#### New Zealand leading the world

Human tissue is essential to find out what goes wrong in human brain disorders – animal models do not fully model this process. With the use of human brain tissue, ground breaking studies have been performed in New Zealand enabling us to identify new areas of the brain affected by specific neurodegenerative diseases. Our research also helps us to understand how specific drugs like anaesthetics, pain killers and anti-epileptic drugs work on the brain.

Critically, our researchers were the first to discover that the human brain contains stem cells that try to repair to replace dying brain cells.

Scientists and doctors across the Centre for Brain Research are working together to improve care for people with neurological conditions. Vital relationships between clinicians, psychologists and scientists allow us to see how a neurological disease affected the person during life, as well as how the disease affected the brain.

Tissue from the Neurological Foundation Human Brain Bank is being studied in conjunction with the CBR Biobank. Small samples of the tissue are also available to leading international researchers with whom we have research collaborations. Working together, our scientists are testing potential new drug treatments on human tissue, creating hope for a better future for people with brain disease.





# What measures ensure privacy and appropriate care of the tissue?

The Neurological Foundation Human Brain Bank complies with the University and District Health Board ethics committees. All donor information is securely stored and only accessed for research purposes. Brain tissue is stored using numeric codes.

The brain bank staff members are highly trained researchers. The directors, Sir Richard Faull and Associate Professor Maurice Curtis are well respected and esteemed New Zealand scientists. A team of researchers and skilled technicians help families through the donation procedures.

## Talk to your family

If you decide to become a donor, it is important that your next of kin agrees with you decision. They will be the person contacting the Neurological Foundation Human Brain Bank after your death, so we encourage you to talk over your decision with them.

# **Contact us**

**Brain Bank Manager** Phone: +64 9 923 6072

Email: brainbank@auckland.ac.nz Website: www.cbr.auckland.ac.nz

Centre for Brain Research

Neurological Foundation Human Brain Bank University of Auckland Private Bag 92019, Auckland 1142 New Zealand

# Donating my brain to science

**CENTRE FOR** 

THE UNIVERSITY OF AUCKLAND

Te Whare Wānanga o Tāmaki Makaurau

BRAIN RESEARCH



FOUNDATION OF NEW ZEALAND

# The Neurological Foundation of New Zealand Human Brain Bank

It's estimated that one in five New Zealanders will suffer from a brain disorder in their lifetime. Neurological conditions including Parkinson's, Alzheimer's, Huntington's, motor neuron disease and epilepsy affect the lives of hundreds of thousands of people. These debilitating conditions rob families of their loved ones and limit sufferer's chances for a normal life.

# Finding answers is critical. Research to find the causes and potential cures for brain disease is our hope for a better future.

Donated human tissue is vital for identifying the brain changes that occur in different neurodegenerative diseases. Neuroscientists, neurologists and neurosurgeons at the Centre for Brain Research need to gain more knowledge of how the brain works, in both health and disease, so we can fight these terrible illnesses. That's where you can help.

"The support of the donors and their families is vitally important for our research. The donation of the human brain is one of the greatest and most precious gifts that can be made to science in order to help future generations."

Sir Richard Faull, director of the Neurological Foundation Human Brain Bank



## How does the human brain bank work?

A human brain bank is a collection of brain tissue, often including other tissue such as the spinal cord, which has been generously donated to research after the donor's death.

The brain is removed and stored in ways that optimise current and future research possibilities. The removal of tissue must be performed rapidly after death. Respect and privacy of the donors and their families is maintained at all times by a dedicated team of brain bank staff.

Researchers and families learn about the pathology of the patient's donated tissue, to find out more about each person's illness. This information is vital for doctors and scientists to develop better diagnoses and treatments in the future.



#### Does the brain bank need my brain?

It is neither too early nor too late to consider donation; people of all ages can bequeath their brain. People with Alzheimer's, Huntington's, Parkinson's, motor neuron disease, epilepsy and brain tumours can help by enrolling to donate their brain and other tissues. To ensure our research is of the highest international standard, comparison with 'normal' brain tissue is essential. This means we also need people who do not suffer from a neurological disease to donate their brain. You can find out more information on brain donation by filling in the form over the page.

On occasions we are unable to accept brain donations at the time of death for technical and logistical reasons.

"Donations from people without a neurological disease are just as important for our research. Only by comparing tissue from healthy brains to tissue with a brain disease, can we work out what goes wrong in brain diseases. That information helps us work towards a cure."

> Associate Professor Maurice Curtis, deputy director of the Neurological Foundation Human Brain Bank

### What is the process for brain donation?

- Fill in the form below and send it to us for more information. Our brain bank team will send out a donation pack and may discuss with you more specific medical information, if required.
- 2. Discuss your wish to donate your brain to science with your family.
- 3. Fill in the donation forms that we send you and return them to us so that we have your offer of brain donation on record.
- 4. The removal of your brain must happen within 24 hours after you die, so your family will need to contact us soon after your death.

You can change your decision about brain donation at any time. Simply write us at the address overleaf and indicate you wish to withdraw consent.

Name:						
Date of birth:						
Gender:	Female		Male			
If you have a b	rain diseo	ase, pl	ease in	dicat	e here:	
Your address:						
Your phone:						
iour priorio.						
Your email:						