



ANNUAL REPORT 2017





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Mission

The Asbestos Diseases Research Institute aims to improve the diagnosis and treatment of asbestos-related diseases and at the same time to contribute to more effective measures to prevent exposure to asbestos.

What we do

The ADRI's primary objective is to make asbestos-related disease history, and to provide a better future for all those unfortunate Australians exposed to asbestos.

Who we are

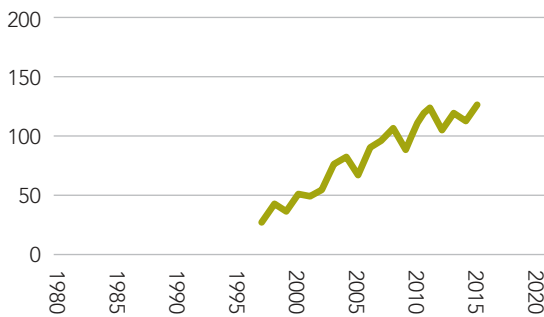
The Asbestos Diseases Research Institute (ADRI) is the first stand-alone research institute tackling the current epidemic of asbestos-related diseases. The ADRI was established and is governed by the Asbestos Diseases Research Foundation (ADRF), a charitable, not-for-profit organisation. The ADRI is located in the ADRF's Bernie Banton Centre on the Concord Hospital campus which was officially opened in January 2009 by the then Prime Minister, the Hon. Kevin Rudd.



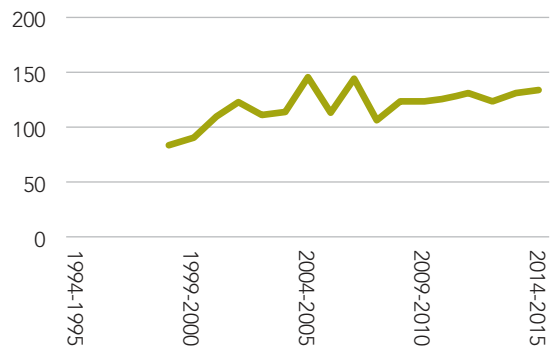
Key Statistics

Asbestosis

1,581 people have died from asbestosis in Australia between 1997 and 2015.

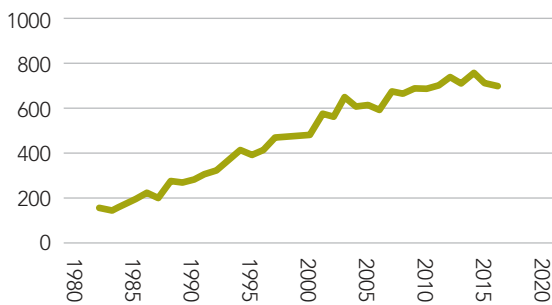


There are around **120** hospitalisations every year due to asbestosis.

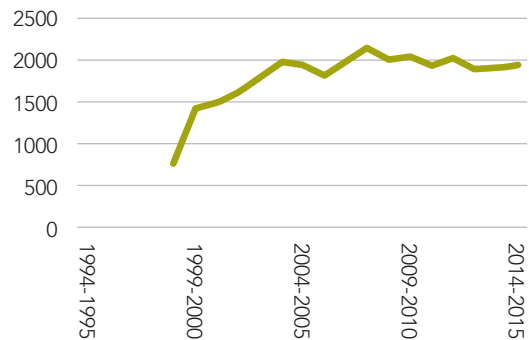


Malignant mesothelioma

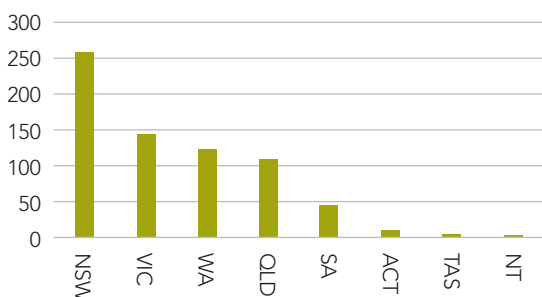
16,679 people in Australia have been diagnosed with malignant mesothelioma **since 1982**.



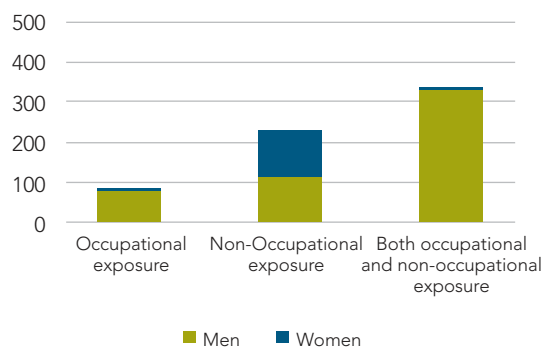
There are around **2000** hospitalisations every year due to malignant mesothelioma.



37% of people diagnosed with malignant mesothelioma in 2016 lived in New South Wales.



51% of people exposed to asbestos in non-occupational environments are women.



* All data extracted from the Australian Mesothelioma Registry 6th Annual Report 'Mesothelioma in Australia 2016' published August 2017.

ADRF Chair's Report

In February 2017 the ADRF welcomed the appointment of Professor Ken Takahashi as the new Director of ADRI, replacing the inaugural Director, Professor Nico van Zandwijk. Ken was the Professor of Environmental Epidemiology and Director of the WHO Collaborating Centre for Occupational Health at the University of Occupational and Environmental Health (UOEH) in Japan. Ken currently serves as the WHO Expert on Chemical Safety/Environmental Epidemiology (International Health Regulations) and is a Fellow and Executive Council Member of the Collegium Ramazzini, Italy. At ADRI Ken has set a strategy to add a new dimension of prevention, public and occupational health while maintaining the strength of on-going research activities. He aspires to position ADRI at the centre of the global asbestos-related diseases network. During the year Ken received Ministerial approval to be appointed to iCare's Dust Diseases Authority as the ADRF's representative.

Since the last report there have been a number of changes to the Board. Mr Sean O'Sullivan resigned in December the previous year having served on the Board for nearly five years as the representative of Past and Present Manufacturers and Suppliers of Dust and Dust Containing Goods. I warmly thank Sean for his contribution and welcome Mr Jason Miele, has re-located from United States, as Sean's replacement in June 2017. Following Sean's resignation, Dr Penman was appointed Chair of the Finance Committee. The terms of reference of the Finance Committee were broadened this year to address

audit responsibilities, becoming the Finance and Audit Committee. In collaboration with the Sydney Local Health District's Internal Auditor, Dr Penman conducted a Risk Assessment of the ADRI.

During the year the Board reviewed and approved a number of policies changes and recommended that communication resources be developed to promote the work and profile of the ADRF. To further promote the research achievements of the ADRI the website was redesigned. The website highlights the outcomes of the ADRI and this year there were a number of important publications in Lancet on the Global Burden of Disease published by an international collaborative of which Professor Takahashi is a member. The data from the MesomiR 1 phase 1 clinical trial was published by local experts including E/Professor van Zandwijk and A/Professor Reid in Lancet Oncology and the ADRF has been negotiating offers for the intellectual property.

I thank the members of the ADRF Board, who gave of their time and expertise to guide the Institute throughout the year. We look forward to a new and exciting year in 2018 with research activities expanding across the three pillars of laboratory, clinical and prevention and public health. We continue to realise ADRF's mission of making asbestos-related diseases history.



JOHN O'MEALLY AM RFD
CHAIR





"We look forward to a new and exciting year in 2018 with research activities expanding across the three pillars of laboratory, clinical and prevention and public health. We continue to realise ADRF's mission of making asbestos-related diseases history."

ADRI Director's Report

It is an honour and great pleasure to set foot in the Asbestos Diseases Research Institute (ADRI), a world unique institute dedicated to research into asbestos-related diseases, established by the Asbestos Diseases Research Foundation (ADRF). It is indeed a challenge to receive the baton from the inaugural Director, E/Professor Nico van Zandwijk, who has accomplished so much. At this time of change, I consider it pertinent and necessary to revisit the origin of the ADRI which can be referenced from the Constitution of the ADRF.



The Constitution states that “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;
- c) 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;
- d) to promote, sponsor and facilitate asbestos-related and Dust-related diseases education and training in relevant health disciplines;
- e) to further knowledge of medicine and science by promoting the conduct of research in the field of asbestos-related and other Dust-related diseases;
- f) to achieve a better understanding of the nature and causes of asbestos-related and Dust-related human diseases and afflictions;
- g) to improve methods of preventing, diagnosing and treating those diseases and afflictions; and
- h) 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.

Hence the Constitution states that the objective is to promote the research of asbestos and asbestos-related diseases (ARDs) and to aspire to provide leadership and excellence in the process. It is evident from the Constitution that the forerunners anticipated a balanced approach across the three areas, or pillars, of ARD research:

- 1) Laboratory Research
- 2) Clinical Studies
- 3) Public Health and Prevention

It should be noted that the third pillar is a broad one, including themes on epidemiology, patient support activities, education and training, international cooperation and ‘quality of life’ studies. Also for every combination of the three pillars, vibrant intersections should be formed, for example, Laboratory Research should intersect not only with Clinical Studies (i.e., translational research) but also with Public Health and Prevention (e.g., development of non-invasive biomarkers and its application to screen populations). Ultimately ADRI should achieve equal balance and scope across the three pillars. The status of ADRI’s research in 2017 is thus reviewed from the perspective of three pillars as the research framework.

1 Laboratory Research

ADRI continues to focus on malignant pleural mesothelioma (MPM), and in particular the identification of new biomarkers and therapeutic approaches for this disease.

Last year, work has expanded to include research into the response of mesothelial and MPM cells to asbestos fibres and an investigation into asbestos carcinogenicity. To date, much of the research at ADRI has centred on understanding the role played by noncoding (nc)RNAs, especially microRNAs, in the biology and drug resistance of MPM cells. We have identified multiple tumour suppressor microRNAs in MPM and have examined their potential as therapeutic targets, findings which led directly to the successful MesomiR 1 trial of TargomiRs described below. To complement the TargomiR approach, we have also begun work on local delivery of microRNAs to tumour cells. On a fundamental level, we are aiming to better understand how tumour suppressor microRNAs are downregulated in MPM, and whether this information can eventually be used to influence MPM growth in the clinic. This year we have started to investigate a new class of ncRNAs termed circular RNAs, which are implicated in cancer cell biology but have yet to be assessed in MPM. We have also begun to look specifically at early biomarkers of MPM development, beginning with in vitro experimentation in cell lines.

2 Clinical Studies

The MesomiR phase I clinical trial was conducted to investigate the safety and optimal doses of TargomiRs and was completed by the end of 2016. The report on its findings was published in the October 2017 issue of the *Lancet Oncology*. The report concluded that TargomiR has an acceptable safety profile and exhibits early signs of activity in MPM, and thus further development is warranted. The ADRF is currently exploring various options regarding the TargomiR intellectual property.

The ADRI Biobank provides investigators with biospecimens and accompanying clinical data for research projects that will lead to a better understanding of disease. The biobank contains fresh frozen tumour tissue, DNA and RNA samples derived from tumour tissue and matched bloods from mesothelioma patients, control tissue samples and a series of formalin-fixed tumour tissues. During 2017 ADRI continued to contribute high quality blood and tumour samples and also pleural fluid from consenting patients undergoing diagnosis or surgical treatment of their asbestos-related cancers.

3 Public Health and Prevention

Epidemiology:

Based on an epidemiologic analysis of socioeconomic and geographic factors among MPM patients awarded compensation, ADRI researchers reported that socioeconomically disadvantaged patients were significantly less likely to receive chemotherapy. The current incidence of malignant mesothelioma (MM) and asbestos exposure trends in Australia was analysed in a descriptive epidemiological study, which found that the age-standardized MM incidence rate levelled off in the last 10 years, albeit a marked increase over time in the age-specific incidence rates for those aged 75 years or older. ADRI also collaborated with Vietnam researchers to publish the estimated incidence of MM in their country. ADRI was commissioned to undertake a research project for the purpose of: i) identifying gaps in research on prevention of ARDs conducted by Australian researchers or institutions; and ii) assessing the Australian burden of non-mesothelioma ARDs.

Patient Support Activities:

The Mesothelioma Support Coordinators (MSC) support patients, carers and families by providing evidence-based clinical information on all aspects of pleural mesothelioma

management from diagnosis to bereavement. This is achieved through telephone, email, face-to-face and social media. Referrals for support come from health professionals, asbestos-related care agencies, cancer services, other patients, families and general enquiries. Accurate information and empathetic support enables patients to optimise their treatment options, as well as focusing on quality living with mesothelioma. Targeted face-to-face meetings focus on patients, carers, or the bereaved, with specific topics addressing perceived needs such as the Well Living EPP (extra pleural pneumonectomy) Group, for patients and carers who have had radical surgery and the annual "Thank You day for Carers". The MSC role is supported by the Turner Freeman Fellowship.

Quality of Life Studies:

Since 2014 ADRI has been conducting an observational, longitudinal study exploring the patient experience of people diagnosed with MM and examining health related quality-of-life, unmet care needs, anxiety and depression in people after a diagnosis of MM. The project recruited through 15 sites nationally and to-date we have enrolled over 100 participants.

Education and Training:

ADRI continues to support the activities of Betty – the ADRI House (a purpose build mobile model home designed to demonstrate where asbestos might be found in and around any Australian home) in collaboration with Insight Communications, i.e., the agency for the national Asbestos Awareness Campaign engaged by the Asbestos Education Committee (AEC) of the Heads of Asbestos Coordination Agency (HACA). ADRI proposed to the Sydney Local Health District and AEC a project to better understand the impact of Betty on the prevention

of ARDs in the community. In June, I was invited by ASEA to the Parliament House, Canberra to give a talk entitled "Asbestos Diseases Research Institute: Status and Future Directions" at a Parliamentary Group on Asbestos Related Disease (PGARD) Meeting, attended by MPs, MP staff, ASEA, and patient supporting charities.

International Cooperation:

I served as World Health Organisation (WHO) Consultant to Vietnam from 12-13 June at a Workshop to Draft the National Action Plan for the Elimination of Asbestos-Related Diseases, organised by the Health Environment Management Agency, Ministry of Health, Vietnam and supported by the WHO. Together with ADRI's epidemiologist, Dr Matthew Soeberg, we served as International Labour Organisation (ILO) consultants to Fiji from 18-19 December at the "Asbestos in Fiji" Symposium, organised by several Fiji Ministries and the Fiji National University and supported by the ILO and the WHO.

HACA funded the publication of a special issue under the theme of "Global Panorama of National Experiences in Public Health Actions to Ban Asbestos" in the International Journal of Environmental Research and Public Health for which I served as Chief Guest Editor. This special issue is to be published in 2018 and will be comprised of 13 articles describing the relevant national situations across different countries/regions that can be transferred to and referenced by currently asbestos-dependent, developing countries.



PROFESSOR KEN TAKAHASHI,
MD, PHD, MPH
DIRECTOR



"...the objective is to promote the research of asbestos and asbestos-related diseases (ARDs) and to aspire to provide leadership and excellence in the process..."

ADRF Board

Mr John O'Meally AM RFD

Independent Chair
Appointed 22 February
2012

John O'Meally was appointed a judge in New South Wales in 1979. He retired as President of the Dust Diseases Tribunal and from the District Court in November 2011. Before his appointment to the bench he was an acting judge of the National Court of Papua New Guinea. He has been a judge of the High Court of Antigua and Barbuda in the Supreme Court of the Eastern Caribbean and an acting judge of the Supreme Court of NSW. Between 1995 and 2003 he was a member of the Standing Committee on Judicial Education for the Judicial Commission of NSW. He was commissioned in the Australian Army Legal Corps in 1968 and in 1979 became Chief Legal Officer (Active Reserve) of the 2nd Military District. Between 1995 and 2000 he was the Honorary Colonel of the Australian Army Legal Corps. He has been a Consultant to the Governments of St Lucia (West Indies) and Solomon Islands (Western Pacific). John O'Meally is a Commissioner of the International Commission of Jurists (ICJ), Geneva, a member of the Australian Section of the (ICJ) and President of the NSW Branch. He has been a member of ICJ Delegations to East Timor and Papua New Guinea. He is an Associate Member of the Thoracic Society of Australia and

New Zealand and a member of the Australia and New Zealand Society of Occupational Medicine. In 2011 he was awarded the Thoracic Society Medal. In the same year he was appointed to the Advisory Council of the John Hulme Research Institute for Global Irish Studies at the University of NSW. He is a part time member of the NSW Civil and Administrative Tribunal and sits on the Medical Tribunal.

Ms Sylvia Kidziak AM

Deputy Chair
Nominated by the Dust
Diseases Board
Reappointed: 16 May 2012

Ms Kidziak is Managing Director of SL Engineering, a Councillor on the NSW Business Chamber Eastern Sydney Regional Advisory Council and held the position of Principal Consultant, Occupational Health, Safety and Environment Policy at Australian Business Ltd for 26 years. She is a member of the Dust Diseases Board of NSW and was previously a member of the Board of Directors of the Workers Compensation (Dust Diseases) Board of NSW and Chair of the Research Grants and Corporate Governance Committees. Ms Kidziak held the position of Chair of the ARPANSA Radiation Health and Safety Advisory Council for 12 years and the Nuclear Safety Advisory Committee for 3 years. She was formerly a Member of the NSW Workers Compensation and Workplace Occupational Health and Safety Advisory Council, 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 safety and environmental 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.

Ms Anita Anderson PSM

Nominated by the Dust
Diseases Authority
Appointed: 20 June 2016

Ms Anderson is the former Executive General Manager of the Workers Compensation Dust Diseases Authority. From 2008 Ms Anderson was the General Manager for the Dust Diseases Board before it became part of the new Insurance and Care NSW (iCare) organisation. Ms Anderson has worked for over 20 years in senior management across all aspects of public sector administration. She began her career in the NSW Attorney General's Department in 1976 and was Director, Local Courts 2001-2003. For 5 years Anita then worked with Legal Aid NSW as Director, Strategic Planning and Policy then Grants. Ms Anderson is a Member of the Australian Institute of Company Directors.

Professor Mark Cooper

Nominated by The
University of Sydney
Appointed 21 October
2015

Mark Cooper is the Professor of Medicine and Head of the Discipline of Medicine at the Concord Clinical School, University of Sydney. He heads the Adrenal Steroid Laboratory at the ANZAC Research Institute. Until 2012 he was a Senior Lecturer in Endocrinology at the University of Birmingham, UK. He was also metabolic bone physician at the Royal Orthopaedic Hospital, Birmingham, one of the largest orthopaedic hospitals in Europe. His clinical and research interests include adrenal steroid physiology and metabolic bone disease. In particular, he has examined the role that glucocorticoid metabolism plays in normal physiology, inflammatory arthritis and glucocorticoid induced osteoporosis. He was previously the Bertram Abraham's Lecturer in Physiology at the Royal College of Physicians of London. He continues to combine a clinical practice with a basic/translational research group.

Emeritus Professor Robert Lusby AM

Nominated by the ANZAC
Health and Medical
Research Foundation
Appointed 3 August 2012

Professor Lusby is the former Head of the Clinical School at Concord Repatriation General Hospital and also former Associate Dean of the Sydney Medical School, University of Sydney. Professor Lusby was a Colonel in the Royal Australian Army Medical Corps, and has served in Rwanda with the United Nations Peacekeeping Force; in Bougainville with the Peace Monitoring Group and in 1999 he served with the INTERFET forces in East Timor. In addition, he was the Consultant Surgeon to the Australian Army and the Australian Defence Force. Professor Lusby is Chair of the ANZAC Medical Research Institute and has previously served on the Macquarie and Northern Area Health Service boards. He is the proprietor of Tintilla Estate Hunter Valley Vineyard and Winery.

Dr Katherine Moore

Nominated by the Sydney
Local Health District
Appointed 12 December
2016

Katherine is the Director of Clinical Governance and Risk for the Sydney Local Health District. Katherine has worked in the public sector of NSW Health for most of her career, working in aged care and rehabilitation. Her previous positions have included Director of Allied Health and General Manager for Community Health in Sydney South West Area Health Service. She has a doctorate in health services management. Katherine sits on the National Occupational Therapy Registration Board of the Australian Health Practitioner Regulation Agency, as well as the NSW Occupational Therapy Council of the Health Professional Council Authority.

Mr Barry Robson

Nominated by the Asbestos
Diseases Foundation of
Australia Inc.
Reappointed: 8 October
2014

Barry 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



PATRICK WINATA

the St Mary's Baseball Club. Member of the National Taskforce Asbestos in Telstra Pits and Member of the Council for the Asbestos Safety and Eradication Agency.

Dr Deborah Vallance

Nominated by Unions NSW
Appointed: 18 April 2016

Since 2009 Dr Vallance is the National Health & Safety Coordinator of the Australian Manufacturing Workers' Union (AMWU). The majority of her working life has been spent in health and safety roles in the union movement, including the participation in tripartite bodies and meetings at State, National and international levels. Deborah previously worked as a medical practitioner, has undertaken health and safety policy and project work for government and has worked in population health research.

Mr Jason Miele

Representing the interest of past and present manufacturers and suppliers of Dust or Dust containing goods
Appointed: 19 June 2017

Jason Miele was appointed to the position of Vice President – Investor and Media Relations at James Hardie in February 2017. In this role, Mr. Miele has responsibility for overseeing the Company's investor relations strategy and successful interface with external audiences, communicating the Company's business strategy and its financial performance to various stakeholders including shareholders,

investment analysts, and the financial media. Mr Miele has 19 years of relevant professional experience, including 10 years of experience with James Hardie, where he has served in various finance and operational support roles, most recently as James Hardie's Vice President - Global Controller, a position he has held since 2013. Prior to joining James Hardie in 2006, Mr Miele held finance roles at Pacificare Health Systems and PricewaterhouseCoopers LLP, both in the Los Angeles, CA, USA area. Mr Miele has a Bachelor's Degree from the University of California at Santa Barbara, where he graduated with a degree in Business Economics with an emphasis in Accounting.

Dr Christopher Clarke

Invited by the Board
Appointed: 13 March 2014

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 has worked under the MSOAP-ICD program as a thoracic physician in country regions in NSW. He is the employee nominated member on the Medical Authority of the Workers Compensation (Dust Diseases) Board of NSW. He is an Authorised Medical Specialist for the NSW Workers Compensation Commission. He is a past President of the Thoracic Society of Australia and New Zealand. He now has a Marine Engine Drivers 2 Certificate of Competency (steam) and is Chief Engineer on ST Waratah which is

one of the vessels run by the Sydney Heritage Fleet. The wide range of trades represented there have given him an insight into the extensive use of asbestos in these industries.

Dr Andrew Penman AM

Invited by the Board
Appointed: 13 March 2014

Andrew Penman is a public health physician whose career has been focussed on the application of health and medical research in effective public policy and health programs. From 1984 to 1998 he held a succession of senior positions as Regional Director of Public Health, Pilbara Health Region, Assistant Commissioner and Chief Health Officer, WA Health Department, Director of Disease Prevention and Health Promotion, and Deputy Chief Health Officer, NSW Health. In these positions he initiated or led campaigns for example in: control of sexually transmitted diseases, environmental health improvement in indigenous communities, expansion of hereditary disease services, improved parenting to reduce conduct disorder, alcohol harm minimisation, and expanded vaccination. Since 1996, he has been Chief Executive Officer of the Cancer Council NSW. In this position he has grown the organisation's revenue, and scale and scope of programs, and initiated innovative programs in liver cancer prevention, tobacco control among disadvantaged people, tobacco retail reform and expanded support services for cancer patients. He was Chair of the Steering Committee to develop guidelines for the management of malignant mesothelioma under the auspices of the Asbestos Diseases Research Institute. His work in cancer control

was recognised by his appointment as a Member in the Order of Australia in 2010. His writing has been largely in the realm of departmental or organisational policy and strategy papers, and advocacy documents such as Health Goals and Targets for Western Australia, and improving Radiotherapy services. These interests are reflected in his publication record.

Professor Nico van Zandwijk

Research Director
Appointed 8 October 2014
Retired: 31 January 2017

Nico van Zandwijk earned his medical degree at the University of Amsterdam, The Netherlands, in 1973, and received licences in internal medicine and pulmonary medicine in 1979 and 1981, respectively. In 1981 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. He was secretary and chaired a number of boards and committees including: the Scientific Board of the clinical section of the Netherlands Cancer Institute; co-chaired the World Lung Cancer Conference (WLCC) 2011 and, was a Member of the Core Program Committee for the WCLC 2013. He was also a member of the national Asbestos Management Review Panel. He co-authored or authored more than 300 peer-reviewed international papers and chapters and was the inaugural Research Director of the ADRI (2007-2017).

Professor Ken Takahashi

Research Director
Appointed: 1 February 2017

Ken Takahashi was Professor of Environmental Epidemiology and Director of the WHO Collaborating Centre for Occupational Health at the University of Occupational and Environmental Health (UOEH), Japan. Ken graduated from the School of Medicine, Keio University in 1983 (MD), and after completing a 2-year residency in surgery, he received a PhD from UOEH and MPH from the University of Pittsburgh. He engages in epidemiologic research of occupational diseases, with special interest on occupational lung diseases, and asbestos-related diseases in particular. He served as consultant/ advisor to the WHO and ILO on a number of occasions, examiner/ advisor to academic institutes in several Asian countries, is a former Board Member of the International Commission of Occupational Health and former President of the Asian Association for Occupational Health. He currently serves as the WHO Expert on Chemical Safety/Environmental Epidemiology (International Health Regulations) and is a Fellow and Executive Council Member of the Collegium Ramazzini. He received the Jorma Rantanen Award from the Finnish Institute of Occupational Health in 2011 and the Selikoff Lifetime Achievement Award from the Asbestos Disease Awareness Organization (NGO in USA) in 2014. In February 2017 the Asbestos Diseases Research Foundation and The University of Sydney recruited Ken Takahashi to the position of ADRI Director and Professor.

Mr Colin Goldrick

Company Secretary
Reappointed: 16 May 2012

Colin is the Principal of Augment Legal, a specialist consulting law firm and Special Counsel with the firm of Goldrick Farrell Mullan, where he advises in 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, as well as compliance and governance for both commercial and not-for-profit entities. Prior to that Colin worked in the Information Technology industry for almost 15 years in a variety of roles.



ADRI Staff

2017 Staff

Mr Kan Chen
Biobank Officer

Dr Yuen Yee Cheng
Research Fellow

Mrs Agata Chrzanowska
Research Officer (-June 2017)

Mr Justin Crosbie
IT Manager

Mr Ross Flemons
Accountant

Mr Jason Fowler
PhD Fellow

Ms Kim Hadley
Receptionist/EA

Mrs Yennie Huynh
Clinical Trials Co-ordinator (-July 2017)

Mrs Rebecca Hyland
Biobank Officer

Mr Thomas Johnson
PhD Fellow

Dr Steven Kao
Oncologist

Ms Victoria Keena
Executive Officer

Ms Hedi Kruse
Research Assistant (-April 2017)

Ms Catherine Leygo
PhD Fellow (-July 2017)

Mrs Jocelyn McLean
Mesothelioma Support Coordinator

Ms Monica Phimmachanh
Hons Student

A/Prof Glen Reid
Senior Scientist

Mr Kadir Sarun
Research Assistant

Dr Karin Schelch
Post Doc Fellow

Mrs Karen Selmon
Mesothelioma Support Coordinator

Dr Matthew Soeberg
Research Fellow

Prof Ken Takahashi
Director (February 2017-)

Mrs Jenny Weismantal
Volunteer

Ms Marissa Williams
PhD Fellow

Mr Patrick Winata
Masters Student

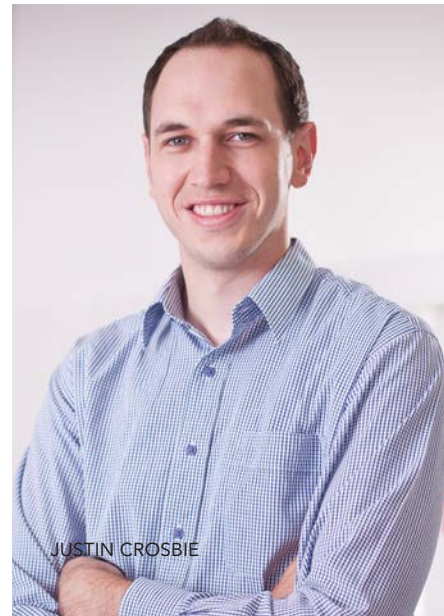
Prof Nico van Zandwijk
Director (-January 2017)



ROSS FLEMONS



YUEN YEE CHENG



JUSTIN CROSBIE

Volunteers

Jenny Weismantal

Jenny is an invaluable team member supporting ADRI's small admin team. Jenny has been working for the team for many years having undertaken courses and becoming our expert with Endnote, a reference manager, and various other document database. We greatly appreciate and thank Jenny for her ongoing support and dedication to the ADRI and our research endeavours.

Geoff and Karen Wicks

'Betty the ADRI House' curators and chaperones, Geoff and Karen Wick have volunteered their time to work again this year. During Asbestos Awareness Month they travelled with Betty to Tasmania. We thank them for their enormous contribution and support of the Asbestos Awareness Campaign. Geoff and Karen were also recognised at the Safework NSW Awards 2017 for their tireless work over the past 5 years travelling thousands of kilometre around Australia raising the awareness of asbestos. To learn more about Betty's travels with Geoff and Karen visit Betty the ADRI House and AsbestosAwareness.com.au.



JENNY WEISMANTAL



GEOFF AND KAREN WICKS



Research

Research funding

New Grants in 2017

iCare, Dust Diseases Care

Mesothelioma Support

Over the past year the role of Mesothelioma Support Coordinator has gained momentum and in July 2017 the ADRI was awarded a Support Organisation Funding Program Grant from iCare, Dust Diseases Care, which has enabled us to expand the role to a full-time position. The grant now supports Mrs Karen Selmon, a Registered Nurse, and a number of supportive and educational programs. Karen has joined Ms Jocelyn McLean in the position, sharing the role. Jocelyn continues to be supported by Turner Freeman.

Asbestos Safety and Eradication Agency

Review of literature in Australia into the prevention of asbestos-related disease

Currently the rate of mesothelioma deaths in Australia is among the world's highest which directly corresponds to the high level of asbestos use in the past. The ARD burden will linger into the future because of the long latency period of ARDs and the formidable amount of asbestos in situ remaining in the community. The call for prevention of ARDs via prevention of exposure, i.e., primary prevention, will remain a priority for Australia. Accordingly,

there is sufficient cause for Australian stakeholders to invest in preventive research.

Australian researchers and institutions have long been engaged in the scientific research of ARDs on many fronts ranging from prevention to the lab sciences as well as the clinical sciences in terms of diagnosis and treatment. It is not clear as to how and the extent to which the country succeeded to promote research on preventing ARDs, relative to other areas of research such as the lab and clinical sciences. Identifying gaps in research on prevention of ARDs will provide leads to recommending new research directions for Australia. The objective of this project is to identify gaps in research on prevention of ARDs conducted by Australian researchers or institutions.

Safework NSW – HACA

Special Issue of the International Journal of Environmental Research and Public Health

Asbestos and ARDs are increasingly recognised as a global health issue. As a forerunner country on issues related to asbestos and ARDs, Australia has a moral obligation to lead the world in preventing and eliminating ARDs. The World Health Organization (WHO) has declared that the best way to eliminate ARDs is for countries to stop using asbestos, i.e., ban asbestos. Today many developing countries continue to use asbestos at formidable levels. The experiences and lessons learnt by countries that

banned asbestos such as Australia have not been easily learnt or shared. The International Journal of Environmental Research and Public Health (IJERPH) requested Professor Ken Takahashi to serve as chief guest editor of a special issue featuring asbestos and ARDs. The Heads of Asbestos Coordination Authorities awarded funds to the Asbestos Diseases Research Institute to enable the publication of this special asbestos-related diseases issue in the IJERPH.

On-Going Grants in 2017

Dust Diseases Authority

Micromanaging microRNAs to treat malignant pleural mesothelioma.

MicroRNAs are a class of short gene regulators that are frequently dysregulated in cancer including mesothelioma. We have discovered that the majority of microRNAs are suppressed in malignant pleural mesothelioma (MPM) and potentially act as tumour suppressors. In this project we are systematically testing the functional significance of all downregulated microRNAs. This allows the characterisation of the full repertoire of tumour suppressor microRNAs and their roles in MPM. We have designed experiments to test the effects of individual microRNA mimics using in vitro and in vivo models. The combinations of mimics will also be

investigated for their effect on MPM cell and tumour growth. The synergistic effects of microRNA combinations and their subsequent cellular pathway involvement will also be tested. At the final stage of this project, we will test how restoration of these microRNAs individually or in combination affect tumour growth using a newly established inter-pleural MPM model. In this model we will use an in vivo-jetPEI from Polyplus to deliver the microRNAs, this method has already been applied in a current clinical trial. As such, the project has the potential to be rapidly tested in the clinic as a treatment for MPM patients.

Cancer Institute NSW – Research Infrastructure Grant

Expanding the asbestos diseases research institute (ADRI) biobank to create a state-wide repository for research into thoracic cancers.

ADRI represents a consortium of clinicians and researchers who together aim to expand the successfully established ADRI biobank to create a state-wide repository for research into thoracic cancers. Thoracic cancers including lung cancer and mesothelioma are an under-researched group, and a biobank is the first step towards improving

research capacity in this area. ADRI already has an established biobank collecting biospecimens and clinical data from mesothelioma patients, but there is currently no dedicated repository of similar samples and data from lung cancer patients. By ear-marking the available capacity of the ADRI biobank and database, and building on the collaborative network of clinicians and scientists already in place, increased collection of samples from mesothelioma patients and rapid collection of samples from lung cancer patients will be possible. These collections will quickly grow into a resource available for cancer researchers across NSW.

Sydney Catalyst

Correcting aberrant microRNA expression as a therapeutic approach in MPM.

The mechanisms causing downregulation of the tumour suppressor microRNAs miR-15a/16-1, miR-15b/16-2 and miR-193a-3p in malignant pleural mesothelioma (MPM) as the specific modes of their downregulation is unknown. To understand the processes involved, the different stages of microRNA biogenesis are being investigated in this PhD project. Marissa Williams started her PhD in 2015 to study aberrant microRNA expression in MPM.

Philanthropic and Corporate Funding

James Hardie

James Hardie Industries plc continued to provide untied support for ADRI's research into asbestos-related diseases. James Hardie's support allows ADRI's researchers to develop early stage ideas that may require several years of work to obtain preliminary results. The results can then be used to leverage support from Government grants. Philanthropic support such as that from James Hardie's is vital for research with its long term horizon and nimble distribution of funds.

CSR Limited — Biobank

The ADRI biobank is an important collection of human biological material and associated information providing the ADRI research team with a range of specimens including: blood, tumour and normal pleural tissues. These specimens are kept in a controlled environment until they are used in experimental analyses within a human research ethics committee approved study protocol. With CSR's co-support the biobank of high quality biospecimens has continued to grow



MARISSA WILLIAMS



TOM JOHNSON

and assist researchers to improve the diagnosis and treatment of asbestos-related diseases, including, but not limited to, malignant mesothelioma, lung cancer and fibrotic asbestos-induced lung disease (asbestosis). In 2017 we announced that ADRI's Biobank was officially certified by the NSW Health Pathology Biobanking Certification Program, endorsed by the University of British Columbia.

Turner Freeman Scholarship - Mesothelioma Support Coordinator

Turner Freeman Lawyers have continued to provide much needed support to the Mesothelioma Support Coordinator role at ADRI. This role which provides assistance and support to those people that have been diagnosed with asbestos-related diseases, their families and

friends. Since Turner Freeman initially supported this role it has grown and has now attracted additional funding to become a full-time position.

Mr Jim Tully Fellowship

The Jim Tully Fellowship has been supporting post-doc fellows at ADRI since 2010. Dr Karin Schelch completed her PhD 2015 in Vienna and returned to the ADRI in early 2016 to take up a post-doctoral position. Karin's research focus is to investigate dysregulated signalling pathways in mesothelioma with the aim of identifying new targets for therapy. Karin was co-supported by the Mr Jim Tully Fellowship in 2017.

ADFA Scholarship

The Asbestos Diseases Foundation of Australia (ADFA) have been supporting young researchers at ADRI since 2010. Tom Johnson enrolled in his PhD through The University of Sydney in 2016 and his project will follow on from preliminary data conducted at ADRI. Tom started at ADRI as a summer student at the end of 2014 and completed his Honours in 2015. His project will focus on the involvement of YB-1 in the drug resistance of malignant pleural mesothelioma (MPM) cell lines. It will further the understanding of chemo-resistance in this disease and therefore has the potential to improve malignant pleural mesothelioma patient outcomes in the development of future drugs.



Research projects

1 Laboratory Research

FGF2 and EGF induce epithelial mesenchymal transition in MPM cells via a MAPKinase/MMP1 signal

Malignant pleural mesothelioma (MPM) occurs in three main histological subtypes. The epithelioid and sarcomatoid subtype are characterised by cuboid and fibroblastoid cells, respectively. The biphasic subtype contains a mixture of both. The sarcomatoid subtype expresses markers of epithelial mesenchymal transition (EMT) and confers the worst prognosis, but the signals and pathways controlling EMT in MPM are not well understood. We showed that treatment with FGF2 or EGF induced a fibroblastoid morphology in several cell lines from biphasic MPM, accompanied by scattering, decreased cell adhesion and increased invasiveness. This depended on the MAP-kinase pathway but was independent of TGF or PI3-kinase signalling. In addition to changes in known EMT markers, microarray analysis demonstrated differential expression of MMP1, ESM1, ETV4, PDL1 and BDKR2B in response to both growth factors and in epithelioid versus sarcomatoid MPM. Inhibition of MMP1 prevented FGF2-induced scattering and invasiveness. Moreover, in MPM cells with sarcomatoid morphology, inhibition of FGF/MAP-kinase signalling induced a more epithelioid morphology and gene expression pattern. Our findings suggest a critical role of the MAP-kinase axis in the morphological

and behavioural plasticity of mesothelioma. This project is the result of a long-standing collaboration between ADRI and the Medical University of Vienna, Austria. The data has been presented at several national and international conferences including the 18th World Conference on Lung Cancer in Yokohama, Japan and the Postgraduate and ECR Cancer Research Symposium at The University of Sydney. A manuscript has been prepared and a revised version submitted for publication.

The microRNA-15/16 family regulates tumour cell growth via fibroblast growth factor signals in MPM

Fibroblast growth factor (FGF) signals play important roles in mesothelioma cell growth and malignant behavior and their inhibition leads to reduced tumor growth in vitro and in vivo. Several FGFs/FGFRs are predicted miR-15/16 targets. In this study, we explored the link between the miR-15/16 and the FGF/R family in mesothelioma and characterised its malignant potential. The data were presented at several national and international conferences and a manuscript was published in the journal *Molecular Oncology*.

YB-1 plays a dual role in MPM growth, which has implications on its role in drug resistance

Following the findings in our recent publication in the *Journal of Thoracic Oncology*, we were interested in the mechanisms behind the growth-

promoting role YB-1 plays in MPM cells. YB-1 was inhibited in MPM cell lines via siRNA transfection and TALI apoptosis assays and cell cycle analysis using cell-flow cytometry was conducted. We found that some MPM cell lines displayed an increase in apoptosis while others displayed G1-G0 cell cycle arrest in response to YB-1 silencing. This led us to investigate the potential role YB-1 might play in MPM chemotherapy resistance, firstly because target-induced apoptosis can act synergistically with traditional chemotherapy and secondly, because YB-1 is known to be involved in the drug resistance of many other cancers. MPM cells were transfected with low doses of YB-1 or control siRNA and treated with different concentrations of cisplatin or vinorelbine chemotherapy. We found that cell lines undergoing apoptosis in response to YB-1 siRNA were also sensitised to these chemotherapies, while those undergoing cell-cycle arrest displayed increased resistance. These findings have implications on the therapeutic potential of targeting YB-1 in patients suffering MPM, and we have ethics approval to conduct in vivo studies on the effect of YB-1 on growth and drug resistance using our novel intraperitoneal mouse model. This exciting new data has been presented at the World Conference on Lung Cancer in Yokohama, Japan, and at the ECR Cancer Research Symposium, Sydney.

miR-137-3p: a new tumour suppressor microRNA in MPM biology

Chromosomal deletion of sites encoding tumour suppressor genes is a major contributing factor in the oncogenesis of malignant pleural mesothelioma (MPM), notably 1p21-23, which occurs in 74-85% of MPM cases. This region encodes the tumour suppressor miR-137, a site which is coincidentally also commonly hypermethylated due to the presence of a large CpG site in its promoter. miR-137 is known to target a number of oncogenic factors such as AKT2, CDK6 and importantly, YB-1. This project set out to characterise the expression patterns and roles of miR-137 and YB-1 in MPM. Data from this project has been presented at several conferences and was published in the Journal of Thoracic Oncology.

The oncoprotein YB-1 regulates EMT, migration and invasion in MPM

YB-1 is a multifunctional protein which has been described to play multiple roles in many tumour types. In our recent publication we showed that YB-1 is overexpressed and plays an important role in growth and the aggressive behaviour of malignant pleural mesothelioma (MPM) cells. YB-1 knock-down, by either siRNA or the YB-1 targeting microRNA miR-137, inhibited MPM migration and invasion. Following these data, we generated cell lines stably overexpressing YB-1 to determine the effects of increased YB-1 on these phenotypes. We found that YB-1 overexpression in turn stimulates MPM cell migration and induces EMT-like morphology changes. While miR-137 downregulates YB-1, we unexpectedly found that using siRNAs to specifically reduce YB-1 levels led to an increase

in miR-137 levels in a panel of MPM cell lines, strongly suggesting that elevated YB-1 levels in MPM suppress miR-137. Thus, increases in YB-1 expression inhibit the YB-1 regulator miR-137, which in turn leads to further elevation in YB-1 through a feed-forward loop. This data was presented at the World Conference on Lung Cancer in Yokohama, Japan and the Postgraduate and ECR Cancer Research Symposium in Sydney.

An *in vivo* model for MPM

Preclinical studies of malignant pleural mesothelioma (MPM) often make use of subcutaneous xenograft models, and we have used these previously to successfully investigate microRNA replacement. Nevertheless, the growth of tumour cells at a physiologically relevant site is considered more informative and can provide more clinically relevant results. Malignant mesothelioma arises from and covers



the mesothelial linings surrounding the lung (pleural mesothelioma) or the peritoneal cavity (peritoneal mesothelioma). A semi-orthotopic intraperitoneal xenograft mouse model will be used to test delivery of siRNA and microRNA mimics *in vivo*.

MesomiR 1: The phase I study testing TargomiRs in patients with recurrent MPM

In this first-in-man, open-label, dose-escalation phase 1 trial of TargomiRs at three major cancer centres in Sydney, we recruited 27 patients satisfying a criteria including a confirmed diagnosis of malignant pleural mesothelioma (MPM), measurable disease and radiological signs of progression after previous chemotherapy. The primary endpoints were to establish the maximum tolerated dose of TargomiRs as measured by dose-limiting toxicity, define the optimal frequency of administration, objective response, duration of response, time to response, and overall survival. Of the 27 enrolled patients, 26 received at least one TargomiR dose. Overall, five dose-limiting toxicities were noted. Cardiac events were observed in five patients. Of the 22 patients assessed for response by CT, one (5%) had a partial response, 15 (68%) had stable disease, and six (27%) had progressive disease. The duration of the objective response was 32 weeks, and median overall survival was 200 days (95% CI 94-358). The acceptable safety profile and early signs of activity of TargomiRs in patients with malignant pleural mesothelioma support additional studies of TargomiRs in combination with chemotherapy or immune checkpoint inhibitors. This study was published in *Lancet Oncology*.

Using artificial miRs to control the growth of MPM

Most cancer chemotherapy is based on 'one therapy, one target' model. Through this principle single gene or secondary pathway mutations can lead to loss of drug efficacy and resistance to therapy. Therefore, a therapy that has more than one target pathway has potential advantages. MicroRNAs have this property as they control expression of multiple genes across different pathways. Given the sequence-specific interaction of natural microRNAs with the 3' untranslated region of their target mRNAs, it is possible to use this principle to design artificial microRNAs that control expression of pre-selected target genes. In theory, controlling multiple genes across different pathways has the potential to avoid resistance associated in a single gene therapy. We have successfully applied an artificial microRNA concept to target genes in multiple pathways in malignant pleural mesothelioma (MPM), and continue to develop this concept in preclinical models.

Regulation of PD-L1 expression by microRNAs in MPM

Cancer immunotherapy, particularly using immune checkpoint blocking antibodies, is leading to long-term responses in some cancer patients. The interaction between programmed death 1 (PD-1) and its ligand PD-L1 are one such target, as they play a significant role in suppressing host immune response in many cancer types. Our study confirms that PD-L1 is an adverse prognostic indicator in malignant pleural mesothelioma (MPM). Although PD-L1 expression is upregulated and associated with poor prognosis in MPM the mechanisms causing its dysregulation are poorly understood. Elevated PD-L1

expression in MPM patient samples correlates with downregulation of tumour suppressor microRNAs that were in turn shown to directly regulate PD-L1 expression *in vitro*. The relationship between miR-193a-3p and PD-L1 was shown to be due to an unusual interaction between the microRNA and non-canonical site in the PD-L1 mRNA. This work was published in the *Journal of Thoracic Oncology*.

Identifying microRNAs with therapeutic potential in MPM

We and others have shown that multiple microRNAs have tumour suppressor activity in malignant pleural mesothelioma (MPM) cell lines when the levels are restored using mimics. Results from our lab led to the phase I MesomiR 1 clinical trial, which was the world's first microRNA replacement strategy (TargomiRs) in mesothelioma patients. In this project we are carrying out a head-to-head comparison of microRNA mimics, both singly and in combination, to identify the most promising microRNAs for future development as therapeutic agents. The initial experiments in this project were carried out by two students from the 2015/16 Summer Studentship program at The University of Sydney. This work is supported by a grant from the DDB.

Co-stimulation of the immune system to improve chemotherapy for MPM

In collaboration with New Zealand biotech company, Innate Immunotherapeutics, we are investigating the ability of a microparticulate immune response modulator, currently in clinical trial for other indications, for its ability to stimulate the immune system and improve response to chemotherapy.

Only 40% of malignant pleural mesothelioma (MPM) patients receiving the standard of care (palliative platinum-pemetrexed chemotherapy) respond to treatment and combined-modality treatment (with curative intent) is followed by prolonged survival in selected cases only. Currently, there is no defined second-line treatment and the need for efficient therapies for MPM remains unfulfilled. Recent research has focused on immunotherapy, to harness the immune system as a novel therapeutic approach. Minor impacts on tumour growth have been demonstrated in animal studies following immunotherapy alone, however, when combined with chemotherapy, clear shrinking of tumours was visible. Moreover, following treatment with immunotherapy, mice implanted with a secondary challenge of MPM exhibited tumour inhibition compared to mice who were not treated with immunotherapy. Clinical studies,

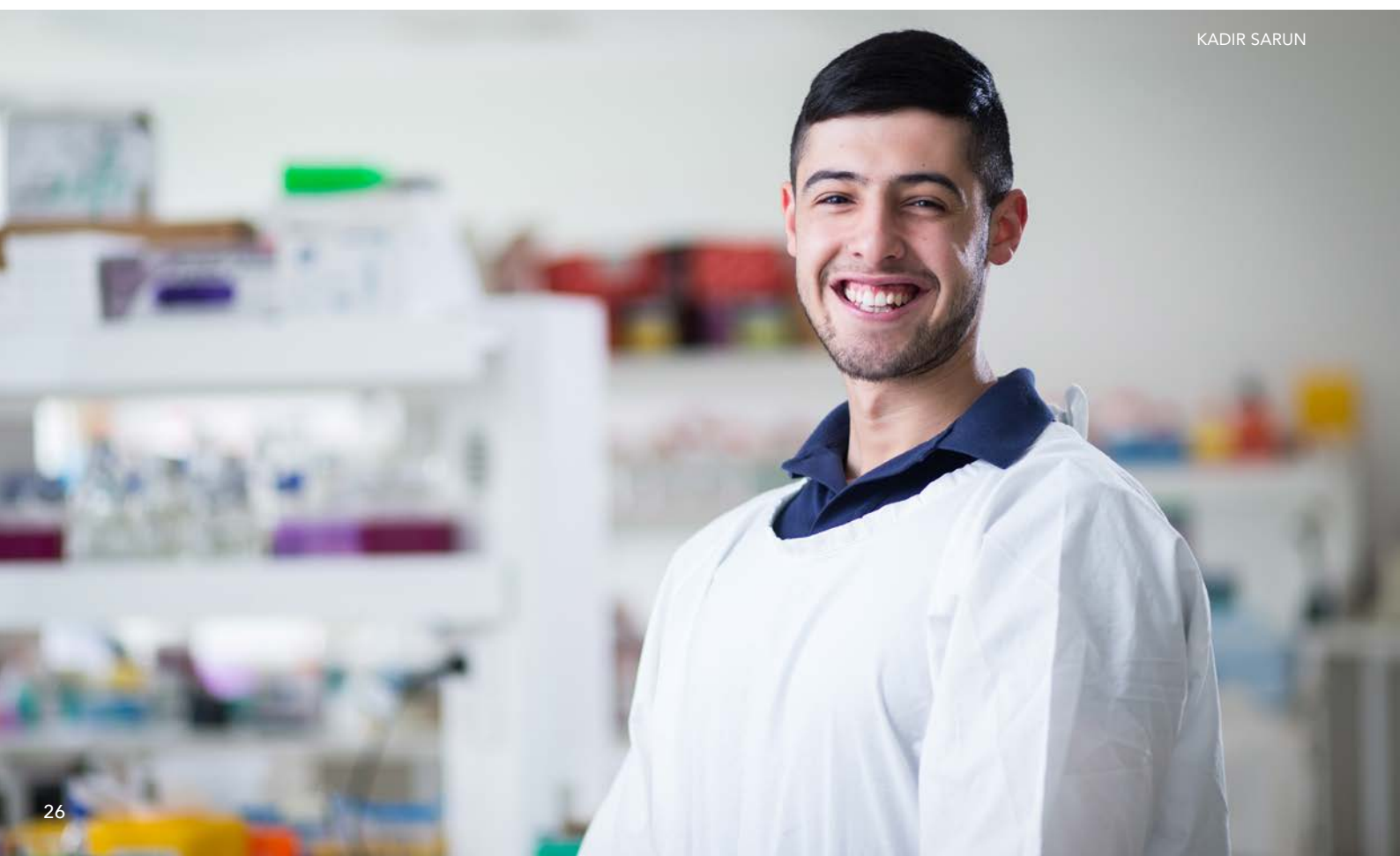
with antibodies blocking immune checkpoints have shown dramatic responses in melanoma and non-small cell lung cancer. Efficacy of immune checkpoint blockade has also been noted in a relatively small series of MPM patients but so far the responses observed were less impressive than in patients with melanoma and non-small cell lung cancer. Thus the development of new treatment approaches for MPM remains vitally important and immune stimulation in combination with existing (chemotherapy) treatment warrants further exploration.

The contribution of stromal cells to microRNA expression in mesothelioma

In this study, being carried out by Kadir Sarun as an MSc project, we have identified several microRNAs that are significantly upregulated in experimental tumours derived

from human malignant pleural mesothelioma (MPM) cell lines when compared to the levels found in the MPM cell lines grown in the laboratory. Amongst these microRNAs species specific pri-miRNA transcripts depicted miR-143-3p, miR-214-3p and miR-223 to be dominantly contributed by mouse stromal cells. Overexpressing these microRNAs in cultured human tumour cells had no significant effect on growth. Hence, indicating that these microRNAs are likely to possess a more biologically relevant role in the stroma. Furthermore, this data also provides a cautionary tale for interpreting microRNA profiles where the results from a MPM biopsy may include microRNAs contributed by stromal cells.

KADIR SARUN



A 3D spheroid culture represents an improved in vitro model of MPM

Most biologists rely on cell culture in the two-dimensional (2D) format for studying tumour context which does not accurately reflect the in vivo state. 3D cell culture techniques provide better cell-to-cell interactions that mimics pathological conditions such as cancer. Malignant pleural mesothelioma (MPM) is a deadly cancer with no effective treatment and is highly drug resistant. This study addressed this problem by growing cells in 3D and therefore creating an environment that more closely mimics the realistic tumour state for molecular and cellular responses. Cells grown in our 3D model displayed greater drug resistance when compared with 2D cells. Most tumour suppressor biomarkers we analysed show downregulation of mRNA expression levels compared with cells in 2D. The data from this study were presented at the IASLC 18th World Conference on Lung Cancer 2017 in Yokohama, Japan.

Establishing malignant pleural mesothelioma cell lines using the spheroid method produces a model with better 3D architecture

Malignant pleural mesothelioma (MPM) is an aggressive malignancy with no effective treatment options. Poor prognosis and drug resistance are the main challenges of this deadly disease. There is also no simple distinctive diagnosis tool for the identification of MPM. Better diagnostic markers may also provide better biological information for treatment development. In this study we established primary MPM cell lines and characterised them with current biomarkers. The ultimate goal was to use these cell lines for the identification of diagnostic biomarkers. Cells grown in 3D provide better



YUEN YEE CHENG

tumour architecture when compared with 2D cells. 3D cells also provide more intensity and greater percentage of positive MPM biomarkers. The data from this study were presented at the IASLC 18th World Conference on Lung Cancer 2017 in Yokohama, Japan.

2 Clinical Studies

An observational study of health-related quality of life in people with MM

This multi-site, observational, longitudinal cohort study aims to explore the experience of people diagnosed with malignant mesothelioma (MM). The project examines health related quality-of-life, unmet care needs and anxiety and depression in people after a diagnosis of MM. It includes a number of optional sub-studies examining associations between these variables and other prognostic indicators such as inflammatory biomarkers, nutritional status and functional status.

Site-specific ethics approval was received for 15 participating hospitals and cancer institutions across New South Wales, Queensland, South Australia and Victoria. Recruitment commenced in April 2014 at approved sites and via self-referral recruitment strategies involving the Dust Diseases Board and the Asbestos Diseases Foundation of Australia. The study completed recruitment in July 2017, with 105 participants taking part. Data collection continued throughout 2017 and is now complete. Preliminary study data has been presented at both national and international conferences and publications have been submitted or are in preparation, reporting quality-of-life and nutritional risk following extrapleural pneumonectomy (EPP) surgical treatment along with a review of Quality of Life measurements.

3 Public Health and Prevention

Australian contribution to the global panorama of national experiences in public health actions to ban asbestos

The *International Journal of Environmental Research and Public Health* (IJERPH) is publishing a special issue titled: 'Global Panorama of National Experiences in Public Health Actions to Ban Asbestos'. Over 50 countries in the world have adopted a national ban on asbestos. These countries have 'national experiences' to make the transition from an asbestos-using society to a non-using society. Professor Ken Takahashi is the lead Guest Editor for this special issue. Dr Matthew Soeberg, ADRI, led the development and publication of an article in this special issue (see publications list) that documents Australia's asbestos ban efforts and the work that has been required since the complete asbestos ban was introduced in 2003.

Gaps in asbestos-related disease prevention research in Australia

ADRI has been contracted by the Asbestos Safety and Eradication Agency to explore gaps in asbestos-related disease prevention research in Australia. This work has involved:

1. understanding international trends in the publication of asbestos-related disease research according to the categories of public health, laboratory, and clinical research;
2. understanding which public health research papers have had the greatest impact in Australia; and
3. extraction and analysis of international and Australian data on a range of asbestos-related diseases. This work has involved collaboration with researchers from Taiwan and Japan. This work is due for completion in May 2018 and will likely to be published as a report by the Asbestos Safety and Eradication Agency.

Asbestosis as a cause of death

Asbestosis is one of the key population health indicators for the presence of asbestos-related diseases in Australia. ADRI is currently using data obtained from the Australian Institute of Health and Welfare to update our understanding of asbestosis as an underlying (primary) cause of death and as an associated (secondary) cause of death from 1997 up to 2015.

Promoting global efforts towards eliminating the use of asbestos and asbestos-related diseases

In December 2017, ADRI was engaged by the International Labour Organization (ILO) to provide short-term technical consultancy expertise for Fiji on the public health and preventive aspects of asbestos-related diseases. Fiji is one of a number of countries where asbestos is consumed through importation of raw asbestos as well as asbestos-containing products and materials, where there is little data on the presence of asbestos-related disease, and where the elimination of asbestos use is recognised as an important goal.

MATTHEW SOEBERG



MD Projects and Summer Research Scholarship Student

ADRI has started to supervise 3 MD students at the University of Sydney, Daniel William Antaw, Joseph Hockey, Justin Ming-Wai Phang, under the overarching topic of "Innovative Projects for World-wide Prevention of Asbestos-Related Diseases," but each with specific research subtopics relevant to public health/prevention. ADRI has completed the supervision of Allyson Todd, a 2017/2018 summer student at the University of Sydney, under the project title of "Developing

Indicators for the Global Prevention of Asbestos-Related Diseases.” The indicators reviewed include the status of ratification for ILO’s Asbestos Convention (C.162) and the Convention for Occupational Cancers (C.139) and the status of occupational safety Standards for Countries that have Ratified C.162. This work will be written up as a report by Allyson Todd.

2017 has been a busy year of actively supporting patients, carers, families and the bereaved who struggle through the early days after losing a loved one. As of the beginning of 2018 we were actively supporting 175 people consisting of: 63 people living with mesothelioma, undergoing palliative treatment (43 males, 20 females); 22 patients who have had trimodality therapy (16 males, 6 female); 79 bereaved families (58 females/9 males); and 6 others with a non-cancer asbestos-related lung disease.

The three groups identified requiring specific support is unchanged:

1. Patients receiving standard (palliative) care;
2. Patients who underwent radical (combined-modality) treatment; and
3. The bereaved - struggling with grief and loss.

The three identified subcategories also remain the same: Patients who are newly diagnosed and want clinical information and empathetic support; patients in a stable condition, who want to live a ‘normal’ life as much as possible; and patients with progressive (symptomatic) disease with complex medical and psychological needs.

We reviewed the service with a brief questionnaire and those who replied were grateful for the service and valued our attempt to meet their needs by providing two way telephone and email communication, face-to-face support groups and evidence based information by email newsletters and formal education sessions.

ADRI was awarded a Support Organisation Grant from Dust Diseases Care (DDC), commencing July 2017 and that enabled the service to evolve into a full time service. We welcomed Mrs Karen Selmon to job share with Ms

Jocelyn McLean in August 2017. Karen, a Registered Nurse has substantial experience as a Cancer Care Nurse brought from both her professional skills as well as her personal experience of caring for a loved one who lived the nightmare of a mesothelioma diagnosis. The funding provided surety that we could facilitate the support services we had developed. We have established a firm collaborative working rapport with DDC so that both parties understand more fully each other’s skills and can share in making the journey of patients’ and families more tolerable.

Our services have been:

1. Telephone calls and emails (843): to and from patients/families that provided a vital communication link between the patient’s world of living with mesothelioma and the clinical and research world of mesothelioma.
2. Face-to-face support: The value of support groups is slowly being recognised by a number of patients and carers particularly those who live within Western Sydney.
 - a. The Liverpool group meets every second month and the attendance ranges from 8 to 20 people.
 - b. The EPP (extrapleural pneumonectomy) Well Living Support Group attendance has remained constant with February (16), August (16,) and November (25) with an informal coffee get together in June (6). There was a rise in the number of people having this procedure in 2017.
3. Meetings held specifically for the bereaved were therapeutic and well attended. Michael Nash (Concord Bereavement Counsellor) again provided expert advice.



ALLYSON TODD &
KEN TAKAHASHI

Mesothelioma Support

In the course of providing support to mesothelioma patients it is discouraging to hear heartbreaking stories about treatment options and care provision, whilst on the other hand there are some stories that are uplifting which renews one’s faith in the health profession. What has become evident to us at ADRI is that every patient is entitled to hear about all treatment options and from this they can make an informed decision about what is the best treatment for them.

The role of the support service at ADRI is gaining momentum and

4. The annual Carer's 'Thank You' day as part of National Carers Week was attended by 22 ladies. The program and lunch provided an opportunity to share stories, support each other and generate friendships.
5. An Awareness and Memorial Walk was held on May 7th with 62 participants. The purpose of the walk was to bring together mesothelioma families to honour those who had died and to raise awareness about what patients and families endure when faced with mesothelioma.
6. An Education Day was held on May 8th with 53 registrations consisting of 37 patients; 16 health professionals and 8 presenters.
7. Teleconferencing has not been taken up by the groups, although it still has the potential to provide group communication and connect those living with similar experiences, thus reducing the isolating impact of distance and rarity of the disease.

Other activities:

- ADRI again attended what has become an annual golf day dinner in memory of Mr Morrie Lucas at the Russell Vale Golf Club and accepted a significant donation towards the work of ADRI.
- Attended the launch of the National Awareness Campaign with some patients.
- Presented at the Asbestos Diseases Foundation of Australia Awareness Day.
- Attended the National Asbestos Safety and Eradication Summit, Canberra.

Plans for 2018:

ADRI will continue to make patient education a focus. Education that not only informs patients and families about trials and treatments but also encourages them to look at how they want their time to be spent while living with the disease.

There is a plan to facilitate a webinar type series of educational material that might address some of the hard to discuss questions and topics around supportive care and end of life.

We have established links with Lung Cancer Nurses in both city and rural areas based at Cancer Centres such as: Nepean, Nowra, Central Coast and Newcastle with the view to co-host information and support meetings.

A long term future aim is to secure ongoing funding for a dedicated Mesothelioma Nurse.

ADRI Biobank

The Biobank at ADRI provides investigators with ethically approved biospecimens and clinical data from consenting patients undergoing diagnostic procedures or receiving treatment. These samples are stored in our state-of-the art cryogenic facility for research projects that will lead to a better understanding of asbestos-related diseases. The overall goal of this work is the ethically approved procurement of high quality samples and the collection of accurate, reliable and standardised clinical data which are critical to the success of ADRI's translational research.

During 2017 we continued to add high quality specimens to our Biobank which included: fresh frozen tumour samples, control tissues, matched blood, pleural fluid, and DNA and RNA samples extracted from bloods. We also substantially upgraded our standard operating procedures (SOPs) and the Biobank staff undertook online education modules as part of the NSW Health Pathology (NSWHP) Biobank Certification Program. We were pleased to announce in November 2017 that ADRI's Biobank was the second biobank in NSW to be certified by the NSW Health Pathology Biobanking Certification Program, endorsed by the University of British Columbia.

"ADRI will continue to make patient education a focus."

JOCELYN MCLEAN





“ADRI’s Biobank was the second biobank in NSW to be certified by the NSW Health Pathology Biobanking Certification Program”



Publications, Presentations and Awards



Peer-Reviewed Articles

1. Barnet MB, Zielinski RR, **Warby A**, Lewis CR, **Kao S**. Pseudoprogression associated with clinical deterioration and worsening quality of life in malignant pleural mesothelioma. *Journal of Thoracic Oncology* doi: 10.1016/j.jtho.2017.09.001. Epub 2017 Sep 12. PMID: 28919393
2. **Schelch K**, Kirschner MB, **Williams M**, **Cheng YY**, van Zandwijk N, Grusch M, **Reid G**. A link between the fibroblast growth factor axis and the miR-16 family reveals potential new treatment combinations in mesothelioma. *Molecular Oncology* doi: 10.1002/1878-0261.12150. Epub 2017 Nov 18. PMID: 29094504
3. **Winata P**, **Williams M**, McGowan E, Nassif N, van Zandwijk N, **Reid G**. The analysis of novel microRNA mimic sequences in cancer cells reveals lack of specificity in stem-loop RT-qPCR-based microRNA detection. *BMC Research Notes*. 2017 Nov 17; 10 (1):600. doi: 10.1186/s13104-017-2930-0. PMID: 29149911
4. **Johnson TG**, **Schelch K**, **Cheng YY**, **Williams M**, **Sarun KH**, Kirschner MB, **Kao S**, Linton A, Klebe S, McCaughan BC, Lin RCY, Pirker C, Berger W, Lasham A, van Zandwijk N, **Reid G**. Dysregulated expression of the microRNA miR-137 and its target YBX1 contribute to the invasive characteristics of malignant pleural mesothelioma. *Journal of Thoracic Oncology* 2017 Nov 4. pii: S1556-0864(17)32860-5. PMID: 29113949
5. **Leygo C**, **Williams M**, Jin HC, Chan MWY, Chu WK, Grusch M, **Cheng YY**. DNA methylation as a noninvasive epigenetic biomarker for the detection of cancer. *Disease Markers*. 2017: 3726595. PMID: 29038612
6. **Cheng YY**, Mok E, Tan S, **Leygo C**, McLaughlin C, George AM, **Reid G**. SFRP tumour suppressor genes are potential plasma-based epigenetic biomarkers for malignant pleural mesothelioma. *Disease Markers*: 2017: 2536187. PMID: 29386699
7. Lau B, Kumar S, Yan T, Burn J, Kennedy C, **McLean J**, Boyer M, McCaughan B, **Kao S**. Pathological complete response in malignant pleural mesothelioma patients following induction chemotherapy: Predictive factors and outcomes. *Lung Cancer*. 2017 Sep; 111:75-78. doi: 10.1016/j.lungcan.2017.07.010. Epub 2017 Jul 13. PMID:28838403
8. Furuya S, **Takahashi K**. Experience of Japan in achieving a total ban on asbestos. *International Journal of Environmental Research and Public Health*. 2017; 14(10):1261. PMID: 29053631
9. Global Burden of Disease 2016 Causes of Death Collaborators, (**Takahashi K**, included). Global, regional, and national age-sex specific mortality for 264 causes of death, 1980-2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet*. 2017; 390(10100):1151-210. PMID: 28919116
10. Global Burden of Disease Cancer Collaboration, (**Takahashi K**, included). Global, regional, and national cancer incidence, mortality, years of life lost, years lived with disability, and disability-adjusted life-years for 32 cancer groups, 1990 to 2015: a systematic analysis for the Global Burden of Disease Study. *JAMA Oncology*. 2017;3(4):524-48. PMID: 27918777
11. Kresoja-Rakic J, Sulemani M, Kirschner MB, Ronner M, **Reid G**, **Kao S**, Schwaller B, Weder W, Stahel RA, Felley-Bosco E. Posttranscriptional regulation controls calretinin expression in malignant pleural mesothelioma. *Frontiers in Genetics* 2017 May 29; 8:70. doi: 10.3389/fgene.2017.00070. eCollection 2017. PMID: 28611824
12. **van Zandwijk N**, Pavlakis N, **Kao SC**, Linton A, Boyer MJ, Clarke S, **Huynh Y**, **Chrzanowska A**, Fulham MJ, Bailey DL, Cooper WA, Kritharides L, Ridley L, Pattison ST, MacDiarmid J, Brahmabhatt H, **Reid G**. Safety and activity of microRNA-loaded micelles in patients with recurrent malignant pleural mesothelioma: a first-in-man, phase 1, open-label, dose-escalation study. *Lancet Oncology* 2017; [http://dx.doi.org/10.1016/S1470-2045\(17\)30596-X](http://dx.doi.org/10.1016/S1470-2045(17)30596-X) PMID: 28870611
13. **Kao SC**, **Cheng YY**, **Williams M**, Kirschner MB, Madore J, Lum T, **Sarun KH**, **Linton A**, McCaughan B, Klebe S, **van Zandwijk N**, Scolyer RA, Boyer MJ, Cooper WA, **Reid G**. Tumor suppressor microRNAs contribute to the regulation of PD-L1 expression in malignant pleural mesothelioma. *Journal of Thoracic Oncology* 2017; 12(9):1421-33. PMID: 28629895
14. Sawanyawisuth K, Furuya S, Park EK, Myong JP, Ramos-Bonilla JP, Chimed Ochir O, **Takahashi K**. Compensation for asbestos-related diseases in Japan: utilization of standard classifications of industry and occupations. *Asian Pacific Journal*

- of Cancer Prevention 2017; 18(7):1779-82. PMID: 28749105
15. Odgerel C-O, **Takahashi K**, Sorahan T, Driscoll T, Fitzmaurice C, Yoko-o M, Sawanyawisuth K, Furuya S, Tanaka F, Horie S, van Zandwijk N, Takala J. Estimation of the global burden of mesothelioma deaths from incomplete national mortality data. *Occupational and Environmental Medicine* 2017; 2017 Dec; 74(12):851-858. doi: 10.1136/oemed-2017-104298. Epub 2017 Sep 2. PMID: 28866609
 16. Takala J, Hamalainen P, Nenonen N, **Takahashi K**, Chimed-Ochir O, Rantanen J. Comparative analysis of the burden of injury and illness at work in selected countries and regions. *Central European Journal of Occupational and Environmental Medicine* 2017; 23(1-2):6-31.
 17. Robb T, **Reid G**, Blenkiron C. Exploiting microRNAs as cancer therapeutics. *Target Oncology* 2017; 12(2):163-78. PMID: 28138797
 18. Manegold C, Dingemans AC, Gray JE, Nakagawa K, Nicolson M, Peters S, Reck M, Wu YL, Brustugun OT, Crino L, Felip E, Fennell D, Garrido P, Huber RM, Marabelle A, Moniuszko M, Mornex F, Novello S, Papotti M, Perol M, Smit EF, Syrigos K, van Meerbeeck JP, **van Zandwijk N**, Chih-Hsin Yang J, Zhou C, Vokes E. The potential of combined immunotherapy and antiangiogenesis for the synergistic treatment of advanced NSCLC. *Journal of Thoracic Oncology* 2017;12(2):194-207. PMID: 27729297
 19. **Linton A**, **Soeberg M**, Broome R, **Kao S**, **van Zandwijk N**. Geographic and socioeconomic factors in patients with malignant pleural mesothelioma in New South Wales and their impact upon clinical outcomes. *Respirology* 2017;22(5):978-85. PMID: 28139858
 20. **Williams M**, **Cheng YY**, Blenkiron C, Reid G. Exploring mechanisms of microRNA downregulation in cancer. *MicroRNA*. 2017;6(1):2-16. PMID: 27928946
- B, **Kao SC**, van Zandwijk N, **Reid G**. Multiple mechanisms contribute to downregulation of tumour suppressor microRNAs in malignant pleural mesothelioma. IASLC 18th World Conference on Lung Cancer 2017, Yokohama, Japan, 15-18 October 2017. (Funded by IASLC Travel Award).
2. **Takahashi K**. The Burden of Asbestos Related Disease. National Conference of Indonesia Occupational Medicine, Jakarta, Indonesia, 30 September – 1 October 2017. (Invited Keynote)
 3. **Takahashi K**. The Global Burden of and Public Health Action for Asbestos-Related Diseases. The 29th Annual Scientific Conference of the International Society of Environmental Epidemiology (ISEE), Sydney, 24-28 September 2017. (Invited Plenary)
 4. **Takahashi K**. Prevention of Occupational Cancer: Recent status of mesothelioma and countermeasures on asbestos-related cancer at global and national levels. XXI World Congress on Safety & Health at Work 2017, Singapore, 3-6 September 2017. (Invited)

Book Chapters

1. **Winata P**, **Williams M**, **Keena V**, **Takahashi K**, **Cheng YY**. DNA Methylation in Mammalian Cells. In: Uchiumi F, editor. *Gene Expression and Regulation in Mammalian Cells – Transcription toward the establishment of novel therapeutics*: INTECH. ISBN 978-953-51-3868-6 Print ISBN 978-953-51-3867-9: Accepted
2. Gulati S, Mulshine JL, **van Zandwijk N**. Section 1: Lung Cancer Control and Epidemiology, 9 - Chemoprevention of Lung Cancer and Management of Early Lung Cancer. In: Pass HI, Ball D, Scagliotti GV, editors. *IASLC Thoracic Oncology (Second Edition)*: Elsevier Inc.; 2017. p. 69-81.e5. ISBN 978-0-323-52357-8

Reports

1. **Takahashi K**. Foreword. In *National Asbestos Profile for Australia*. Asbestos Safety and Eradication Agency. November 2017, p5.

Conference Presentations

1. **Williams M**, Kirschner MB, **Cheng YY**, **Sarun KH**, McCaughan

Conference Posters

1. **Cheng YY**, Wang Y, van Zandwijk N, **Reid G**. A 3D spheroid culture represents an improved in vitro model of malignant pleural mesothelioma (MPM). IASLC 18th World Conference on Lung Cancer 2017, Yokohama, Japan, 15-18 October 2017.
2. **Cheng YY**, **Sarun KH**, Lee K, Clarke CJ, Cheng NC, van Zandwijk N, Klebe S, **Reid G**. Establishing malignant pleural

- mesothelioma cell lines using the spheroid method produces a model with better 3D architecture. IASLC 18th World Conference on Lung Cancer 2017, Yokohama, Japan, 15-18 October 2017.
3. **Johnson T, Schelch K, Sarun K, Lasham A, van Zandwijk N, Reid G.** Targeting YB-1 induces either drug sensitisation or resistance via distinct mechanisms in malignant pleural mesothelioma. IASLC 18th World Conference on Lung Cancer 2017, Yokohama, Japan, 5-18 October 2017. (ADFA Travel Scholarship)
 4. Kirschner MB, **Leygo C**, Burgers JA, Korse CM, van den Broek D, van Zandwijk N, **Reid G.** A 4-miR lung cancer signature discriminates between NSCLC and malignant pleural mesothelioma patients. IASLC 18th World Conference on Lung Cancer 2017, Yokohama, Japan, 15-18 October 2017. (Funded by Zurich).
 5. **Schelch K, Johnson TG, Sarun K, Lasham A, van Zandwijk N, Reid G.** YB 1 suppresses miR 137 via a feed forward loop, increasing YB 1 levels, migration and invasion in malignant mesothelioma. IASLC 18th World Conference on Lung Cancer 2017, Yokohama, Japan, 15-18 October 2017. (Applying for CRGH Travel Award).
 6. Lee K, **Soeberg M**, van Zandwijk N, Vallance D. Improving regional networking and capacity in South East Asia to eliminate asbestos related diseases in workplaces. ILO XXI World Congress on Safety and Health at Work 2017; Singapore, 3-6 September 2017.
 7. **Cheng YY, Sarun KH, Lin R**, van Zandwijk N, **Reid G.** Cells grown in 3D culture without scaffold support represent an improved in vitro model of malignant pleural mesothelioma (MPM). 29th Lorne Cancer Conference, Lorne 9-11 February 2017
 8. **Schelch K, Johnson TG, Cheng YY, Sarun KH, Williams M**, van Zandwijk N, **Reid G.** MiR-137 acts as a tumour suppressor by targeting the oncoprotein YB1 in malignant pleural mesothelioma. 29th Lorne Cancer Conference, Lorne 9-11 February 2017
 4. **Schelch K.** Light-induced activation of Opto-FGFR1 stimulates mesothelioma cell growth and malignant behaviour. 2017 Postgraduate & ECR Cancer Research Symposium, New Law Building, The University of Sydney 30 November 2017
 5. **Takahashi K.** Gaps in Preventive Research on Asbestos/ARDs. Asbestos Safety and Eradication Summit Canberra 2017, Old Parliament House 26-28 November 2017
 6. **Takahashi K.** International Cooperation for the Prevention of ARDs. ADFA Annual National Asbestos Awareness Day, Darling Harbour 24 November 2017
 7. **McLean J.** Mesothelioma Patient Support at the ADRI. ADFA Annual National Asbestos Awareness Day, Darling Harbour 24 November 2017
 8. **Johnson T.** Scientific update of ADFA PhD scholar and acceptance of scholarship. ADFA Annual National Asbestos Awareness Day, Darling Harbour 24 November 2017
 9. **Takahashi K.** Gaps in preventive research on asbestos/ARDs. ANZAC Research Institute, Concord, 17 November 2017.
 10. **Takahashi K.** Research gaps on prevention of asbestos-related diseases. 2017 National Centre for Asbestos Related Diseases (NCARD) Annual Scientific Meeting, Perth, 9-10 November 2017.
 11. **Reid G.** Novel therapeutic targets in mesothelioma. Malignant Pleural Mesothelioma Advances in diagnostics, therapy & research. University Medicine Essen –

Invited Presentations

1. **Takahashi K.** Keynote Address: Asbestos and health – ARDs, carcinogenicity, etc., - an overview of its nature, use health impacts and the way forward. 1st Fiji Asbestos Symposium. Equipping the workforce with the right knowledge about asbestos. MEPIR, MoHMS, FNU in collaboration with the ILO and the WHO. Fiji 18-20 December 2017
2. **Takahashi K.** Global burden of asbestos-related disease. 1st Fiji Asbestos Symposium. Equipping the workforce with the right knowledge about asbestos. MEPIR, MoHMS, FNU in collaboration with the ILO and the WHO. Fiji 18-20 December 2017
3. **Soeberg M.** Epidemiology and trends in asbestos-related diseases and asbestos and public health: Lessons from the Pacific, from Australia's ongoing legacy of asbestos-related diseases. 1st Fiji Asbestos Symposium. Equipping the workforce with the right knowledge about asbestos. MEPIR, MoHMS, FNU in collaboration with the ILO and the WHO. Fiji 18-20 December 2017



the IASLC Meeting Yokohama, Japan 17th October 2017

2. **Williams M.** People's Choice Award, Sydney Catalyst Post Graduate and Early Career Researcher Symposium, Concord Medical Education Centre, Concord, 28 April, 2017

Travel Grants

1. **Cheng YY.** Slater & Gordon Health Projects & Research Fund for Continuing Education Travel Grant - 19th World Conference on Lung Cancer, Toronto, Canada, 23- 28 September 2018
2. **McLean J.** Slater & Gordon Health Projects & Research Fund for Continuing Education Travel Grant - 14th International Mesothelioma Interest Group Conference (iMig2018), Ottawa, Canada, May 2 – 5, 2018.
3. **Johnson T.** ADFA Travel grant. 18th IASLC World Conference on Lung Cancer, Yokohama, Japan, 15-18 October 2017
4. **Cheng YY.** Concord Repatriation General Hospital Research Travel Scholarship. 18th World Conference on Lung Cancer 2017, Yokohama, Japan, 15-18 October 2017.

5. **Schelch K.** Concord Repatriation General Hospital Research Travel Scholarship. 18th World Conference on Lung Cancer 2017, Yokohama, Japan, 15-18 October 2017.
6. **Williams M.** IASLC Travel Award. 18th World Conference on Lung Cancer 2017, Yokohama, Japan, 15-18 October 2017.

- Ruhrlandklinik, Germany, 10 November 2017
12. **Takahashi K.** On prevention of asbestos-related diseases. National Asbestos Awareness Month Campaign Launch 2017. Doltone House, Jones Bay Wharf, Pyrmont, 1 November 2017.
13. **Cheng YY.** DNA methylation as a non-invasive epigenetic biomarker for the detection of cancer. Epigenetics 2017, Brisbane, 29th October - 1st November 2017.
14. **Reid G.** cMyc links to miRNA in mesothelioma. Queenstown Research Week, QMB Satellite cell signalling programme. 2-9th September 2017
15. **Reid G, McKenzie D.** Plasma-activated nanoparticles for nucleic acid drug delivery. Sydney Catalyst International Translational Cancer Research Symposium, Sydney 8 August 2017.
16. **Williams M.** Aberrant microRNA expression in Malignant Pleural Mesothelioma (MPM). Anzac Research Seminar Series, ANZAC Research Institute, Concord Hospital, 31st July, 2017

17. **Takahashi K.** Invited WHO Expert to the Workshop on the Draft of National Action Plan for Elimination of Asbestos Related Diseases, organised by the Health and Environment Management Agency, Ministry of Health, Supported by the WHO. Hanoi, Vietnam 12 June 2017.
18. **Williams M.** Tumour suppressor microRNAs regulate PD-L1 expression in malignant pleural mesothelioma. Sydney Catalyst 2017 Post Graduate and Early Career Researcher Symposium. Concord Medical Education Centre, 28th April, 2017

Awards

1. **Williams M.** Awarded the Young Investigator Award by the International Association for the Study of Lung Cancer (IASLC) and the Local Organising Committee of the 18th IASLC World Conference on Lung Cancer for the abstract "Multiple mechanisms contribute to downregulation of tumour suppressor microRNAs in malignant pleural mesothelioma." The award is to be presented at

Financial Summary

Profit and Loss Statement	2016-17	2015-16
Revenues		
Research	1,925,636	2,228,390
Fundraising	693,603	694,119
Interest	126,189	160,669
Total	2,745,428	3,083,178
Expenses		
Employee Benefits	1,995,162	2,041,165
Research consumables/equipment	402,214	387,338
Office expenses	247,924	418,999
Depreciation	459,170	420,352
Total	3,104,470	3,267,854
Surplus / Deficit for the period	359,042	-184,676

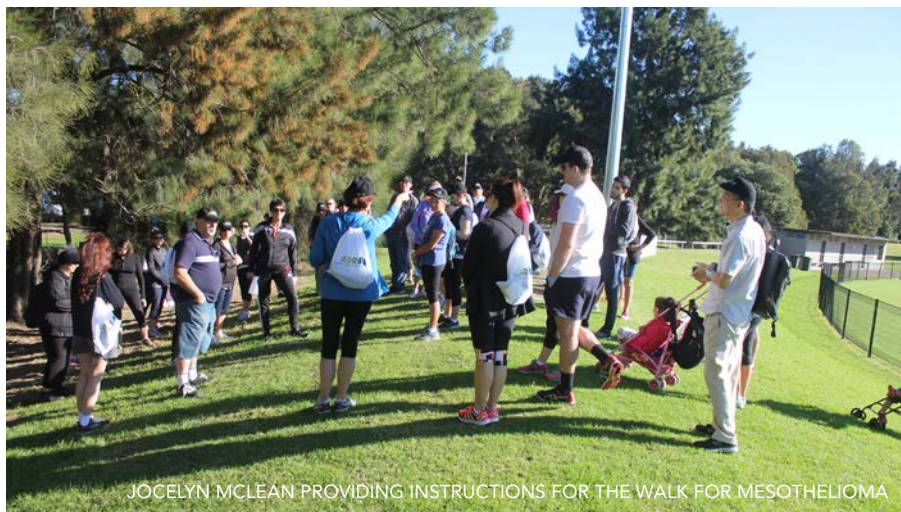
Balance Sheet	30/06/2017	30/06/2016
Assets		
Cash and cash equivalents incl. Term Deposits	5,241,469	5,385,391
Trade and other receivables	280,596	126,671
Property Plant and Equipment	8,459,863	8,884,032
Total	13,981,928	14,396,094
Liabilities		
Trade and other payables	847,496	819,458
Employee provisions	124,698	207,860
Total	972,194	1,027,318
Net Assets	13,009,734	13,368,776

The figures above have been extracted from the Audited Financial Statements of ADRF for the relevant periods.
The full audited financial statements are available at www.adri.org.au

Community Support in 2017

Walk for Mesothelioma

On Sunday 7th May 2017 62 patients, families and professionals attended and enjoyed our inaugural Walk for Mesothelioma around Majors Bay Reserve and through the beautiful Yaralla Estate at Concord. The purpose of the walk was to acknowledge people living with mesothelioma today and to remember loved ones whose lives have been lost to this horrible disease. The walk concluded at the Concord RSL for a morning tea and an opportunity to chat.



JOCELYN MCLEAN PROVIDING INSTRUCTIONS FOR THE WALK FOR MESOTHELIOMA



Education Day

A pleural mesothelioma education day was held on Monday 8th May 2017 at Revesby Workers Club. This was our first education day with a comprehensive programme on clinical and practical information on mesothelioma presented by experts in the field. Fifty-five patients, carers and health professionals attended and from the feedback they were keen for this interactive programme to be continued in the future as they found the discussion informative and most helpful.

Carer's Day

Our annual Carer's 'Thank you' day was held on Tuesday 10th October 2017 at Revesby Workers Club. It was an opportunity to say thank you to those people who are providing support and care or who have provided support and care for loved ones with mesothelioma. This year Carer's Day programme was again filled with light-hearted entertainment.

Julie Rollinson, an image consultant and known as 'That Travel Chick', demonstrated her knowledge and understanding of colour, style and wardrobe, to teach the participants how to create mix-n-match clothing and to pack in such a way that helps say goodbye to heavy bags, strained backs and excess luggage fees! John Messina, a Magician, has been performing his amazing skills with cards and coins for the past 20 years. The group were magically entertained and impressed by John's sleight-of-hand. Carer's Day was supported by:

icare dust diseases care

The Well Living EPP Group

The Well Living EPP (extrapleural pneumonectomy) Group began in 2012 and meets three times a year at the Drummoyne Sailing Club. The last meeting for 2017 was held on the 22nd November with 24 attendees including the wonderful physiotherapy staff from Strathfield Private Hospital and surgeon Professor Brian McCaughan. The guest speaker was ADRI's Molecular Scientist, Dr Yuen Yee Cheng, whose presentation explained the work that is evolving to identify people who might be at risk of developing an asbestos-related disease using a less invasive diagnostic test. The talk was followed by a group lunch in the Sailors Grill and then the usual frantic conversation, laughter and intergroup support. This support of each other underpins everything about this special group of survivors and partners, and friends who have lost their partners.

Asbestos Awareness Campaign

The National Asbestos Awareness Month Campaign is the initiative of the Asbestos Education Committee working in partnership with the ADRI. Launched in 2011, the campaign became a national initiative in 2012 with the aim of increasing awareness of the dangers of asbestos among homeowners, renovators and tradespersons and has been internationally recognised as a world leading community health education campaign featuring www.asbestosawareness.com.au and Betty the ADRI model house in the prevention of asbestos-related diseases. At this year's official launch of the National Asbestos Awareness Month 2017, sponsored by the Doltone House and the Biaggio Signorelli Foundation, Professor Ken Takahashi announced the publication of the first special issue of the International Journal of Environmental Research and Public Health (IJERPH) under the theme of "Global Panorama of National Experiences in Public Health Actions to Ban Asbestos". Professor Takahashi is the lead editor, at the request of the IJERPH, with 12 countries/regions including Australia and New Zealand.



BERNIE BANTON FAMILY

In Memory of Bernie Banton AM

The 27th November 2017 was the 10th anniversary of Bernie Banton's passing. In honour of Bernie, members of his family organised a remembrance day visiting ADRI, the medical research centre named in Bernie's honour. Bernie Banton was an Australian crusader for people suffering from asbestos-related diseases and social justice. He was the widely recognised face of the legal and political campaign to achieve compensation for the many sufferers of asbestos-related diseases.

guest speakers. Ken spoke about the international cooperation for the prevention of asbestos-related diseases, and Jocelyn about the mesothelioma patient support programme at the ADRI. Tom Johnson provided a scientific update as ADFA's PhD scholar.

Blue Lamington

A vital part of raising awareness of the dangers of asbestos among the community is creating a forum for discussion. As part of the Asbestos Awareness Month in November the Asbestos Awareness Campaign invites all Australians to hold a Blue Lamington Drive. The Blue Lamington relates to the natural blue asbestos fibres and is intended to raise awareness of the dangers of asbestos and to generate vital funds for research. At ADRI we are overwhelmed by the enthusiasm and resourcefulness some groups go to with their Blue Lamington Drive. We very much appreciate all the support, both big and small, and the raising of awareness of the dangers of asbestos. Prevention after all is the best cure.

Asbestos Diseases Foundation of Australia (ADFA)

On the 3rd November 2017 the ADRI research team attended the ADFA's black and white Gala Race Day at Rosehill Gardens again this year. ADRI also attend ADFA's National Memorial Day on the 24 November 2017 at the Maritime Museum, Darling Harbour. Professor Ken Takahashi and Ms Jocelyn McLean were both



KEN TAKAHASHI, GEOFF AND KAREN WICKS AND BETTY

Supporters

On behalf to the ADRI we would like to thank everyone who has supported the ADRI throughout 2017 by way of regular donations, charity events or in memory of a loved one. Your generosity is greatly received and much appreciated.

Mr Michael Ah Kit	Mrs Ann Ashelford	Beverley A Bennett	Ms Jennifer Bower	Mr Don Burke
Mr Anthony J. Abbott	Ms Gail Ashton	Mr Gareth J. Bennett	Mrs Maxine Bower	Ms Denise Burns
Shelley Abbott	Mr Paul Atkins	Mr Malcolm Bereford	N. D. Bowman	Andrei Buters
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Anonymous	Ms Denise M. Batchelor	Ms Kathryn F. Boland	Ms Clare Brown	Mrs Anna Chaimalas
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Mr Hamish A. Claxton	Ms Ingrid Cusack	Bronwen Duke	Mr Tristan Findlay	Ms Jose Gonzalez
Mr Syd & Mrs Bev Clefton	Frances Cutter	Ms Paula I Dunning	Nicolle Fisher	Ms Christine Goodear
Mr Ken Coad	H da Silva	Ms Jennie Durand	Marnie Fitz	Mr Brett Goodwin
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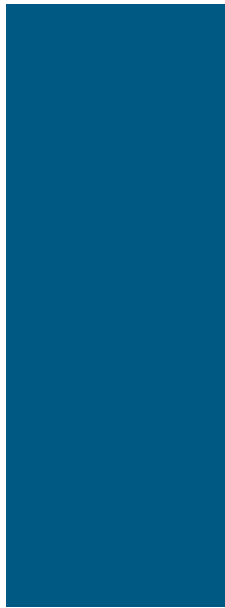
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