

# Annual Report 2010



## Mission

The Asbestos Diseases Research Institute aims to improve the prevention, the diagnosis and treatment of asbestos-related diseases.

## Who We Are, What We Do

The Asbestos Diseases Research Institute (ADRI) was established by the Asbestos Diseases Research Foundation (ADRF), a charitable, not-for-profit organisation dedicated to assist and support the research efforts of the ADRI.

Australia is one of the countries with the highest national incidence of malignant mesothelioma in the world due to the intensive production and consumption of asbestos and its products between the 1940s and the 1980s. Asbestos was mined, processed and extensively used in the building industry. Moreover, asbestos was used in a multitude of different industrial products and many Australians were not aware of the dangers of asbestos. The asbestos exposure in the last century has been so significant that the number of new cases of mesothelioma is still on the rise and nationwide coordination is needed to prevent the huge amounts of asbestos still present in the environment affecting future generations of Australians.

Thus ADRI's mission - to improve the diagnosis and treatment of asbestos-related diseases and to contribute to effective preventive measures- is a very important one.

ADRI's research staff is working hard to provide a better future for all those Australians exposed to asbestos by exploring novel preventive measures and research towards more accurate diagnosis and more effective treatment of asbestos induced diseases, and mesothelioma in particular. ADRI's research progress has been summarised in this report. 2010 was characterised by increasing attention of the media for the Australian asbestos tragedy and ADRI has contributed to regional and national efforts to increase the Australian public's awareness of the dangers of asbestos. ADRF Board Members, Sylvia Kidziak and Paul Bastian, together with the ADRI Director Nico van Zandwijk, have started their contribution to the Asbestos Management Review Advisory Group, which is tackling Australia's asbestos legacy by a coordinated national approach.

## CONTENTS

ADRF Chair's Report	2
ADRI Director's Report	3
Research Program	4
Staff	8
Grants	11
Publications	14
Presentations	15
Collaborators	17
Visitors	19
ADRI Supporters	20
Governance	21
Contact ADRI	25



---

## Acting Chair's Report

### Asbestos Diseases Research Foundation

With the resignation of the Chair, the Hon. Bob Carr from the ADRF Board in December 2009 it has been my pleasure to serve as Acting Chair until a new Chair is appointed.

I am pleased to report that the staff of the ADRI has had a successful second year of operations and it is encouraging to see that the research program has expanded significantly in the 2010. Research outcomes as measured by the number and quality of peer-reviewed publications and presentations made at national and international scientific forums are key indicators of ADRI's success. These research outcomes contribution to a better future for all those Australians exposed to asbestos.

Important strategic initiatives were consolidated during the year, including:

- National Guidelines for the Diagnosis and Treatment of Malignant Mesothelioma – The process to develop these guidelines in line with NHMRC criteria was stimulated by expert meetings at ADRI and it is expected that national recommendations will be ready for adoption into clinical practice in mid 2012.
- Australian Mesothelioma Registry - a consortium consisting of the ADRI, Cancer Institute NSW, Monash University and the WA Mesothelioma supported by Safe Work Australia commenced activities in 2011 and the Registry will be connected with the ADRI Biobank.
- The ADRI BioBank received a grant from the CINSW allowing us to expand freezing capacity and to comply with high quality standards.
- The ADRF's Translational Research Facility, funded by the Commonwealth Government, construction is expected to commence mid 2011.

Launch of the Australian Mesothelioma Registry - Member of ADRF Board, Ms Sylvia Kidziak AM, the Prime Minister the Hon. Julia Gillard and the Premier of NSW, the Hon Kristina Keneally

Through continued philanthropic support it enables us to continue our commitment toward the prevention and amelioration of malignant mesothelioma and other asbestos-related diseases. I would like to thank in particular the Biaggio Signorelli Foundation for its support of the Development of Guidelines for the Diagnosis and Treatment of Malignant Mesothelioma.

#### ADRF Board

I would also like to thank the Board for their support and hard work during 2010. There were a number of challenges during the year that required input and I'm especially thankful to Ms Sylvia Kidziak and the Executive Committee for their stamina to resolve many of these issues out of session. As Acting Chair I look forward to a busy and productive 2011 with the building of the Translational Research Facility and the appointment of a new Chair.

#### ADRI

In this second year of operation I would like to take this opportunity to thank Professor Nico van Zandwijk, Dr Glen Reid and the staff of ADRI for their dedication and hard work and look forward to seeing future research successes in 2011.



Mr David Henry  
Acting Chair



---

## Director's Report

### Asbestos Diseases Research Institute

Welcome to the second Annual Report of the Asbestos Diseases Research Institute (ADRI). ADRI's first full operational year can be characterised as a period of rapid progress, confirming the unique opportunities of a disease-oriented research institution focused on one of the most prominent health issues in Australia.

There is no country in the world, which is more extensively exposed to asbestos than Australia and this is the cause of the current 'silent epidemic' of mesothelioma. Asbestos is still ubiquitously present in the Australian environment and huge efforts are needed to curtail the tragic consequences of our asbestos legacy. Despite relatively limited resources and a modest number of research staff, ADRI has been able to produce a remarkable scientific output in the second year of its existence. There were 17 publications in major peer-reviewed international scientific journals. One chapter was contributed to the most influential textbook of thoracic oncology and another chapter appeared in a European textbook of thoracic oncology. Many presentations were made at national and international scientific forums and for to the general public to increase the awareness of the dangers of asbestos. ADRI also contributed to raising awareness by giving newspaper, radio and television interviews. ADRI also hosted educational meetings for governmental representatives from Vietnam and Korea, and contributed to an international initiative from Vietnam and Australian Unions to phase out asbestos use that is still poisoning the South-East Asian (Vietnamese) work environment.

The Federal Government, through an invitation to two ADRF Board members and the ADRI Director to become a member of the national Asbestos Management Review Advisory Group, has confirmed the important role of our institute. The national Asbestos Management Review Advisory Group will formulate recommendations to further control of Australia's immense asbestos legacy and to effectively curtail future exposures.

It is also important to mention that the Australian Mesothelioma Registry (AMR), supported by Safe Work Australia, and a joint initiative of the Cancer Institute NSW (CINSW), ADRI, Monash University, the School of Public Health at The University of Sydney, has started its registration activities in 2010. The AMR is an essential tool to accurately describe the Australian mesothelioma epidemic and to gain up-to-date information about underlying occupational and/or environmental asbestos exposures. The ADRI Biobank, a steadily increasing source of materials for translational research, has profited from an equipment grant from the CINSW and will be enriched by liquid nitrogen freezers in the beginning of 2011. Another CINSW grant will allow us to pilot proteomic markers in 2011.

Despite our positive achievements it is inevitable to also mention some clouds on the horizon of medical research in Australia and ADRI in particular. At its conception ADRI received generous support from the NSW Government. At a later stage an important contribution was received from the Federal Government allowing us to build a Translational Research Facility that will serve ADRI and our neighbour, the ANZAC Research Institute. Notwithstanding important contributions in the past, a medical research institute of modest (niche) size will not survive if the current trend to restrict infrastructural support to only medical research institutes that are able to attract a large grant income (> \$5 million) will continue. Research excellence has always profited from a competitive research environment but if total grant income will be considered more important than an objective measure of scientific output (i.e publications in peer-reviewed journals), a niche institute like ADRI will find itself in a vulnerable position.

There are at least two reasons why a niche institution such as ADRI is so well adapted to its important mission. As per the definition, ADRI is a disease-oriented institute and research is taking place in an environment with concentrated expertise. Apart from concentration of expertise it is also essential to build a (international) network that is able to provide critical mass and it is my privilege to depict our network that has been developed in the last two years. This network (see Collaborators page 16) illustrates how ADRI is integrated in the national and international research environment and which at the same time provides an optimal critical mass. Careful nurturing of this network through collaborative projects and through scientific discussions is one of our important tasks in the coming years.

ADRI is committed to high quality research in a disease area with a significant unmet need. It is important to realise that this research already provided a good return and it would be very unlikely that this would change in the future. When reading this Report you will notice that ADRI has made contributions towards better diagnosis and treatment of asbestos-related diseases. We are more than ready to continue our important mission and we very much hope that we will be enabled by continuing support from the State and Federal governments.



Professor Nico van Zandwijk  
Director

## Research Program



Dr Glen Reid working on microRNAs

### **Molecular Characterization**

**Glen Reid, Yuen Yee Cheng**

Malignant mesothelioma is a heterogenic tumour, and has extensive intrinsic resistance to chemotherapeutic drugs. Both of these factors contribute to the ongoing difficulties associated with the clinical management of the disease. In order to better understand the biology of mesothelioma, we are characterising the disease on the molecular level by investigating the gene expression in both tumour cell lines and patient samples. Our particular focus is on the expression of microRNAs, small regulatory genes, and how they differ in the different histological subtypes of mesothelioma and how they contribute to drug resistance. This project makes use of samples from patients who have undergone surgery for mesothelioma in Sydney and is collaboration between ADRI and the surgical team of Professor Brian McCaughan at RPAH/Strathfield Private.

### **New targets and therapeutics for Malignant Mesothelioma**

**Glen Reid, Lyn Schedlich, Michaela Kirschner, Sumedha Gattani**

The treatment of mesothelioma remains problematic, and despite some improvements in chemotherapy, new targets for treatment are urgently needed. We are using a rational gene silencing approach to identify genes involved in the growth and survival of mesothelioma cells, as well as those involved in the clinical chemo-resistance observed in patients. This project makes use of RNA interference, a powerful technique allowing the function of any gene to be inhibited using small interfering RNAs.

Our experiments make use of primary mesothelioma cell lines and this project is being carried out in collaboration with Associate Professor Kwun Fong and Dr. Rayleen Bowman at The Prince Charles Hospital, Brisbane.

### **The identification of a new class of molecular markers for Malignant Mesothelioma**

**Glen Reid, Michaela Kirschner, Lyn Schedlich**

Accurate diagnosis of mesothelioma can be quite time consuming, and definitive diagnosis requires assessment of biopsy tissue by experienced Pathologists. There are at present no known biomarkers for detection of mesothelioma in the blood or pleural fluid. We are investigating the feasibility of using extracellular microRNAs present in the circulation or pleural fluid as biomarkers of disease. This project has identified candidate microRNAs from patient plasma as well as those released by mesothelioma cells in culture. We are currently validating these candidates and aim to test them in larger groups of patients this year. This project also has the potential to identify early markers of mesothelioma in at-risk individuals, and we will investigate this possibility by testing plasma samples collected over the last 20 years from individuals in the Asbestos Review Program in WA. This work is being done in collaboration with Professor Bill Musk at UWA and the Charles Gairdner Hospital.

### **Prognostic Factors for Malignant Mesothelioma**

**Steven Kao, Stephen Clarke, Janette Vardy, Michael Boyer, Nick Pavlakis, Brain McCaughan, Catherine Kennedy, Jocelyn McClean, Glen Reid, Doug Henderson, Sonja Klebe, Kenneth Lee, Juliet Burn and Nico van Zandwijk**

The "classic" biomarker in medicine is a laboratory parameter that the doctor can use to help make decisions in making a diagnosis and selecting a course of treatment. For malignant mesothelioma it would be a big step forward if we would be able to confirm the diagnosis and to predict the course of disease by relatively simple tests using for instance blood. The prediction of response to treatment is quickly becoming the most important aim of biomarker research in medicine. With the growing number of new biological agents, there is increasing pressure to identify molecular parameters that will not only guide the therapeutic decision but also help to define the most important targets for which new biological agents should be tested in clinical studies. In 2010 ADRI has developed a new prognostic marker for Malignant Mesothelioma. The lymphocyte to neutrophil ratio (LNR) in blood identified patient groups with short and relatively long survival, opening the door to more careful patient selection<sup>2</sup> in the future. These data will be confirmed in an independent (prospective) study and additional candidate markers will be taken on study. For these studies the ADRI Biobank serves as an essential reservoir of specimen paving the road to 'individualized' treatment approaches.

### **NHMRC Guidelines for the Diagnosis and Treatment of Malignant Mesothelioma (MM)**

**Andrew Penman, Nico van Zandwijk, Victoria Keena, Christopher Clarke and a National Steering Committee**

There are no guidelines for diagnosis and treatment of malignant mesothelioma in Australia. Diagnostic approaches may range from simple aspiration of pleural fluid to video assisted thoracoscopy with multiple biopsies and treatment can vary from symptomatic / palliative approaches to combinations of induction chemotherapy followed by radical surgery and postoperative radiotherapy. To provide an evidence-based fundament for the diagnosis and treatment of MM and to reduce the variability of care in Australia, ADRI has engaged a team of national experts, chaired by Dr Andrew Penman, CEO of the NSW Cancer Council, to develop: Evidence-based guidelines for the diagnosis and treatment of MM.

Clinical practice guidelines constitute systematically developed statements to assist practitioner and patient in choosing the most appropriate health care. It is anticipated that the MM guidelines will close the gaps between current clinical practice and the best available evidence and there is no doubt that the welfare and benefit of patients will be enhanced by adopting

recommendations derived from a systematic review of the medical literature into policy and practice.

The Guidelines for the Diagnosis and Treatment of Malignant Mesothelioma are being developed in line with the National Health & Medical Research Council of Australia and it is anticipated that they will be published in 2012.



The 1st Steering Committee Meeting -February 2010 - for the Development of Guidelines for the Diagnosis and Treatment of Malignant Mesothelioma

### **The Australian Mesothelioma Registry (AMR)**

**Cancer Institute NSW, ADRI, Monash Centre for Occupational and Environmental Health, Hunter Valley Research Foundation, Cancer Epidemiology and Health Services Research Group of the University of Sydney, University of Western Australia and the Dust Diseases Board**

Australia was a producer and one of the biggest users of asbestos in the world and it has a legacy of a large amount of asbestos in buildings and other infrastructure. It also has one of the highest national incidences of malignant mesothelioma. In 2010 more than 700 Australians were diagnosed with malignant mesothelioma and most experts believe that this figure is yet to increase.

While Australia has collected national mesothelioma incidence data for many years, the ability to estimate patterns of exposure in an 'at risk populations' has been limited. The Australian Mesothelioma Registry (AMR) will provide a national resource for researchers to conduct further analysis with the aim of identifying preventable risk factors to assist in reducing mesothelioma in the future.

The AMR was launched by the Deputy Prime Minister on 30<sup>th</sup> April 2010 at the ADRI and has started collecting data on patients diagnosed with malignant mesothelioma from

1<sup>st</sup> September 2010. The AMR will monitor the national incidence of mesothelioma, recruit new cases and collect detailed information on their occupational and environmental asbestos exposure.

The AMR is funded by Safe Work Australia and its development and operation is overseen by a consortium of organisations including some of Australia's leading experts in asbestos-related diseases and cancer registration. The Cancer Institute NSW is responsible for the management of the AMR, including the coordination of mesothelioma notifications from State and Territory Cancer Registries. The Monash Centre for Occupational and Environmental Health is responsible in developing tools for the assessment of asbestos exposure for each consented case. The Hunter Valley Research Foundation will conduct telephone interviews. Other members of the AMR consortium: The Asbestos Diseases Research Institute (ADRI), the Cancer Epidemiology and Health Services Research Group of the University of Sydney, the University of Western Australia and the Dust Diseases Board will provide expert scientific and medical advice. Information collected for the AMR will be used to:

- Gather more detailed information on the relationship between asbestos exposure and the occurrence of malignant mesothelioma than has been possible in the past and to help prevent the disease in the future.
- Better understand the nature and levels of asbestos exposure which can result in malignant mesothelioma.
- Identify whether certain groups of workers or others may still be exposed to potentially dangerous levels of asbestos and to prevent that exposure.
- Assist the Federal and State Governments in developing policies to best deal with asbestos still present in our buildings and the environment.
- Serve as an example to those countries still using asbestos, raising awareness of the suffering it can inflict on victims and their families.

#### **ADRI Biobank**

**Marian Barker, Steven Kao, May Ng, Jim Mc Bride, Brian McCaughan, Jocelyn McClean, Glen Reid and Nico van Zandwijk**

ADRI's Biobank is funded by CSR Limited (tb checked) and we are currently accruing biospecimens, demographic and clinical information for translational research. The aim of our Biobank is to offer a research resource for the development of early diagnostic markers for mesothelioma. To fulfil this goal, the Biobank will provide access to a range of specimen types, including: tissue, plasma, serum, buffy coat, pleural fluid proteins, as well as accurate clinical and occupational information.

Standard operating procedures for high-quality freezing were adopted in 2010 and it is expected that a formal

governance structure will be finalised and implemented in early 2011 to oversee the management of the Biobank.

The main objectives of the Biobank program are to maintain and expand ADRI's resources for translational research by enrolling new mesothelioma patients, generating more data, and connecting the data to the Australian Mesothelioma Registry. For the Biobank samples to have optimal value, each sample is annotated with detailed and accurate data from patients' medical records. This information is stored in a secure database (CanstOME), which has been designed and is maintained by the Peter Wills Bioinformatic Centre at the Garvan Institute and was implemented in 2010. All patient information is de-identified, so that privacy is protected, and the clinical information will only be used for the purpose of approved research projects through a Human Ethics Research Committee.



#### **Prevention through Education**

**Nico van Zandwijk, Victoria Keena and Glen Reid**

'We did not know it was dangerous stuff going down into your lungs. It was just rubbish. The same as in a dust storm; you put a handkerchief up to your face; you do not think the dust is poison.'

Text from former Baryulgil asbestos mine worker as given in Chapter 3 of the NSW Ombudsman report (November 2010) : Responding to the asbestos problem: The need for significant reform in NSW.

Asbestos-related diseases are by definition preventable diseases and effective education/awareness campaigns are essential to prevent future asbestos exposures and to curtail the present Australian epidemic. The NSW Ombudsman report cited above also states that: From our research and enquiries it is clear that the public has little or no knowledge about the dangers of asbestos and the types of measures required to handle it safely. The Cancer



---

Council of Western Australia conducted a survey of around 2,800 people living in WA. 77% of male and 71% of female respondents they had been exposed to asbestos dust or fibres. 11% of males and 10% of females said they had lived near where asbestos was processed or used and a total of 65% of both sexes said that they had been exposed to asbestos in the home. Of those interviewed only 40% stated they had taken precautions to protect themselves from asbestos in the workplace, of those who lived near where asbestos was processed or used only 10% had taken precautions and only 11% stated they had taken precautions when they had lived near asbestos renovations/demolitions. (T. Slevin UWA, Curtin University/ Murdoch University, Data presented at the National Asbestos Summit, Sydney, 29 June 2010.)

These figures once more illustrate how enormous the Australian asbestos problem is and they reinforce the pressing need to increase awareness through education. During 2010 ADRI participated in a number of education/ awareness activities including community education programs and consumer group updates, which were conducted both here at the Bernie Banton Centre and in local councils. National presentations were also made, in addition to a series of interviews on radio, television and for newspapers. The media were also engaged in the awareness campaign 'think before you drill' to increase the awareness of the handymen just before the holiday season.

In 2011 ADRI will continue its commitment to raise awareness in Australia and will try to investigate which is the most effective strategy for increasing awareness for the Australian public. On October 29<sup>th</sup> 2010 the Minister for Workplace Relations, Senator Chris Evans announced the establishment of a national review into the management of asbestos and the Government's intention to ratify several International Labour Organisation treaties. The Asbestos Management Review Advisory Group will assess current activities in the area of asbestos management and research and make recommendations for the development of a national strategic plan to improve asbestos awareness, management and removal. ADRF board members Paul Bastian and Sylvia Kidziak AM as well as ADRI Director, Nico van Zandwijk, have accepted positions on the Asbestos Management Review Advisory Group which is perfectly in line with the mission of ADRI.



A common snapshot of the Australian asbestos legacy

---

## ADRI STAFF

### Administration Staff

#### Nico van Zandwijk

##### Director

Nico van Zandwijk is the inaugural Director of the Asbestos Diseases Research Institute located in the Bernie Banton Centre, Concord Hospital, Sydney, Australia. He earned his medical degree at the University of Amsterdam, The Netherlands, in 1973 and wrote his thesis on "Pulmonary injury elicited by blood" in 1976. He was editor of the hematology section of *Excerpta Medica* until 1980, and received licences in internal medicine and pulmonary

number of boards and committees including: the Scientific Board of the clinical section of the Netherlands Cancer Institute; a National Advisory Board for new lung cancer medications, and a state Council on asbestos and lung cancer. He has also been a member of the Advisory Board of the Thoracic Section of the French National Cancer Institute. Professor van Zandwijk is currently a Board Director of the International Association for the Study of



Professor Nico van Zandwijk

medicine in 1979 and 1981, respectively. In the same year he was appointed Assistant Professor of the Academic Medical Centre, Amsterdam and became Consultant Physician at the Netherlands Cancer Institute, Amsterdam. From 1985 to 2008 he was Head of the Department of Thoracic Oncology at that Institute. Professor van Zandwijk has served as Secretary (1982–1988) and Chair (1988–1994) of the European Organisation for Research and Treatment of Cancer (EORTC) Lung Cancer Group. He has chaired a

Lung Cancer. He is a Study Coordinator in several international studies, and has authored or co-authored more than 200 peer-reviewed international papers and chapters. In 2007 the Asbestos Diseases Research Foundation, Bernie Banton and the University of Sydney recruited Nico van Zandwijk to the position of ADRI Director and Professor, Sydney Medical School.

---

## Research and Medical Staff

### **Victoria Keena** Executive Officer

Victoria Keena joined the ADRI in 2008 as a Senior Consultant after many years as the General Manager of the Woolcock Institute of Medical Research. At the Woolcock Victoria assisted with the successful application for the Cooperative Research Centre (CRC) for Asthma in 1999. She was instrumental in the successful applications to both the State and Federal Governments for capital funding awarded to the Woolcock. She has had extensive hands-on experience in virtually all aspects of infrastructure through to research translation. She has been involved with a variety of funding programs and awards to support science and medical research, such as NH&MRC, ARC, NSW Medical Research Support Program, BIO First Awards and the Tall Poppy Awards. Victoria has written peer-reviewed journal articles, edited a number of major works and has co-authored a number of books, including: Peat J, Elliott E, Baur L, Keena V. *Scientific writing: easy when you know how*. London: BMJ Books 2002.

### **Ross Flemons** Accountant

Ross Flemons joined the ADRI in December 2009 as part time Accountant. His previous position was as Finance Manager at the Woolcock Institute of Medical Research where he worked for 14 years. Ross is CPA qualified and has vast experience with all financial matters relating to independent medical research organisations, including reporting, budgeting, payroll, compliance and financial management.

### **Kim Mattock** Receptionist

Kim Mattock joined the ADRI in April 2010 as the Receptionist/Administrative Assistant of the Bernie Banton Centre. Kim previously worked in varied administration roles and fields, both corporate and government. Joining ADRI is a return to the Concord Hospital campus for Kim; in a 'previous life' she worked for various specialists throughout the Hospital.

### **Justin Crosbie** Information Systems Manager

Justin Crosbie joined ADRI in 2009 as the Information Systems Manager. He has completed a Science degree in Information Technology at the University of Technology, Sydney. Justin has previous experience working an information technology consultancy firms and also works for the ANZAC Research Institute on the Concord Campus.

### **Dr Christopher Clarke** Senior Clinical Advisor

Dr Christopher Clarke commenced practice as a Consultant Thoracic Physician in 1976. His special interest has been occupational lung disease. He has held appointments at a number of public hospitals in Sydney including Visiting Medical Officer in the Department of Thoracic Medicine at Concord Hospital until December 2008. Dr Clarke now works as a thoracic physician in a number of country centres including Walgett, Kempsey and Port Macquarie. He was nominated by workers as a member of the Medical Board Authority of the Workers Compensation (Dust Diseases) Board of NSW.

### **Dr Glen Reid** Senior Research Scientist

Dr Glen Reid was appointed Senior Research Scientist in April 2009. He has been the Principal Investigator, Head of RNAi Product Development for Genesis Research & Development Corporation in New Zealand. In 2004 Glen was originally employed by Genesis as a Staff Scientist in molecular biology and in 2006 he became Senior Staff Scientist and led a cancer RNAi discovery program. During this time he collaborated with the Department of Pharmacology at the University of Auckland and was an Honorary Senior Lecturer. As a Research Fellow (2003-04) he helped set up the newly formed Children's Cancer Research Group laboratories in Christchurch, New Zealand having completed his Postdoctoral with Professor Piet Borst at The Netherlands Cancer Institute in Amsterdam. His main focus was on the characterization of multidrug resistance proteins.

### **Dr Lyn Schedlich** Cell Biologist

Dr Lyn Schedlich joined ADRI as a Research Fellow in September 2009. Her previous appointment was as Head of the Gene Regulation Laboratory in the Hormones and Cancer Group at the Kolling Institute of Medical Research. During that time her research focused on understanding how members of the insulin-like growth factor family of proteins modulated nuclear hormone and TGF- $\beta$ 1 signalling pathways in experimental models of breast and bone cancer. She established collaborative studies with a number of organizations including John Curtin School of Medical Research, CSIRO Molecular Science and The Garvan Institute of Medical Research. Lyn has many years of experience as a cancer cell biologist with a particular interest in cell imaging and flow cytometry.

---

**Michaela Kirschner**  
**Postdoctoral Fellow**

Michaela Kirschner commenced as a Postdoctoral Fellow at the Asbestos Diseases Research Institute in September 2009. Having completed her teaching degree studies in biology and chemistry, Michaela performed her PhD thesis with Professor Heike Allgayer and Professor Christian Manegold at the University of Heidelberg and the German Cancer Research Centre in Heidelberg, Germany (2005-2009). The focus of her PhD thesis was on preclinical studies on the anti-metastatic effects of drugs in lung cancer and the identification of potential drug target genes.

**Dr Yuen Yee Cheng**  
**Molecular Biologist**

Dr Yuen Yee Cheng joined ADRI as a Research Fellow in March 2010. She completed her PhD at the Chinese University of Hong Kong where she starts her research in epigenetic alterations in gastric cancer. She then undertook two years of Postdoctoral training at the University of Hong Kong. Epigenetic gene regulation has been the major focus of Dr Cheng's research efforts her research in epigenetic alterations in cancer has been published in prestigious international journals. At ADRI, Dr Cheng continues her epigenetic study as well as focusing on microRNA profiling of malignant mesothelioma.

research experience in the field of cell biology and immunology and has a particular interest in cell imaging and cancer research.

**Marian Barker**  
**Biobank Officer**

Marian Barker joined ADRI as Biobank Officer in December 2010. Having completed her Masters in International Public Health at Sydney University in 2000, Marian took up an AYAD position as health educator in Bangkok with the Office of Primary Health Care, a division of the Thai Ministry of Health. She later coordinated an online Directory of Clinical Databases at the London School of Hygiene and Tropical Medicine, University of London. Marian returned to Sydney in 2004 and worked part time at the Workers Compensation Dust Diseases Board of NSW, contributing research to several asbestos related diseases projects.

**Dr Steven Kao**  
**PhD Student**

Dr Steven Kao is an oncologist and started his PhD at the ADRI, focusing his research on predictive and prognostic factors in malignant mesothelioma. Steven is also instrumental in collecting data from a cohort of recently diagnosed patients with malignant mesothelioma in NSW to reveal the current practice of diagnosis and treatment. This project is funded by the Dust Diseases Board.



**Sumedha Gattani**  
**Research Assistant**

Sumedha Gattani joined ADRI as a Research Assistant in August 2010. She completed her Masters in Biotechnology in 2006 in New Delhi, India. After completing her degree she was employed as a Research Scholar at Turku Centre for Biotechnology, Finland. During this time her research focused on "Understanding molecular mechanisms of human IL-4 induced Th2 lymphocyte differentiation". In 2009 she relocated to Sydney and was employed as a Research Assistant under Professor Wolfgang Weninger at Centenary Research Institute, Sydney. She has three years



Dr Glen Reid and Mrs Sumedha Gattani

---

## Grants

During 2010 the Research Program of the ADRI was supported by attracting both peer and non peer-reviewed grants.

### **Cancer Institute NSW – Research Equipment Grant**

This research equipment grant of \$89,899 funded the establishment of a malignant mesothelioma (MM) biobank. The equipment purchased with this funding consisted of a liquid nitrogen freezer and a -80oC freezer to store patient samples, and a liquid nitrogen storage facility for MM cell lines. These units have been chosen because they maintain a stable long-term freezing temperature and therefore provide the longest possible sample viability over time.

In order to develop new tests and treatments for MM, carefully collected and stored patient samples are needed. The biobank will support the nationwide study of MM by collecting patient samples and storing them at very low temperature. The incidence of MM is increasing in Australia, with the majority of cases in NSW. The ADRI has close links to hospitals in the region which makes it an ideal location to house a collection of patient samples for research purposes. This collection will be the first in Australia and will support MM research at the ADRI and nationwide.

### **Cancer Institute NSW – Project Grant – Identifying New Plasma Markers in Mesothelioma**

In this \$50,000 project we will identify novel plasma protein markers in malignant mesothelioma (MM) patients that relate to the neutrophil to lymphocyte ratio (NLR) and outcomes of disease, including prognosis, and toxicity and response following treatment. It is thought that early changes in the systemic inflammatory process correlates with onset of disease and can be used as biomarkers to personalise the treatment of MM patients.

Progress in MM treatment has remained modest, with median survivals of only 7 months to 2 years depending on the stage of the disease and treatment modalities used. Diagnosis is frequently made when the disease is in an advanced stage. A biomarker, or a combination of biomarkers, that could improve prognosis and/or predict responses to therapy would pave the way to better treatment outcomes.

### **Dust Diseases Board – Project Grant – A quantitative analysis of the Dust Diseases Board data set of applicants with a diagnosis of Malignant Mesothelioma (MM)**

Anecdotal evidence on the unmet needs of mesothelioma patients is significant and there are limited papers publications on this subject. Before making recommendations to reform health care for MM patients a quantitative analysis is needed. A systematic review of 150 recent MM cases in the DDB dataset was undertaken to obtain a more complete picture of the way MM patients are currently treated within NSW. This project supported by the DDB (\$155,210) for two years is scheduled to be

completed in 2011 and will provide a retrospective picture to allow for the evaluation against current practice standards. It is expected that the outcomes are will give direction to restructure the health care for these patients.

### **Dust Diseases Board – Project Grant – Molecular manipulation of malignant mesothelioma**

The discovery of RNA interference (RNAi) has revolutionised biomedical research over the last 10 years. The ability of RNAi to selectively inhibit the expression of any gene in a sequence-specific manner and to inhibit genes considered undruggable by traditional small molecule methods has quickly led to its application in cancer research. Malignant mesothelioma (MM) is aggressive and extremely difficult to treat and, despite some recent progress, new therapeutic options remain urgently needed. MM exhibits an intrinsic resistance to chemotherapy that remains a significant problem in treatment and the molecular basis of this drug resistance is yet to be fully understood. Research staff at ADRI are using extensive experience in RNAi to better understand drug resistance and to identify and validate new therapeutic targets for MM. Results from this research were presented at the International Mesothelioma Interest Group (IMIG) meeting in Kyoto, Japan in September by Michaela Kirschner on: 'Y-Box-binding protein 1: a potential therapeutic target in malignant mesothelioma.' and also by Dr Lyn Schedlich as a poster presentation on 'RNAi-based screening of potential chemosensitising targets for malignant mesothelioma.' This project has been funded by the DDB (\$247,175) for two years and will be completed in 2012.





Members of the 3rd Steering Committee (above) for the Development of **Guidelines for the Diagnosis and Treatment of Malignant Mesothelioma** -1st December 2010

Mr Paul Signorelli (r) accepting a Certificate of Appreciation on behalf of the **Biaggio Signorelli Foundation**. Professor Nico van Zandwijk, ADRI Director, and Dr Andrew Penman, CEO of Cancer Council NSW and Chair of the Guidelines for Mesothelioma (l-r).



### **Biaggio Signorelli Foundation - support of the Development of National Guidelines for Mesothelioma**

The Biaggio Signorelli Foundation has generously donated \$125,000 to the development of National Guidelines for the Diagnosis and Treatment of Malignant Mesothelioma.

Mr Biaggio Signorelli, founder of the Doltone House Group, died in 2008 of mesothelioma and his dying wish was to help save others from this terrible disease. Fulfilling his wish his family established the Biaggio Signorelli Foundation in his honour. On the Board of the Foundation are Biaggio's children, Mr Paul Signorelli, Mrs Nina Milazzo and Mrs Anna Cesarano and they have been praised for their compassion and organisational excellence in raising funds for asbestos-related diseases.

Mr Paul Signorelli has also committed time in-kind to the development of the Guidelines as he is a member of several of the Working Groups.

### **Slater & Gordon's Asbestos Research Fund**

The Slater & Gordon's Asbestos Research Fund awarded \$100,000 over two years to the ADRI, Bernie Banton Centre to conduct research into the analysis of the gene expression profiles in mesothelioma and it is anticipated this research will lead to a better understanding of this disease as well as providing potential diagnostic markers and therapeutic targets. Results from this research were selected for an oral presentation given by Dr Glen Reid at the International Mesothelioma Interest Group (IMIG) meeting in Kyoto, Japan in September on: 'Circulating miRNAs as biomarkers for malignant mesothelioma.' The initial phases of this project will be completed in 2011.

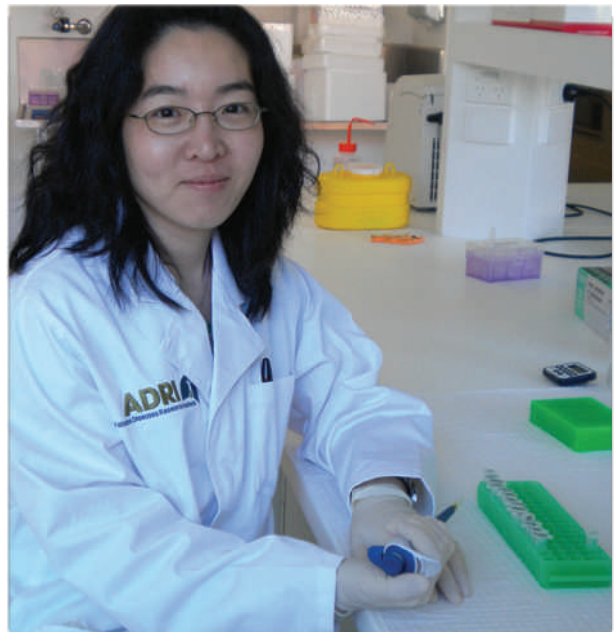
### **Astellas Pharma**

Astellas Pharma Inc. awarded ADRI \$57,000 to carry out a pre-clinical assessment of a new molecule, YM155, in malignant mesothelioma. YM155 targets survivin; a protein expressed in the majority of human cancers including malignant mesothelioma. Survivin expression is often correlated with a poor prognosis in other cancers and may also be involved in the resistance to therapy of malignant mesothelioma.

### ADFA Fellowship

The Asbestos Diseases Foundation of Australia (ADFA) awarded ADRI a \$25,000 Fellowship to support Dr Yuen Yee Cheng's research into DNA methylation as a marker for Malignant Mesothelioma. Results from this research have been presented at the International Mesothelioma Interest Group Conference 2010 (IMIG) in Kyoto, Japan, September 2010, 'Epigenetic inactivation of tumour suppressor genes by DNA methylation in malignant mesothelioma.' and also at the Australian Lung Cancer Conference 2010 (ALCC), Melbourne, October 2010, 'Epigenetic inactivation of SFRP family by DNA methylation in malignant mesothelioma.' Dr Cheng was awarded an Australian Lung Foundation (ALF) travel grant to present at this conference.

Dr Yuen Yee Cheng, **ADFA Fellow**, (r) was awarded an **Australian Lung Foundation** Travel Grant to present her research outcomes at the Australian Lung Cancer Conference in Melbourne, October 2010.



Dr Lyn Schedlich and summer student Pamela Ajuyah

---

## Publications & Presentations

The most accurate measure of research output is publications. Research publications reflect the quality, originality and value of the research conducted and the number of publications largely reveals research productivity.

### Peer-reviewed articles

1. Manegold C, van Zandwijk N, Szczesna A, Zatloukal P, Au JSK, Blasinska-Morawiec M, et al. A Phase III, Randomized Study of Gemcitabine and Cisplatin With or Without PF-3512676 (TLR9 Agonist) as First-line Treatment of Advanced Non-small Cell Lung Cancer. *Annals of Oncology* 2010; In press.
2. Kao SC-H, Reid G, van Zandwijk N, Henderson DW, Klebe S. Molecular Biomarkers in Malignant Mesothelioma - State of the Art. *Pathology* 2010; In press
3. Kao SC-H, Yan T, Lee K, Burn J, Henderson DW, Klebe S, Kennedy C, Vardy J, Clarke S, van Zandwijk N, McCaughan BC. Accuracy of Diagnostic Biopsy for the Histological Subtype of Malignant Pleural Mesothelioma. *Journal of Thoracic Oncology*. 2010; In press
4. Reid G, Kirschner MB, van Zandwijk N. Circulating microRNAs: association with disease and potential use as Biomarkers. *Critical Reviews in Oncology/Hematology* [Review]. 2010; In press: doi:10.1016/j.critrevonc.2010.11.004
5. Li Y, Revalde J, Reid G, Paxton J. Modulatory effects of curcumin on multi-drug resistance associated protein 5 in pancreatic cancer cells. *Cancer Chemotherapy and Pharmacology*. 2010; In press
6. Kao SCH, Lee K, Armstrong N, et. al. Validation of Tissue Microarray Technology in Malignant Pleural Mesothelioma. *Pathology* [Original Report]. 2010; In press
7. Reck M, van Zandwijk N, Gridelli C, Baliko Z, Rischin D, Allan S, et al. Erlotinib in advanced non-small cell lung cancer: efficacy and safety findings of the global phase IV Tarceva Lung Cancer Survival Treatment study. *Journal of Thoracic Oncology: Official Publication of the International Association for the Study of Lung Cancer*. 2010;5(10):1616-22.
8. Li Y, Revalde JL, Reid G, Paxton JW. Interactions of dietary phytochemicals with ABC transporters: possible implications for drug disposition and multidrug resistance in cancer. *Drug Metab Rev*. 2010 Nov;42(4):590-611.
9. Lasham A, Herbert M, Coppieiers 't Wallant N, Patel R, Feng S, Eszes M, Cao H, Reid G. A rapid and sensitive method to detect siRNA-mediated mRNA cleavage in vivo using 5' RACE and a molecular beacon probe. *Nucleic Acids Res*. 2010; 38(3):e19.
10. Kappers I, van Sandick JW, Burgers SA, Belderbos JS, van Zandwijk N, Klomp HM. Surgery after induction chemotherapy in stage IIIA-N2 non-small cell lung cancer: why pneumonectomy should be avoided. *Lung Cancer*. 2010; 68(2):222-7.
11. Kao SC, Reid G, Lee K, Vardy J, Clarke S, van Zandwijk N. Malignant Mesothelioma. *Internal Medicine Journal*. [Review]. 2010; 40:742-50.
12. Kao SC, Phan VH, Clarke SJ. Predictive markers for haematological toxicity of pemetrexed. *Curr Drug Targets*. 2010 ;11(1):48-57.
13. Kao SC, Pavlakis N, Harvie R, Vardy JL, Boyer MJ, van Zandwijk N, Clarke S. High Blood Neutrophil-to-Lymphocyte Ratio Is an Indicator of Poor Prognosis in Malignant Mesothelioma Patients Undergoing Systemic Therapy. *Clin Cancer Res*. 2010; 16(23): 5805-13.
14. Kao SC, McCaughan B, Muljono A, Boyer M. A pathological complete response in malignant pleural mesothelioma after combination chemotherapy with Carboplatin and pemetrexed. *J Thorac Oncol*. 2010; 5(3):405-6.
15. Kao SC, Butow P, Bray V, Clarke SJ, Vardy J. Patient and oncologist estimates of survival in advanced cancer patients. *Psycho-Oncology* 2010; DOI: 10.1002/pon.1727
16. Cheng YY, Chau D, Chan T, Gill H, Liang R, Kwong YL, et al. Absence of NPM1 promoter hypermethylation in human myelodysplastic syndrome. *J Clin Pathol*. 2010; 63(11):1008-11.

### Book Chapters

1. van Zandwijk N. Lung Carcinogenesis and Chemoprevention. In Manegold C. *Non-Small Cell Lung cancer Treatment*. 2nd Ed. Uni-Med Verlag AG. Bremen 2010; 15:165-176
2. van Zandwijk N. Chemoprevention. In: Pass HI, eds., et.al. *Principals and practice of Lung Cancer: the official reference text of the ISALC*. 4<sup>th</sup> Ed. Lippincott, Williams & Wilkens, Philadelphia, USA. 2010



---

## Conference Presentations

1. Glen Reid A rapid and sensitive method to detect siRNA-mediated mRNA cleavage in vivo using 5' RACE and a molecular beacon probe, RNAi2010: gene regulation by small RNAs, Oxford, UK, March 2010
2. Nico van Zandwijk Asbestos & Disease: From Epidemiology and Prevention to Diagnosis and Treatment. Union Aid Abroad – APHEDA, National Institute of Labour Protection in Vietnam in collaboration with the Australian Manufacturing Workers' Union (AMWU) & the Asbestos Disease Research Institute (ADRI) Meeting. Hanoi 9-10 April 2010
3. Nico van Zandwijk Screening of Asbestos-exposed Individuals. 2nd European Lung Cancer Conference – IASLC (International Association for the Study of Lung Cancer) and ESMO (European Society for Medical Oncology). Geneva 28 April - 1 May 2010.
4. Kao SCH, Pavlakis N, Abraham R, et al. Validation of blood neutrophil-to-lymphocyte ratio as a prognostic factor in patients with malignant mesothelioma undergoing chemotherapy. Sydney Cancer Conference (SCC). 14-16 July University of Sydney; 2010.
5. Michaela B Kirschner, Lyn Schedlich, Yuen Yee Cheng, Nico van Zandwijk, Glen Reid. Y-Box-binding protein 1: a potential therapeutic target in malignant mesothelioma. International Mesothelioma Interest Group Conference 2010 (IMIG) Kyoto, Japan 31 Aug -3 Sept 2010
6. Glen Reid Circulating microRNAs as Markers of Malignant Mesothelioma. International Mesothelioma Interest Group Conference 2010 (IMIG) Kyoto, Japan 31 Aug -3 Sept 2010
7. Steven Kao Nick Pavlakis, R Abraham, et al. Validation of blood neutrophil-to-lymphocyte ratio as a prognostic factor in patients with malignant mesothelioma. International Mesothelioma Interest Group Conference 2010 (IMIG) Kyoto, Japan 31 Aug -3 Sept 2010 (Awarded a Vojakovic Fellowship – [Melbourne Community Foundation](#) travel grant)
8. Nico van Zandwijk Chemoprevention of high risk patient populations. 2nd International Thoracic Oncology Congress Dresden 16- 18<sup>th</sup> September 2010
9. Nico van Zandwijk Screening of asbestos exposed individuals. 3<sup>rd</sup> Australian Lung Cancer Conference (ALCC) 2010 Melbourne 7-9 October 2011
10. Nico van Zandwijk Identification of high risk individuals for chemopreventative measures. 3<sup>rd</sup> Australian Lung Cancer Conference (ALCC) 2010 Melbourne 7-9 October 2010
11. Nico van Zandwijk IASLC – World Conference Update. 3<sup>rd</sup> Australian Lung Cancer Conference (ALCC) 2010 Melbourne 7-9 October 2010
12. Kao SCH, Clarke S, Harvie R, et al. Relationship between markers of systemic inflammation and clinical symptoms and survival in patients with malignant mesothelioma (MM). European Society of Medical Oncology Conference Milan 8-12 October 2010.
13. Glen Reid Translational Research at the ADRI. NCARD Annual Scientific Meeting, Perth 20-21 October 2010
14. Nico van Zandwijk Translational studies in malignant mesothelioma. Seventh Perth Mesothelioma Group Symposium, Perth 26 November 2010.
15. Nico van Zandwijk Methods of earlier detection of mesothelioma. National Institute of Labour Protection (NILP) Conference. Hanoi, Vietnam 21 December 2010

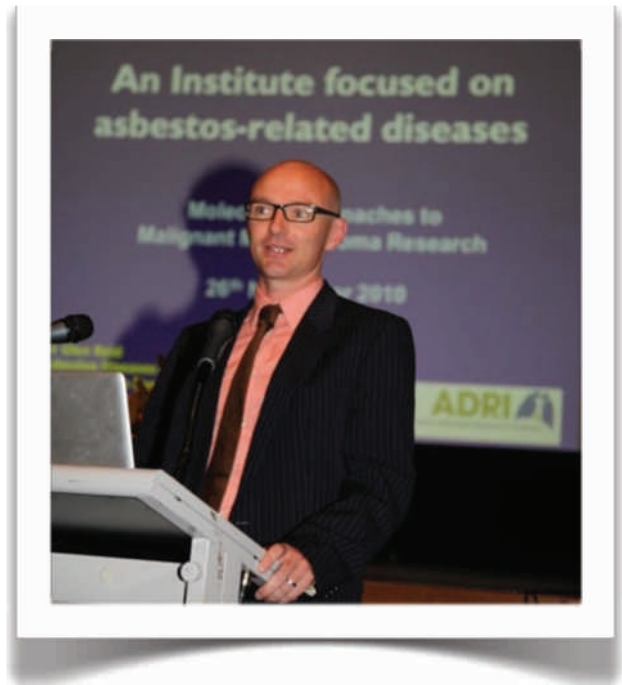
## Poster Presentations

1. Lyn Schedlich, Michaela Kirschner, Bill Musk, Alison Reid, Nicola Armstrong, Nico van Zandwijk & Glen Reid. Prognostic and Predictive Markers of Malignant Mesothelioma. Sydney Cancer Conference 2010 (SCC), Sydney 14-16 July 2010
2. Michaela B Kirschner, Lyn Schedlich, Vandana Relan, Kwun Fong, Rayleen Bowman, Nico van Zandwijk, Glen Reid. RNAi-based screening of potential novel druggable and chemosensitising targets for malignant mesothelioma. Sydney Cancer Conference 2010 (SCC), Sydney 14-16 July 2010
3. Lyn Schedlich, Michaela Kirschner, Vandana Relan, Kwun Fong, Rayleen Bowman, Nico van Zandwijk, Glen Reid. RNAi-based screening of potential chemosensitising targets for malignant mesothelioma. International Mesothelioma Interest Group Conference 2010 (IMIG) Kyoto, Japan 31 Aug -3 Sept 2010 (Awarded a Vojakovic Fellowship – [Melbourne Community Foundation](#) travel grant)
4. Yuen Yee Cheng, Hong Chuan Jin, Francis KL Chan, Lyn Schedlich, Michaela Kirschner, Nico van Zandwijk, Glen Reid; Epigenetic inactivation of

---

tumour suppressor genes by DNA methylation in malignant mesothelioma. International Mesothelioma Interest Group Conference 2010 (IMIG) Kyoto, Japan 31 Aug -3 Sept 2010

5. Lyn Schedlich, Michaela Kirschner, Vandana Relan, Kwun Fong, Rayleen Bowman, Nico van Zandwijk, Glen Reid. RNAi-based screening of potential chemosensitising targets for malignant mesothelioma. Australian Lung Cancer Conference 2010 (ALCC) Melbourne 7-9 Oct 2010
6. Michaela B Kirschner, Lyn Schedlich, Yuen Yee Cheng, Nico van Zandwijk, Glen Reid. Knockdown of Y-Box-binding protein 1 induces subtype-specific growth inhibition in malignant mesothelioma cells. Australian Lung Cancer Conference 2010 (ALCC) Melbourne 7-9 Oct 2010
7. Yuen Yee Cheng, Hong Chuan Jin, Francis KL Chan, Sumedha Gattani, Michaela Kirschner, Nico van Zandwijk, Glen Reid; Epigenetic inactivation of SFRP family by DNA methylation in malignant mesothelioma Australian Lung Cancer Conference 2010 (ALCC) Melbourne 7-9 Oct 2010 (Awarded an ALF travel grant).
8. Glen Reid An institute focused on asbestos-related diseases. ADFA Asbestos Awareness Day 26 November 2010



Dr Glen Reid presenting at **ADFA's** Asbestos Awareness Week meeting - November 2010

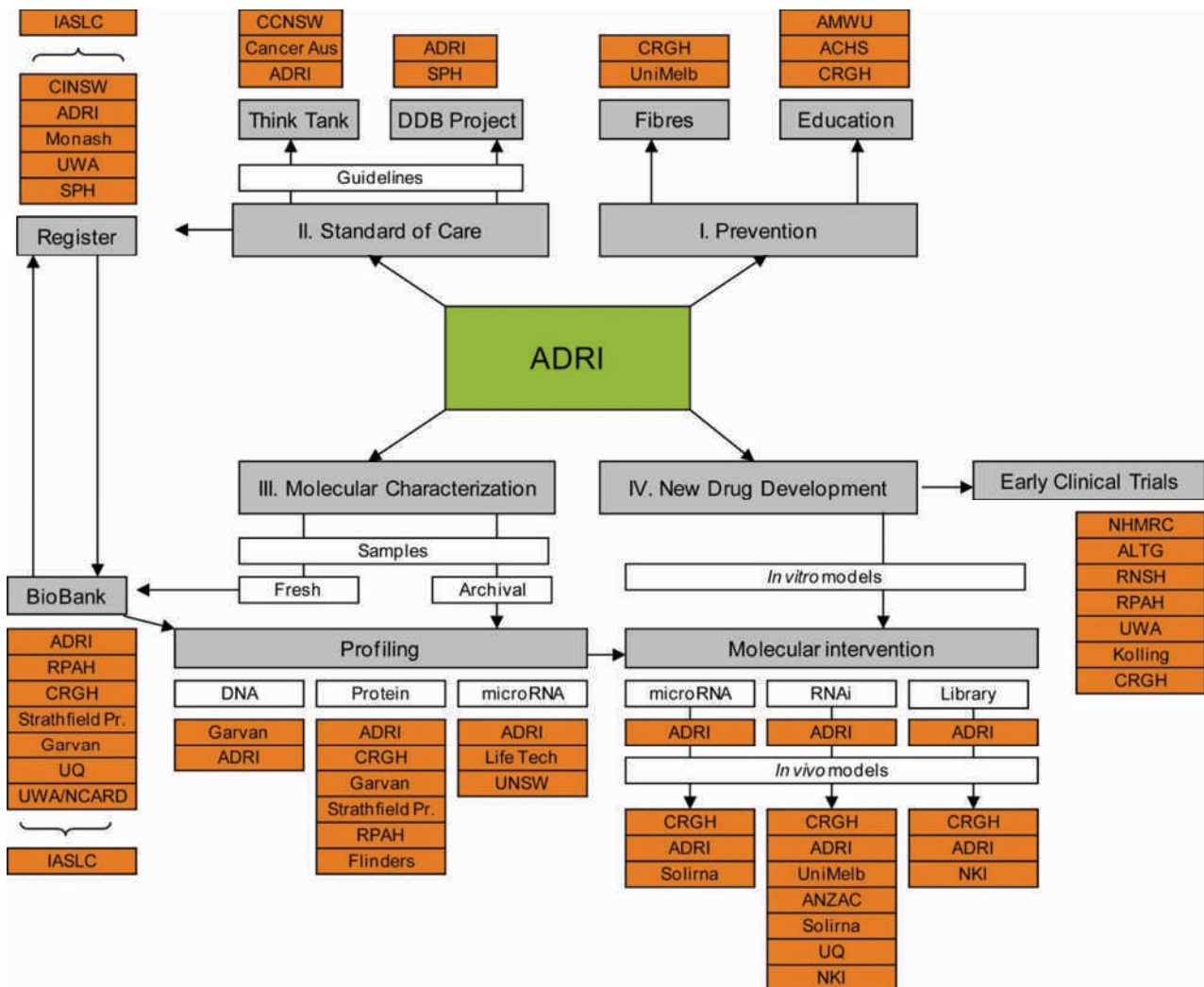
### Local Presentations

1. Lyn Schedlich Translational Research in Malignant Mesothelioma, Woolcock Institute of Medical Research, 2010
2. Lyn Schedlich Predictive & Therapeutic Approaches to Malignant Mesothelioma, ANZAC Research Institute, 2010
3. Nico van Zandwijk Current Management of mesothelioma: how can we move forward? Lilly Oncology Symposium: Changing the Treatment Paradigm in Advanced NSCLC: Myth or reality? Melbourne 19 - 21 Feb 2010
4. Nico van Zandwijk ADFA 20<sup>th</sup> Anniversary. Mount Druitt Workers Club, Dharruk 15 May 2010.
5. Nico van Zandwijk Debate: Histology versus Molecular Markers in thoracic tumours E.Lilly Symposium Sydney 24<sup>th</sup> July 2010
6. Nico van Zandwijk Asbestos Community Education. ADFA Meeting, Holroyd City Council, Holroyd Miller Street, Merrylands 9<sup>th</sup> August 2010
7. Nico van Zandwijk Translational studies in malignant mesothelioma. 7<sup>th</sup> Perth Mesothelioma Group Symposium, Perth 26 November 2010

## Collaborators

As disease-oriented research institute with its unique focus on asbestos-related diseases the ADRI is ideally placed as the central node to coordination and guide collaborative research. The state-of-the-art infrastructure (laboratories, videoconferencing, IT facilities) at ADRI/Bernie Banton Centre has provided a pivotal point for an effective network with important educational roles and like-minded intellectual synergies to create an assembly of a critical mass of high quality asbestos-related diseases researchers. These features create the most fruitful environment to foster outstanding research productivity, leading to gains in clinical outcomes.

The diagram (below) is a representation of ADRI's four main projects and relationships between them.



Acronym	Institute	Collaborator
ACHS	Australian Council of Health Standards	Dr Desmond Yen
ADRI	Asbestos Diseases Research Institute	Prof Nico van Zandwijk▲ Prof Chris Clarke Dr Glen Reid▲ Dr Stephen Kao▲
ALTG	Australasian Lung cancer Trials Group	Michael Millward
AMWU	Australian Manufacture's Workers Union	Mr Paul Bastian
ANZAC	ANZAC Research Institute	Prof David Handelsman A/Prof Graham Robertson
Cancer Aus	Cancer Australia	
CCNSW	Cancer Council NSW	Dr Andrew Penman



<b>Acronym</b>	<b>Institute</b>	<b>Collaborator</b>
CINSW	Cancer Institute NSW	Prof David Currow Prof Matthew Peters Prof Christine Jenkins Dr Janette Vardy▲
CRGH	Concord Repatriation General Hospital	Dr Kenneth Lee▲
DDB	Dust Diseases Board of NSW	Dr Kirsty Hannaford-Turner Prof Douglas Henderson▲
Flinders	Flinders University	Dr Sonja Klebe▲ Dr Maija Kohonen-Corish Mr Jim McBride Dr Nicole Armstrong▲
Garvan	Garvan Institute of Medical Research	Prof Peter Goldstraw
IASLC	International Association for the Study of Lung Cancer	Prof. Robert Baxter
Kolling	Kolling Institute	Chris Adams
Life Tech	Life Technologies™	Dr Marc Hendrix
Mac Uni	Macquarie University	Dr Malcolm Sim
Monash	Monash University	
NHMRC	National Health & Medical Research Council	
NKI	Netherlands Cancer Institute	Prof Anton Berns Prof Johan Jongasma Prof Nick Pavlakis▲
RNSH	Royal North Shore Hospital	Prof Stephen Clarke▲ Dr Peter Corte A/Prof Brian McCaughan▲
RPAH	Royal Prince Alfred Hospital	Dr Annabelle Mahar Prof Michael Boyer▲
Solirna	Solirna Biosciences – New Zealand	
SPH	School of Public Health, University of Sydney	Prof Bruce Armstrong Ms Catherine Kennedy▲
Strathfield Pr.	Strathfield Private Hospital	A/Prof Brian McCaughan▲
UniMelb	University of Melbourne	Prof. Frank Caruso Dr John Provis
UNSW	University of NSW	Ruby Lin A/Prof Kwun Fong▲
UQ	University of Queensland	Dr Rayleen Bowen▲ Nigel McMillan Prof Bill Musk▲
UWA	University of Western Australia	Prof Anna Nowak Dr Alison Reid▲
UWA/NCARD	University of Western Australia/National Centre for Asbestos Related Diseases	Prof Bruce Robinson

*Scientific papers or abstracts published in collaboration – see publications list ▲*



Professor Nico van Zandwijk showing the Korean Government Ministers and senior scientists the latest research at ADRI.

## Visitors

During 2010 ADRI, Bernie Banton Centre received many visitors. As well as the organised events a number of the general public called in for a chat and a look around. Consumer participation in research is regarded as an important role of ADRI and we welcome visitors who are interested in research into asbestos-related diseases.

### Launch of the Australian Mesothelioma Registry

On the 30th April the then Deputy Prime Minister, the Hon Julia Gillard launched the Australian Mesothelioma Registry at ADRI, Bernie Banton Centre. The Australian Mesothelioma Registry will replace the voluntary system previously in place and collect all notifications of new cases of mesothelioma from the state and territory cancer registries and detailed information on the past exposure to asbestos of mesothelioma patients. The registry will be managed by a consortium led by the Cancer Institute of NSW. The ADRI will provide scientific and medical advice and the Monash Centre for Occupational and Environmental Health will be responsible for collecting information from the consenting patients diagnosed with mesothelioma and their occupational and residential history and past exposure to asbestos. In July 2010 notification of new cases of mesothelioma to the Registry and the collection of information on asbestos exposure commenced.

### Korean Government Ministers visit ADRI

The international reputation of ADRI continues to grow with the most recent visitors being a high-level delegation from the Korean Government. Professor Nico van Zandwijk, ADRI Director, welcomed the group recently by praising Korea as one of the few nations, along with Australia, which has placed a total ban on the use of asbestos. The Korean delegation included senior staff from the Prime Minister's office, and from the Ministries of the Environment, Health and Welfare, and Employment and Labor, along with medical scientists from Korean research centres. Professor van Zandwijk noted that: "More than 10,000 cases of cancer linked to asbestos can be expected in China each year and in the coming decade it is likely there will be more than 100,000 cases in China, and India will have a similar problem." He also said that: "Unfortunately malignant mesothelioma is not always recognised in developing countries."

Professor van Zandwijk explained to the Korean delegation that an early and significant achievement of ADRI was the establishment of a national registry of patients, with a focus on their work and environment histories, together with a biobank of frozen tissue and blood samples. He said these would allow researchers at ADRI to develop drugs, identify disease pathways, and find ways to manipulate cancers caused by asbestos.

## ADRI Supporters

We would like to thank all of you who have given so generously in memory of loved ones, through bequests and on-going support. We greatly appreciate your commitment which is often given at a very difficult time in your life. Your donations enables us to continue our commitment toward the prevention and amelioration of this insidious disease – malignant mesothelioma and other asbestos-related diseases.

Mr	Antonio	Acquaro	Mr	Frank	Iacono
Mr	Michele	Anello	Mrs	Caterina	Iacono & Family
		Atom Supply	Mr	Anthony	Ienna
Ms	Kaye	Bellar	Mrs	Dianne	Keating
		Bernie Banton Foundation	Mr & Mrs	B. & M.	Kerr
Miss	Jean	Black	Mrs	Heather	Kidd
Ms	Patricia	Boccalatte		A & S	La Cava
Ms	Vivienne	Bradshaw	Mr	Alan	Laughlin
Mr	Dennis	Brooking	Mr	Ross	Leonard
Mrs	Laurelle	Burleigh	Mr	John	Lidgard
Mr	Carmelo	Camuglia	Mr	Bruno	Lorizio
Mr	Sandy	Catalano	Mr & Mrs	TB	McNally
Mr & Mrs	N & C	Catalano	Mr	Gino	Moliterno
Mr & Mrs	P.R.	Clarke	Mr	Chirs	Mooney
Mrs	Beryl J.	Clifford	Mrs	Elaine	Mooney
Mrs	F.M.	Cooke	Mr	Trent	Moy
	S.	Dawson	Ms	Annemarie	Nelson
Mr	Philip	Day	Ms	Debbie	Nicholls
Mrs	J.	Decker	Mr	Keith	O'Neill
Ms	Shelia	Devlin	Mrs	Lesley	Pearce
Mr	Mathew	Dupille	Mrs	R.L.	Price
	V.	Ferraro		Returned and Services League of	Australia
Mrs	Rosemary	Francis		B.E. & K.	Schweitzer
Mr	Paul	Freame	Mr	Craig	Sloane
	Gemglow	Jewellers	Mr	Warwick	Smith
Mrs	Shirley	Gifford	Mrs	Yvonne	Tully
Ms	Helen	Gosper	Ms	Elsa	Vazquez
Mrs	Leonie	Gusman	Mr & Mrs	Brian & Pat	Wade
	L.	Hawkins	Mr	Bruce	Waight
Mr	I.	Hickson	Mrs	Violet M.	Waller
Mr	Peter	Huitema	Mr	Chris	Watson
				Tony	from Edensor Park



## We sincerely thank you

Having contact with our supporters and sharing their stories, and getting to know a little about the loved ones they have lost makes all our hard work worthwhile.

One such story in 2010 was of Mr Jim Tully. The photograph (I) is of **Mr Jim Tully** in May 2006 with two of his three grandchildren. Claudia is now 6 and Jack 4 (and Luke 2 whom he never met).

I would like to thank Mrs Yvonne Tully for her most generous donation of the Mr Jim Tully Fellowship. The outcomes of this research will be reported in 2011.

## Governance

### Asbestos Diseases Research Foundation Board

The Board of the Foundation consists of the independent chairperson invited by the Minister for Industrial Relations, four members from the Workers Compensation Dust Diseases Board (two representing employer interests and two representing employee interests); the Chair of the Workers Compensation Dust Diseases Board NSW Medical Authority; and nominees from the University of Sydney, ANZAC Health & Medical Research Foundation, Sydney South West Area Health Service, Asbestos Diseases Foundation of Australia Inc., Unions NSW, and past and present manufacturers and suppliers of asbestos or dust-containing goods. In 2010 the position of Chair of the ADRF has been vacant, Mr Dave Henry has been Acting Chair. In addition, the Board has appointed a further member, being the Research Director of the Institute.

#### Dave Henry – Acting Chair

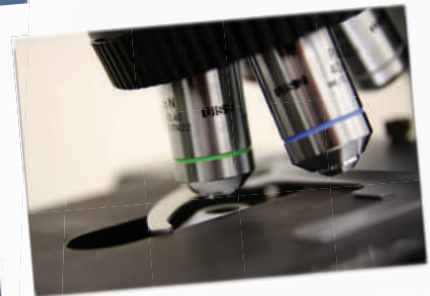
Mr Henry has been the Occupational Health and Safety Officer for the NSW Branch of the Australian Manufacturing Workers' Union (AMWU) since 2003. He represents workers in relation to both OH&S and workers' compensation matters and is responsible for development and implementation of AMWU policy, representing the union at all levels of industry and government. Prior to this he was an industrial organiser with the union from 2001. Mr Henry is a member of the Workers Compensation and Workplace Occupational Health and Safety Council of New South Wales, the WorkCover Manufacturing Industry Reference Group as well as sitting on a number of Australian Standards committees. He is the Chairman of the Industrial Health and Research Foundation and a board member of the New South Wales Dust Disease Board. Mr Henry is also a WorkCover accredited trainer.

#### Objectives

The objects for which the Foundation is established are:

- (a) to promote, sponsor and facilitate research and healthcare delivery among those individuals and communities exposed to asbestos or other dusts or suffering from asbestos-related or other dust-related diseases;
- (b) to provide leadership and excellence in asbestos-related and dust-related diseases research activities;
- (a) to promote awareness of the special circumstances experienced by those exposed to asbestos or other dusts which can lead to potential or actual asbestos-related or other dust-related diseases;
- (b) to promote, sponsor and facilitate asbestos-related and dust-related diseases education and training in relevant health disciplines;
- (c) to further knowledge of medicine and science by promoting the conduct of research in the field of asbestos-related and other dust-related diseases;
- (a) to achieve a better understanding of the nature and causes of asbestos-related and Dust-related human diseases and afflictions;
- (b) to improve methods of preventing, diagnosing and treating those diseases and afflictions; and
- (c) where possible, to apply its research and other activities, either directly or indirectly, to the development of relevant products and treatments; preventative strategies and practices; and educational programs and materials for asbestos-related and other dust-related diseases.

The Foundation must pursue its objectives principally in Australia.



---

### **Sylvia Kidziak AM**

Ms Kidziak is Managing Director of SL Engineering, a Councillor on the NSW Business Chamber Sydney North Regional Council and held the position of Principal Consultant, Occupational Health, Safety and Environment Policy at Australian Business Ltd for 26 years. She is Chair of the ARPANSA Radiation Health and Safety Advisory Council and Member of the NSW Workers Compensation and Workplace Occupational Health and Safety Advisory Council. Ms Kidziak was formerly a Commissioner on the Australian Safety and Compensation Council and the National Occupational Health and Safety Commission, Board Member of the NSW Cancer Council, a Director on the NICNAS Industry, Government Consultative Committee, Chair of the Occupational Health, Safety and Rehabilitation Council of NSW and Chair or Member of various other state and federal government Councils and Committees concerned with health and safety matters. Ms Kidziak has received several awards for her work which has included extensive advice on policy and technical issues relating to health and safety, medical research and specifically asbestos.

### **Rita Mallia**

Ms Mallia has been the Senior Legal Officer for the Construction, Forestry, Mining and Energy Union NSW, Construction and General Division, since February 2000. From 1996 to February 2000 Ms Mallia was the Union's Workers' Compensation Officer. In her role Ms Mallia provides legal assistance to the union, its officials and members of CFMEU in many matters including workers compensation and industrial issues. Ms Mallia also represents the CFMEU on the Construction Industry Reference Group and the Vocational Training Appeal Panel. Ms Mallia is also a director of the Schizophrenia Research Institute.

### **Barry Robson**

Mr Robson is the President of the Asbestos Diseases Foundation of Australia (ADFA) and President of the Blacktown and Mt Druitt Cardiac Support Group. He is a life member of the Maritime Union of Australia and the St Mary's Baseball Club.

### **Professor David Bryant**

Professor Bryant has been Senior Staff Thoracic Physician at St. Vincent's Hospital, Sydney, for 33 years and Associate Professor of Medicine at the University of New South Wales for the past 19 years. He has over 70 publications on various aspects of chest disease and is a member of the Australian, American and European Thoracic Societies, as well as the Australian and British Societies for Allergy and Clinical Immunology. David has also been the Chair of the Medical Authority of the Workers' Compensation Dust Diseases Board of New South Wales for the past 13 years.

### **Paul Bastian**

Mr Bastian has been the National President of the Australian Manufacturing Workers' Union since January 2010. Paul commenced his employment with the AMWU in 1981 and in 1997, was elected State Secretary of the NSW Branch. He is a shipwright by trade and completed a Law Degree while studying part time at the University of Technology, Sydney. Paul has worked throughout the manufacturing industry, in the construction, shipbuilding and metals industries, in both metropolitan and regional areas of the state. He is an Executive Board Member of APHEDA, he represents the AMWU on a number of Government and ACTU bodies and was a member of the NSW Manufacturing Council and the NSW Workers Compensation Advisory Council. He has a long history of involvement with community and union campaigns against asbestos and has represented the AMWU and International Metalworkers Federation (IMF) at numerous international asbestos Conferences.

### **Professor Ben Freedman**

Professor Freedman is Professor of Cardiology at the University of Sydney, and Deputy Dean of its Sydney Medical School. He was previously Head of Department of Cardiology at Concord Repatriation General Hospital and is now Head of the Vascular Biology Laboratory of the ANZAC Research Institute. Professor Freedman's research interests include ischaemia, acute coronary syndromes, heart failure, and inflammation and thrombosis in atherosclerosis. He is the author of well over 100 papers, articles and book chapters, is on the editorial board of a number of cardiology journals and was Scientific Chairman of the World Congress of Cardiology in 2002.

### **Danny O'Connor**

Mr O'Connor has worked in the New South Wales health system in various roles for almost 30 years. Danny started his health career as a community service clinician at St Vincent's Hospital in Sydney and has held positions including manager of the NSW Methadone Program, senior policy analyst with NSW Health, director of Drug Health Services with Central Sydney Area Health Service, general manager of Sydney Dental Hospital and general manager of Concord Repatriation General Hospital. He holds a position on the Sydney Institute of Health and Medical Research, the ANZAC Research Foundation, the NSW and ACT Advisory Committee for the Australia Council on the Health Care Standards (ACHS) and has been an ACHS surveyor since 2001. He joined Greater Western Area Health Service as acting director of Clinical Operations in February 2009 and is currently the Area's Chief Executive.



---

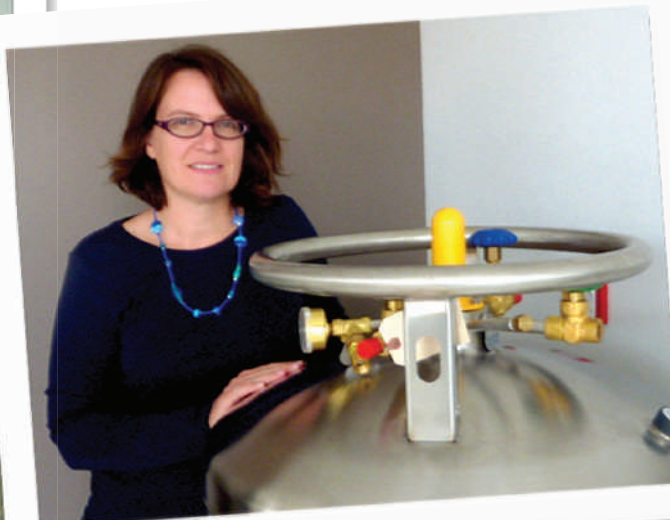
### Professor David Handelsman

Professor Handelsman has been Director of the ANZAC Research Institute since its inception in 1998. He is an international expert in Andrology, the study of male reproductive health, medicine and biology. While studying for his PhD, he established the first clinical Andrology centre in Australia, which has now become the first Australian hospital Andrology Department. David has served as adviser to the WHO Human Reproduction Programme, Secretary of the International Society of Andrology and President of the Endocrine Society of Australia. He was awarded the Susman Prize from the Royal Australasian College of Physicians in 1994 and the inaugural AMA Men's Health Award in 2003. He was promoted to a Personal Chair at the University of Sydney in 1996 to become the first Professor in Andrology in Australia. He is a director on the ANZAC Health and Medical Research Foundation.

### Professor Nico van Zandwijk - Director

Professor van Zandwijk earned his medical degree at the University of Amsterdam, The Netherlands, in 1973 and wrote his thesis on "Pulmonary injury elicited by blood" in 1976. He was editor of the Haematology section of *Excerpta Medica* until 1980, and received licences in internal medicine and pulmonary medicine in 1979 and 1981, respectively. In the same year he was appointed

Assistant Professor of the Academic Medical Centre, Amsterdam and became Consultant Physician at the Netherlands Cancer Institute, Amsterdam. From 1985 to 2008 he was Head of the Department of Thoracic Oncology at that Institute. Professor van Zandwijk has served as Secretary (1982-1988) and Chair (1988-1994) of the European Organisation for Research and Treatment of Cancer (EORTC) Lung Cancer Group. He has chaired a number of boards and committees including: the Scientific Board of the clinical section of the Netherlands Cancer Institute; a National Advisory Board for new lung cancer medications, and a State Council on asbestos related disease. He has also been a member of the Advisory Board of the Thoracic Section of the French National Cancer Institute (INCA). Professor van Zandwijk was a Board Director of the International Association for the Study of Lung Cancer (2005-2009) and is co-chairing the World Lung Cancer Conference 2011. He was Study Coordinator of several international studies, and has authored or co-authored more than 190 peer-reviewed international papers and chapters. In 2007 the Asbestos Diseases Research Foundation, Bernie Banton and the University of Sydney recruited Nico van Zandwijk to the position of ADRI Director and Professor, Sydney Medical School.



Dr Steven Kao (I) has collected data from a cohort of recently diagnosed patients with malignant mesothelioma.

(above) Ms Marian Barker, ADRI's Biobank Officer

---

### **Brian Eichhorn**

Mr Eichhorn has worked in manufacturing industries all his working life. For the past thirty (30) years he has held senior positions in Human Resources Management. Mr Eichhorn has qualifications in Human Resources and Occupational Health and Safety. He is a trustee of his company's superannuation fund.

### **Dallas Booth**

Mr Booth was admitted as a Barrister at Law in NSW in 1980 and holds a Diploma in Law (BAB). For the following 9 years, he gained experience as a legal policy adviser in the NSW Attorney General's Department. From 1989 to 1998 Mr Booth was Deputy General Manager and then General Manager of the Motor Accidents Authority of NSW. This involved the regulatory oversight of the compulsory third party insurance scheme in NSW. He was also involved in the implementation and funding of programs for accident prevention and medical research projects aimed at improving the care and rehabilitation of victims of motor vehicle trauma. In 2001 Dallas helped design, implement and manage the HIH Claims Support Scheme, and arrangements between the Australian Government and the general insurance industry for the provision of assistance to HIH policyholders suffering hardship as a result of the failure of that insurer. He was then the Deputy Chief Executive of the Insurance Council of Australia representing the general insurance industry in submissions to governments on a wide range of matters. During this period he was also a member of the WorkCover

Board of Tasmania. In December 2006 Dallas was appointed Chief Executive Office of Asbestos Injuries Compensation Fund Limited to implement and administer the agreed arrangements between James Hardie Industries NV and the NSW Government for the funding of compensation claims against former James Hardie companies.

### **Colin Goldrick - Company Secretary**

Mr Goldrick is a partner in the legal firm of Goldrick Farrell Mullan, heading up their Business and Technology practice group. He also acts as legal counsel to the Foundation. Colin has been a lawyer since 1996, specialising in intellectual property, corporate advisory and commercial law. Prior to that Colin worked in the Information Technology industry for almost 15 years, holding positions ranging from technical support, through to sales and business unit management. He has also worked as a management consultant with CSC, consulting with companies on implementing business change. He advises a number of companies on compliance and governance issues.

Dr Glen Reid, Senior Research Scientist



## Contact ADRI

### Address

Asbestos Diseases Research Institute  
Bernie Banton Centre  
Gate 3  
Hospital Road  
Concord NSW 2139 AUSTRALIA

### Postal Address

Asbestos Diseases Research Institute  
PO Box 3628  
Rhodes NSW 2138 AUSTRALIA

T: 61 2 97679800

F: 61 2 97679860

E: [info@adri.org.au](mailto:info@adri.org.au)

[www.adri.org.au](http://www.adri.org.au)

ABN 79 121 168 867



## Report production details

250 copies were produced

Total external costs were \$1,777. (excl. GST) for printing.

Edited by Nico van Zandwijk and Victoria Keena

Design by Victoria Keena

Photography by [onlinephoto.com.au](http://onlinephoto.com.au)

