i>	<i>EDTA Plasma</i>	<i>WBC Pellets</i>
Haematological	291	327	428
Sarcoma	0	0	0
Total	291	327	428

Total Donor Numbers by Tumour Type

<i>Tumour Type</i>	<i>Donors</i>
Haematological	58
Sarcoma	2
Total	60

Acknowledgments

We are indebted to the following tissue banks for sharing their methodologies and experience: **Cancer Society Tissue Bank** (Christchurch, NZ). **Neurological Society Brain Bank** (Auckland, NZ). **Rare Disease Biobank** (Otago, NZ). **Australasian Leukaemia and Lymphoma Group Tissue Bank** (Brisbane, Australia). **Victorian Cancer Biobank** (Melbourne, Australia). **Mayo Clinic 20K Tissue Bank** (Minnesota, US)



Special thanks to all our staff for their ongoing commitment to research excellence

Richard Ames	Lyndsay Le Comte
Shelley Ashcroft	Julia Leary
Dr John Baker	Rhonda Litchfield
Mary Baldwin	Patricia Loft
Francie Birch	Gwenda Lunn
Sue Bugler	Daphne Mason
Dianne Buskermolen	Jo-Ann McLeish
Ruth Cammell	Lynda Mockett
Diane Caveney	Pauline O'Brien
Rose Clarke	Veronica Park
Renee Coxon	Cecilia Paul
Yvonne Dunn	Lynette Pearce
Penelope Eadie	Alison Robertson
Murray Farnsworth	Leesa Russell
Helen Farrell	Dr Stuart Ryan
Ann-Marie Ford	Gabrielle Sexton
Chris Giffney	Debbie Tipper
Namratha Gopalkrishna	Cecilia Tong
Zuzana Gray	Kara Trask
Donna Guy	Megan Upjohn
Jenny Han	Alain Vandal
Lyn Haycock	Marie White
Catherine Howie	Ruth Withers
Dr Samar Issa	Irene Zeng
Gene Jeon	
Frances Kasmi	

Centre for Clinical Research
and effective practice

Creating the future of healthcare





Centre for Clinical Research
and effective practice

Creating the future of healthcare

