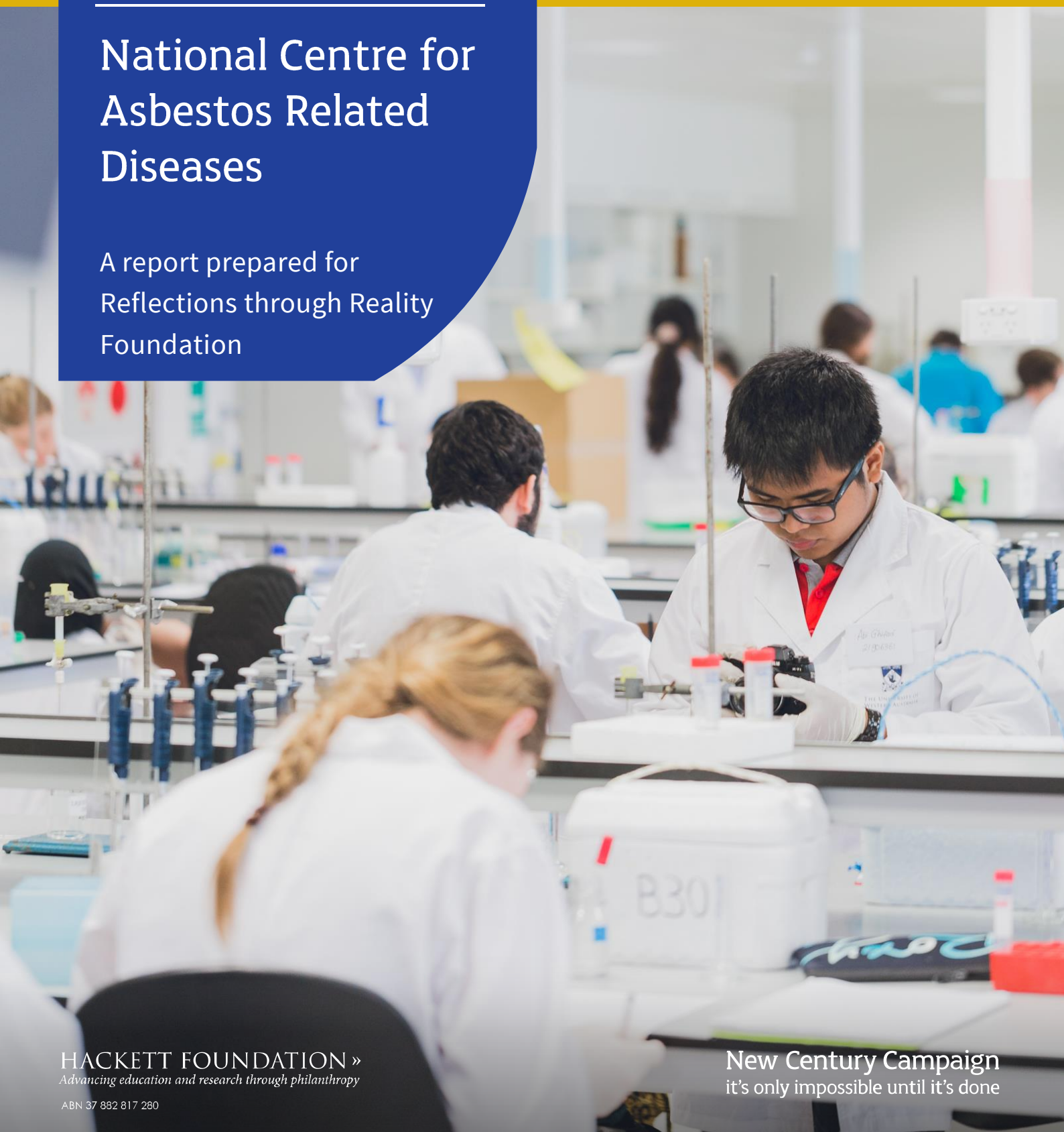
THE UNIVERSITY OF WESTERN AUSTRALIA

Seek Wisdom

National Centre for Asbestos Related Diseases

A report prepared for Reflections through Reality Foundation



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Message from the Vice-Chancellor

Dear Mr Watkins

Thank you for your continuing support of The University of Western Australia and the National Centre for Asbestos Related Diseases (NCARD). It is my pleasure to provide you with an update from NCARD Research Fellow, Dr Linda Ye.

As you are aware, research is the key to finding the answers to our questions about mesothelioma and asbestos related diseases. Your support of this research and the team at NCARD is instrumental in bringing us one step closer to finding the answers to those questions, and hopefully, one day a cure.

We are proud of our association with Reflections through Reality; your work in the community in supporting patients through treatment, and raising awareness about mesothelioma and asbestos related diseases is truly commendable.

Once again, thank you for your support, encouragement and belief in our students, researchers and our institution – you truly are making a difference.

Yours sincerely

Professor Dawn Freshwater
Vice-Chancellor

Message from the Pro Vice-Chancellor and Executive Dean, Faculty of Health and Medical Sciences

Dear Mr Watkins

As we celebrate the 60th anniversary of the UWA Medical School, we would like to thank Reflections through Reality, and your donors and volunteers, for your vision in investing in medical research. In particular, we greatly appreciate Rotary Club of Perth's support. Rotary Club of Perth has had a long-standing history of supporting medical research at UWA. They played a vital role in establishing UWA Medical School by driving the 1950s community appeal. By engaging the broader community, Reflections through Reality has made a difference to mesothelioma.

UWA Medical School is proud that many of our leading mesothelioma researchers are graduates of our own Medical School and we remain committed to developing the skills of both clinicians and researchers in order to improve the health of all Western Australians and indeed people across the world.

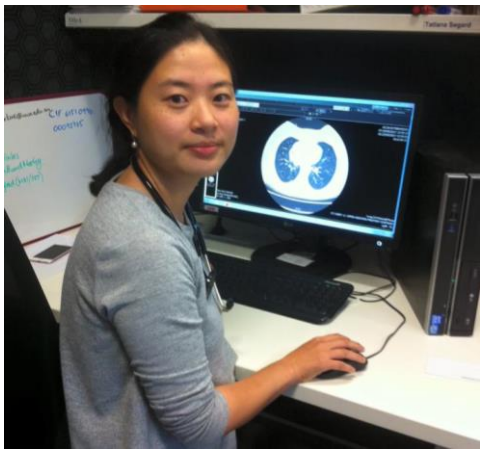
Without community support, we could not achieve what we do. My sincere thanks to everyone at Reflections through Reality for rallying people to this important cause.

Yours sincerely

Wendy Erber

Professor Wendy Erber
Pro Vice-Chancellor and Executive Dean
Faculty of Health and Medical Sciences

Update from Dr Linda Ye, NCARD Research Fellow



I am a doctor in my final year of medical oncology training. I am grateful for the opportunity to work with the NCARD team in lung cancer and mesothelioma research.

Current research projects that I am working on include:

A clinical trial to evaluate the safety of a novel cancer treatment strategy – the neoantigen vaccine in patients with surgically resected lung cancer. This trial also aims to analyse the immune responses generated by this vaccine treatment.

Currently lung cancer is the most common cause of cancer death in Australia and worldwide. With our current treatment options, the 5 year survival rate for advanced lung cancer is still only around 5%. In recent times, immunotherapy drugs have been developed which can induce significant prolonged responses in lung cancer. However, with the current drugs available, the response rate is only around 20%.

The Neoantigen vaccine is a new immunotherapy strategy which we hope will improve the current treatment paradigm. For each individual patient, a vaccine is produced targeting his/her specific cancer mutations. The vaccine aims to induce a person's own immune system to attack mutated cancer cells. As this immune response is directed against specific cancer mutations, this treatment would theoretically be safer than current immunotherapy agents as the immune system is less likely to attack normal cells.

This strategy has been tested in mouse models and strong immune responses against specific cancer mutations have been detected. The vaccine is now being evaluated in humans, as in our study.

My role is to help develop and finalise the study protocol, making sure that our study design is feasible, safe and has the ability to achieve the research objectives. Specifically I am involved in writing the protocol, creating forms required for data collection, writing the ethics applications, liaising with different departments that will be involved in the trial such as the pharmaceutical company and pharmacy.

If this study shows that neoantigen vaccination is safe and immunogenic in lung cancer patients, we hope to extend future research to other cancer groups such as mesothelioma.

Analysis of immune responses in tumour draining lymph nodes and blood pre and post chemotherapy in patients with advanced lung cancer.

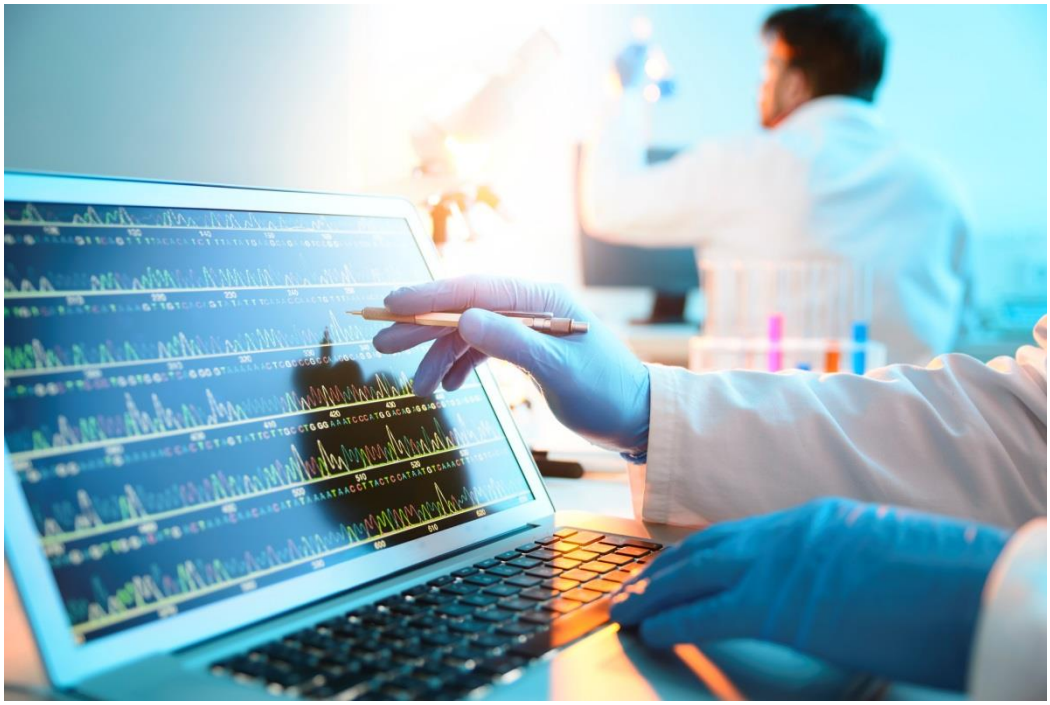
In order to develop better treatments, it is essential to gain further understanding of the mechanisms of treatment response and resistance. This study focuses on how the immune environment in lymph nodes and blood changes pre and post chemotherapy. Results of this study will advance our understanding of why some tumours respond and some don't, and ways to overcome treatment resistance.

My role is to help develop a study protocol and apply for ethics approval. This involves researching the safety and feasibility of the study design and writing the ethics submission.

Tissue collection in mesothelioma patients.

Asbestos induced genetic mutations are well established as the main causative factor in the development of mesothelioma. Further research into the genetic profile of mesothelioma requires good quality tissue samples with adequate cellularity for gene sequencing.

I am involved in the development of a sample collection protocol for this study, which provides a guideline for surgeons to obtain research tumour tissue. This protocol will allow us to access good quality tissue samples that will aid future research.



Thank you

UWA and Dr Ye would like to thank you supporting this important research.

Contact us

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