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 antisepsis
• 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