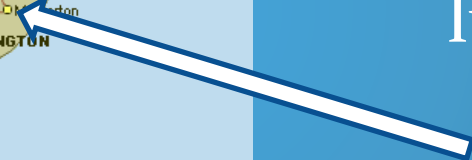


# The History of Medical Physics in New Zealand

Howell Round  
University of Waikato  
New Zealand



It all started here  
in Masterton  
(where?)



By this chap



**William Henry Hosking**  
MRCS, LRCP (London), LSA, LMI  
1841 – 1917

- Kept up-to-date with the Lancet
- Early practitioner of antiseptis
- Dabbled in hypnosis and electrotherapy

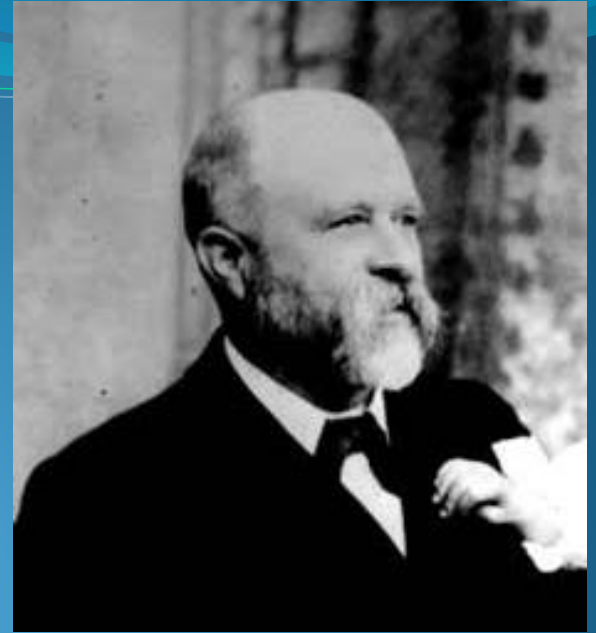




- 1895 Roentgen discovers X-rays
- 1896 First X-ray 'photographs' in NZ demonstrated in Dunedin
- 1896 Hosking imports X-ray equipment



- ‘Turn of the century’ Hosking imports radium
- Successful cures
- Treats own wife for breast cancer
- Dies 1917 from severe anaemia (attributed to radiation)



- “Father was careless with protective clothing, and was guilty of not wearing the leather gloves and aprons he was advised to.”

- Christina Hosking

## Early major hospital users of X-rays:

1897 Auckland

1897 Christchurch

1898 Wellington

1904 Dunedin

1904 Palmerston North

The equipment was quite unreliable!



## **First physics input:**

Radon collection plant set up at Wellington Hospital (mid-1920s) under (nominal) supervision of Professor Sir Ernest Marsden

By 1930, radiotherapy departments at Auckland, Wellington, Christchurch and Dunedin

But still no physicists involved!

John Strong

First Travis Radiological Physicist (1933)

Leaves on 9-month study tour in 1939 of English  
and American labs

War breaks out while he is at sea

Gets involved in radar research in Britain

Killed in flying accident 1941 aged 31 years

## First Hospital Physicist

Warren Sinclair - Dunedin Hospital - 1945

1947 - went to London to do PhD on half pay

Pay didn't eventuate, so he never came back!

1954 NZ Medical Physicists Association

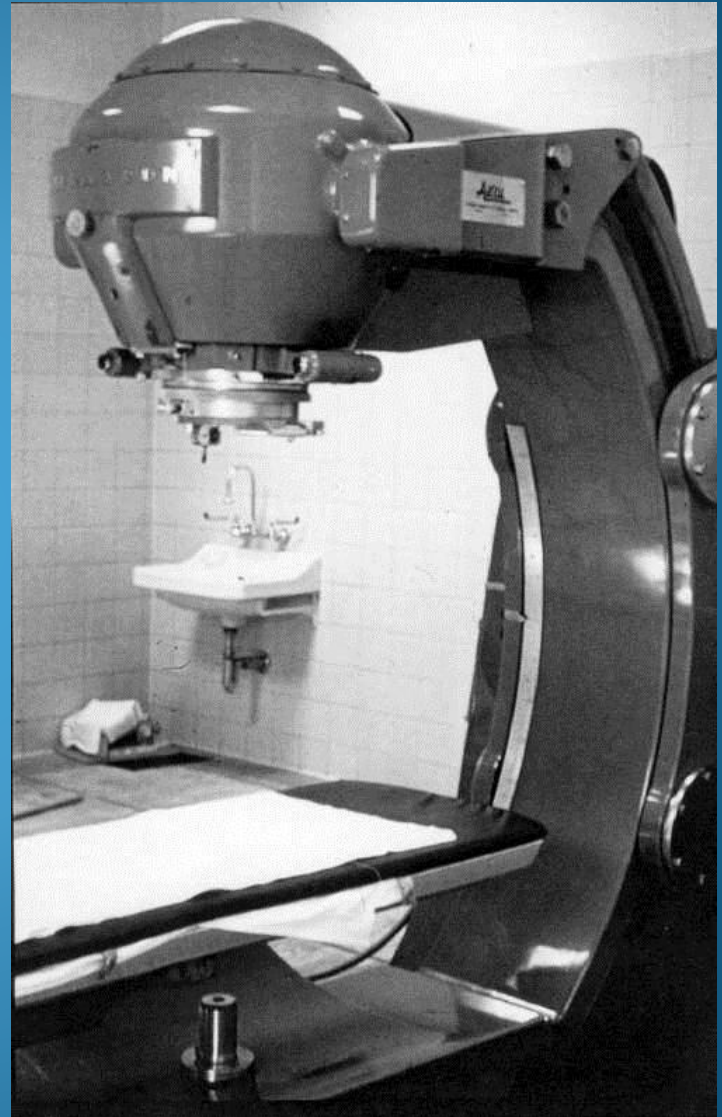
1968 NZ Hospital Physicists Association (Inc)

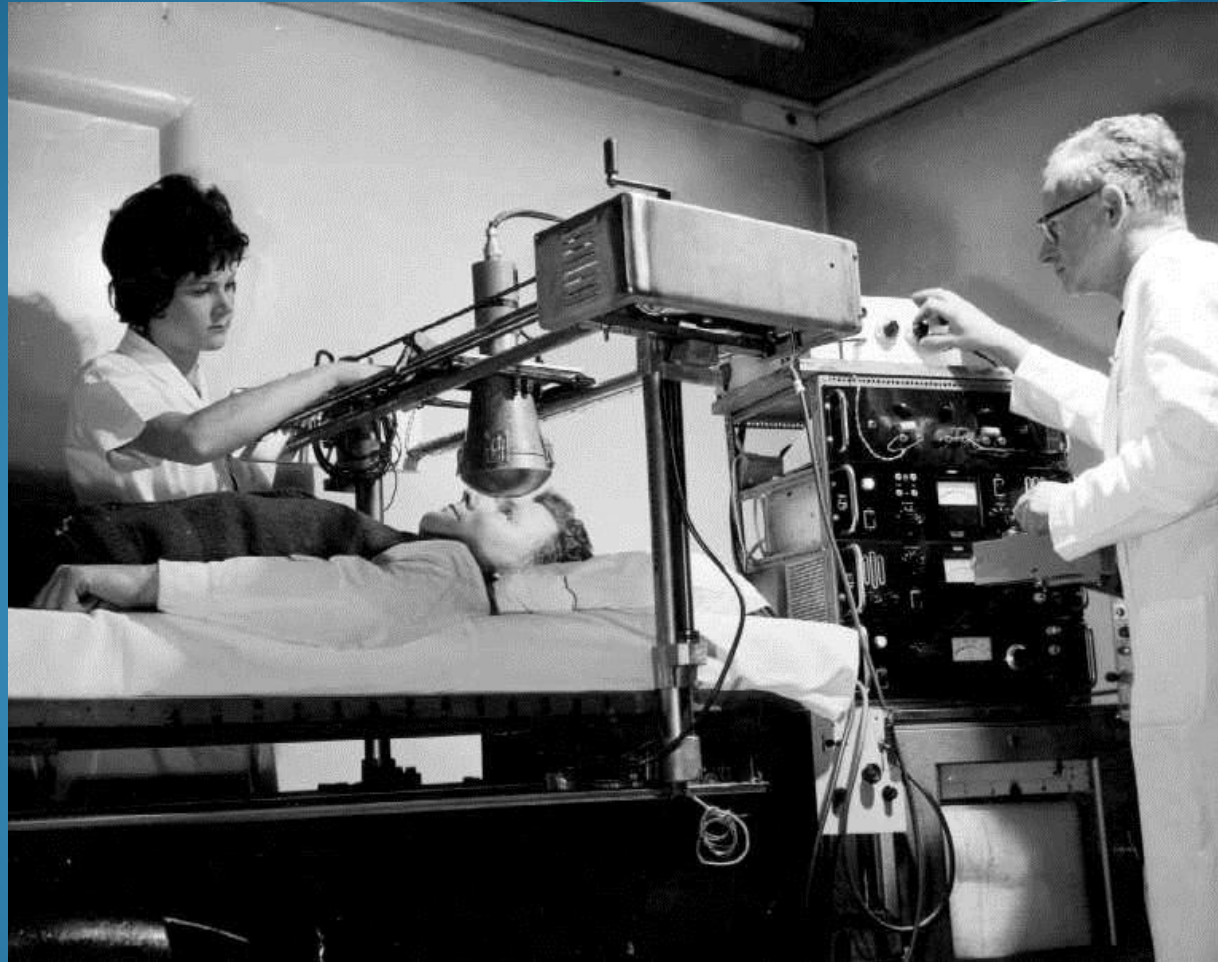
1979 Australasian College of Physical Scientists  
and Engineers in Medicine

# First supervoltage radiotherapy unit in NZ:

AECL Theratron-B  
Co-60 isocentric unit,  
75 cm SAD

Christchurch  
Hospital, 1956





Early rectilinear scanner

Designed and built by Medical Physics staff, Christchurch Hospital  
Jack Tait at the controls  
Tom Rogers as a 'simulated' patient.

## Education

- 1983 MSc Medical Physics at Otago university
- 2002 NZ Clinical Training Agency agrees to set up Medical Physics registrar (resident) program (TEAP)
- 2003 MSc Medical Physics at Canterbury University
- 2006 BTech in Medical Physics and Imaging Technology at Auckland University