



New Bernie Banton Centre to Fight Asbestos Cancer

The Asbestos Disease Research Institute at Concord is the world's first stand-alone asbestos research facility.

Beth Quinlivan

PROFESSOR NICO VAN ZANDWIJK is hoping that within five years, the new Asbestos Disease Research Institute will have as many as 50 researchers dedicated to minimising this country's heavy burden of asbestos-related disease.

The Institute, housed in the Bernie Banton Centre at Concord Hospital and established in conjunction with the Faculty of Medicine's ANZAC Research Institute, is the world's first stand-alone research facility dedicated to the prevention and treatment of asbestos diseases.

Professor van Zandwijk, a thoracic oncologist and previously with the Netherlands Cancer Institute, was appointed as its Director in 2007. The ultimate purpose in setting up ADRI is to boost the national research effort in asbestos diseases - important because the human and health costs associated with Australia's early asbestos mining and usage are increasing rapidly.

Asbestos mining finally ceased in Australia just 25 years ago and the country has the dubious distinction of having had the highest per capita usage of asbestos in the world. The legacy is that it now also has the world's highest - and rising - incidence of the deadly asbestos cancer, mesothelioma. About 300 new cases are diagnosed each year in NSW alone, forecasts are that by the middle of this century, mesothelioma is likely to have killed over 20,000 Australians.

"Our aim is to find new ways to treat a disease that is resistant to almost all existing cancer treatments. Mesothelioma is among the most aggressive malignant diseases known, prognosis is typically less than one year from diagnosis to death," said Professor van Zandwijk.

"Despite its impact, we know too little about the mechanisms that produce asbestos cancers to develop effective screening and prevention campaigns."

Several characteristics of mesothelioma provide opportunities for research.

Firstly, the mineral fibre is relatively inert biologically so that the development of mesothelioma must involve

a chain of post-exposure steps. Second, only a small percentage of people who are exposed to asbestos ever develop mesothelioma. And, mesothelioma is almost always diagnosed in its late, untreatable phase, which can be up to 40 years after exposure to asbestos fibres.

But if researchers are able to understand the molecular processes which occur during the long period between exposure and diagnosis - as they have been able to do with, for example, colon cancer - they may be able to identify ways to stop or slow the progress of the disease.

With colon cancer, research has identified clear steps in the slow progression from normal cells to pre-malignant colonic polyps and finally to invasive, fatal colon cancer. Screening programs and early treatment if polyps are found, have been very effective in reducing the burden of fatal colon cancer.

"We are in the period of molecular medicine, and I am quite optimistic that we will in future be able to identify the critical pathways with mesothelioma," he said.

A priority is the development of a tissue bank, to underpin research efforts.

The Bernie Banton Centre was officially opened in January by the Prime Minister Kevin Rudd and NSW Premier Nathan Rees. The Prime Minister at the time announced a further \$5 million in funding, to go towards fitting out the Centre's research laboratories and to establish a new animal research facility.

The Centre was named in honour of Bernie Banton, who spent the last five years of his life fighting for compensation for people who had contracted mesothelioma or asbestosis through exposure to James Hardie products.

The University of Sydney contributed \$5 million towards the establishment of the Asbestos Disease Research Institute. Further funds came from the Dust Diseases Board of NSW, ANZAC Research Institute, James Hardie Industries, NSW Health and Sydney South West Area Health Service.



Professor Nico van Zandwijk.
The Bernie Banton Centre.