

## ASBESTOS CANCER RESEARCH

Bruce was moved by the hopeless situation of asbestos cancer victims in the mid-1980s. His State had the highest incidence of asbestos cancers in the world due to the mining and widespread use of the deadliest asbestos fibres, crocidolite.

At that time the disease was untreatable and the physicians would send the patients straight to palliation. So Bruce established a research team to try to make an impact and improve outcomes for this disease.

In order to do this the team established the first human and animal mesothelioma cell lines, the first disease models, the first *in vitro* drug sensitivity tests and the first immunotherapy trials in the disease, including the first to show significant benefit, recombinant alpha 2a interferon. This spurred the team to further study immunotherapy for this disease which has since improved treatment response rates in mesothelioma patients from around 0-8%<sup>6</sup> to over 45%.



*Boys playing in asbestos dust. Both died of mesothelioma as young men.*

### IMIG



In the early 1990s he co-founded the main international mesothelioma collaborative group, the International Mesothelioma Interest Group (IMIG).

### NCARD

This led 20 years later to the establishment of the highly successful Australian national NHMRC Centre of Research Excellence, the National Centre for Asbestos Related Diseases (NCARD). NCARD brought together most of the best Australian scientists in the field to work collaboratively towards curing and preventing asbestos cancers. He was Director of this Centre for 11 years.



NCARD has led many firsts in the field including the genomic identification of the first tumour neo-antigens induced by natural carcinogens and the first reliable blood biomarker for mesothelioma.

He was co-chair of the international ICGC-TCGA mesothelioma gene sequencing program.

*Professor Robinson's team are the world leaders in the field of mesothelioma research*

***Professor V Courtney Broaddus, Chief of Pulmonary, San Francisco, USA. 2012 Report to NHMRC CRE Board.***

He is a regular contributor to community, consumer and media discussion on asbestos issues.

#### **CURRENT PROJECTS**

- Blood biomarkers
- Mutation identification
- Cancer vaccines
- Chemoimmunotherapy