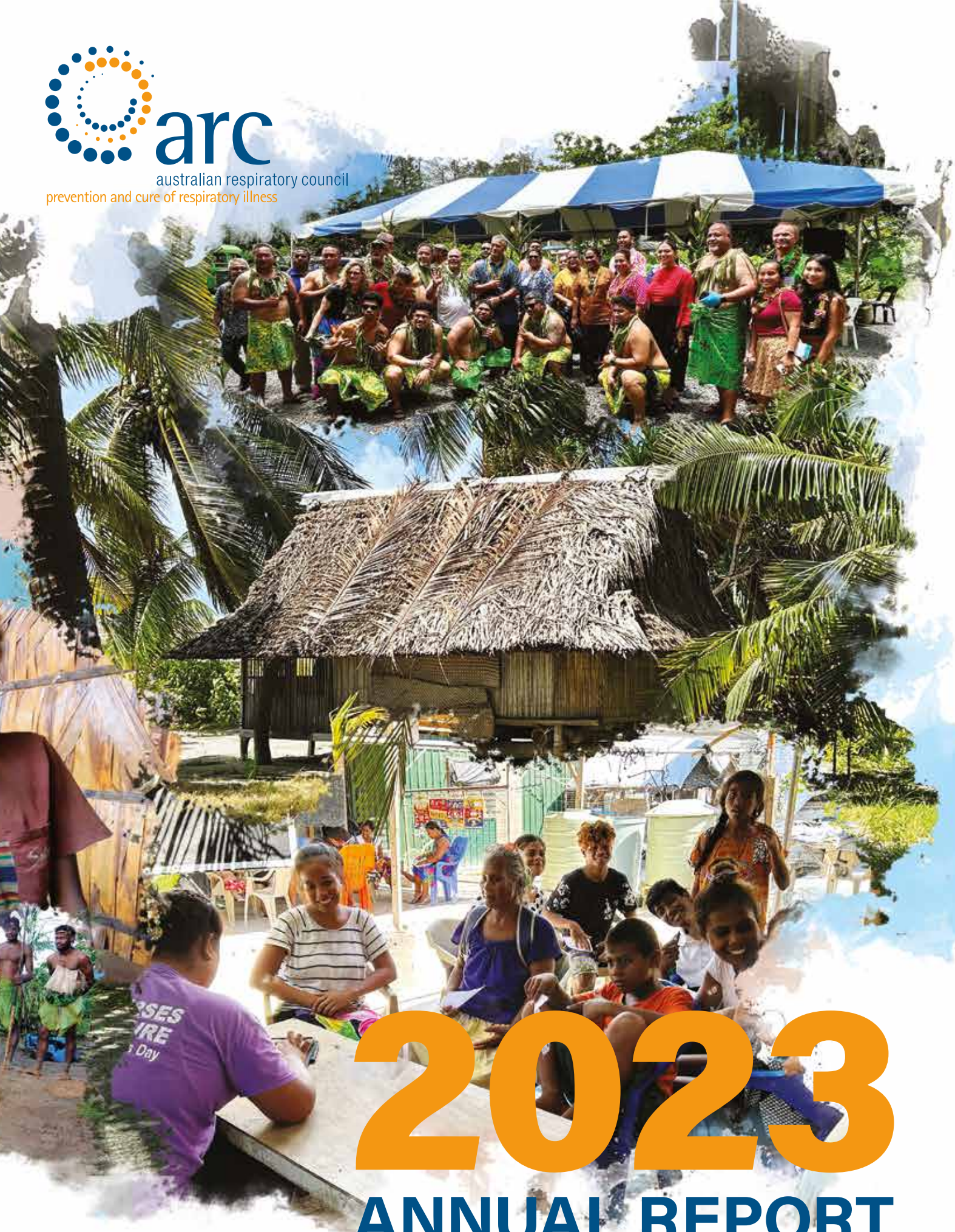
arc

australian respiratory council

prevention and cure of respiratory illness



2023 ANNUAL REPORT

NO. 110

Our Patrons



Her Excellency the Honourable Margaret Beazley AC KC and Mr Dennis Wilson

The Australian Respiratory Council (ARC) confirms that in the pursuit of its mission and vision it has no tobacco exposure in regard to direct stocks or managed funds exposures held within its' Investment Portfolio.

The ARC welcomes feedback. Please send feedback or complaints to arc@thearc.org.au or write to the Executive Director, Australian Respiratory Council, PO Box 538 North Sydney NSW 2059.

The ARC confirms its commitment to full adherence to the ACFID Code of Conduct. Complaints relating to a breach of the ACFID code can be made to the ACFID Code of Conduct Committee www.acfid.asn.au

ACFID MEMBER

The Australian Respiratory Council is a member of the Australian Council for International Development (ACFID) and is a signatory to the ACFID Code of Conduct. The Code requires members to meet high standards of corporate governance, public accountability and financial management.

The Union
International Union Against Tuberculosis and Lung Disease
Health solutions for the poor

The Australian Respiratory Council is a Heritage Member of the International Union Against Tuberculosis and Lung Disease (The Union). The mission of The Union is to bring innovation, expertise, solutions and support to address health challenges in low and middle income populations.

REGISTERED CHARITY
acnc.gov.au/charityregister

The Registered Charity Tick is a way for registered charities to easily show the public that they are registered with the Australian Charities and Not-for-profits Commission (ACNC), and it will also help members of the public find information about the charity on the Charity Register. The ACNC encourages members of the public to use the information on the Charity Register to make informed giving decisions.

Memberships and Affiliations

WOOLCOCK
LEADERS IN BREATHING & SLEEP RESEARCH

fia ORGANISATIONAL MEMBER
Professional Fundraising

Stop TB Partnership

arc australian respiratory council
prevention and cure of respiratory illness

Our Vision

A world free of tuberculosis and lung disease.

Our Mission

The mission of Australian Respiratory Council is to improve lung health for vulnerable communities in Australia and the Indo-Pacific through translation of research and evidence-based practice into sustainable health solutions.

Organisational Values

The values that ARC strives to reflect and embody include the following:

- Accountability to stakeholders
- Ethical and sustainable practice
- Credibility and professionalism
- Consultative and participatory practices
- Leadership in respiratory health
- Maintaining a development based focus
- Contributing to intellectual and professional development
- Implementing evidence based practices and activities that are community led, innovative, efficient, caring, compassionate and respectful.

ARC President's Report 2023

As President, I am pleased to report on the activities and outcomes of the Australian Respiratory Council (ARC) during 2023. My report will highlight key events and the work undertaken by our organisation over the year.

To begin my report I would like to acknowledge the work undertaken by ARC's Directors, committees, consultants and staff this year to ensure that the organisation can continue its important work in funding research, delivering project activities and supporting people in need. The ongoing contribution made by each person is greatly valued and appreciated.

Over the past few years a significant amount of work has been undertaken to ensure the ongoing financial security of the organisation. During the year the organisation purchased a property in North Sydney, the property will be used as a base for the organisation and an investment for future financial sustainability.

The work of the ARC continues to be important as tuberculosis (TB) and lung disease continue to be global health issues. The World Health Organization (WHO) reports that global efforts to combat TB have saved over 75 million lives since the year 2000. However, even more efforts are needed as TB remained the world's second leading infectious killer. In the 2023 WHO Global TB Report it is noted that there has been a significant worldwide recovery in the scale-up of TB diagnosis and treatment services, reversing the detrimental effects of COVID- 19 disruptions on TB services. The report identifies that 7.5 million people were diagnosed with TB in 2022, making it the highest figure recorded since WHO began global TB monitoring in 1995. The increase is attributed to recovery in access to, and provision of health services in many countries. It is also estimated that 10.6 million people fell ill with TB in 2022, an increase from 10.3 million in the previous year, with 1.3 million people reported to have died from TB in the year . Approximately twenty percent of the burden of global disease occurs in countries within our region, these are the countries that ARC works in and supports through project activities and research funding.



To support regional TB prevention and control activities ARC has continued to work this year in partnership with Professor Ben Marais, Professor Warwick Britton, the PEARL Project Team and the Kiribati Ministry of Health and Medical Services to deliver the PEARL Project. The project is focussed on developing a pathway for the elimination of TB and leprosy in Kiribati, and the wider pacific more generally. The ARC is leading the component of the project relating to building workforce capacity through training and education. This work builds on exiting expertise and activities to deliver in-country training and clinical mentoring for National TB Programs in the Pacific.



In 2023 ARC provided technical support and training for nurses and outreach workers from the National TB Programs (NTP) of the US Affiliated Pacific Islands (USAPI). Through monthly online network calls and an annual face to face meeting the ARC nurse consultants support capacity building and the work of the regional TB Programs. The relationship and support provided by ARC began in 2006, together the USAPIs, the US Centers for Disease Control (CDC) and ARC have built a strong and sustainable network to support nurses and outreach workers working within the USAPI TB Programs. I attended the annual PITCA meeting held in American Samoa in November, 2023 with Amanda Christensen and Kerrie Shaw and witnessed the important role of ARC and the relationship that exists between participating countries, CDC and ARC.

I am pleased to report that the Solomon Islands Baru Rangers Program funded by ARC this year has been successful in demonstrating how case finding, treatment support, community awareness and advocacy activities undertaken in the project were transferrable to other settings within the Solomon Islands. Through the work of the project the team have contributed to the development of the Solomon Islands Tuberculosis National TB Strategic Plan 2024-2026, and





obtained Global Funds to establish a TB Aid Post in the remote mountain areas of East Kwaio. These outcomes are important to promote sustainability of services and ensure no one is left behind in the fight against TB.

Further information on the project and the activities ARC has delivered and supported are available on pages 24 to 30 of this report.

The ARC Nurse Consultant Group worked this year to develop a fourth specialist unit of study for the University of Western Sydney (UWS) Graduate Diploma/Master of Nursing (TB Management). The unit will equip students with the knowledge and skills required to perform screening and immunisation for TB in accordance with national requirements. The course continues to be a collaboration between ARC and the UWS to support capacity building within the Australian and regional nursing workforce.

To support the course and students ARC awards annual scholarships. This year, two scholarships were awarded to Noel Paradero to undertake the TB specialist units within the Master of Nursing (TB Management) course. A profile of Noel is included on pages 23 & 23 of this report.

Acknowledgement and thanks

To begin my acknowledgements and thanks, I would like to extend my sincere gratitude to ARC's loyal and generous donors who continue each year to support our work and activities. I am pleased to be able to share with you that all of the funds raised through our fundraising appeals were utilised, in full, to fund research and project activities. Further information about how your donations are used to support the work of the ARC can be found in this report and on our website – www.thearc.org.au.

I would like to thank the Finance Team, led by Chris Turner and supported by Robyn Johnson, Wade Ebrahimi and Amanda Christensen for their work over the past year. Your ongoing efforts to promote and ensure the financial viability of the organisation are greatly appreciated. Further information on ARC's financial statements are detailed on pages 39 to 59 of the annual report.

Investing in lung health and TB research is essential to improve diagnosis, care, treatment and outcomes for people and communities affected by TB and lung disease. The ARC is fully committed to continuing to support research initiatives and innovation through the annual ARC Research Grants and funding the Australasian Clinical Tuberculosis Network (ACTnet). On behalf of Professor Greg Fox, the Chair of ARC's Research Committee I would like to thank the committee for their time and support in assisting ARC to achieve our research goals. This year we awarded four research grants, further information on the grants awarded this year to ACTnet and through the ARC Research Support Grant Scheme are included in the annual report on pages 10 to 21.

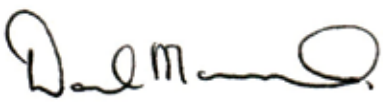
In 2023, ARC continued to work collaboratively partners to fund and deliver projects, provide training and technical support, and promote the elimination of TB. The ARC values the collaboration and relationships developed with our partner agencies. These agencies include: The International Union Against TB and Lung Disease (The Union), the US Centers for Disease Control and Prevention, the Pacific Island Health Officers Association, the Kiribati Ministry of Health and Medical Services, the University of Western Sydney School of Nursing and Midwifery and the University of Sydney, Institute for Infectious Diseases. I would like to acknowledge the grants received from a number of these agencies this year to support and contribute to our project activities.

I would like to thank the ARC Nurse Consultants Group (Kerrie Shaw, Lauren Deakin, Chris Lowbridge and Amanda Christensen) and note their ongoing contribution to the project work and activities that ARC supports and delivers within the region. The group has actively contributed to ARC's project portfolio, outcomes and success over the past 12 months.

I extend my thanks to my colleague and good friend Robert Estcourt AM, Chair of the Board of Directors of the Woolcock Research Institute. I would particularly like to acknowledge the continued relationship and valued collaboration between ARC and the Woolcock Institute. In 2024, the ARC will be co-located with the Woolcock Institute in their new premises at Macquarie University. We look forward to continuing the successful relationship between our organisations in the coming years.

My thanks and those of the Board are extended to our investment adviser Daniel Meech from Koda Capital for his financial guidance over the past year. I would also like to thank our auditors, David Conroy and Patryk August, from Conroy Audit & Advisory for their expertise and outstanding service in meeting our annual auditing responsibilities.

Finally, to Amanda Christensen our Executive Director, on behalf of the Board of Directors I would like to acknowledge your contribution to the success of the organisation again this year.



David Macintosh AM KMG
President

Board of Directors

DAVID MACINTOSH AM KMG

BBS (UTS), FCA



Member of the Order of Australia 2011, Member of the Order of Malta 2022, awarded National Medal for Service 2014, Chairman, The Macintosh Foundation, Macintosh Chair of Paediatric Respiratory Medicine - Endowed Chair in perpetuity; Founder since 2013 and Benefactor since 2007, Royal Alexandra Hospital for Children - The Children's Hospital at Westmead; Director, Woolcock Institute of Medical Research 2000-2011, re-appointed 2021 to Present; Director, The Australian Lung Foundation 1994-2013; Life Governor, Melanoma Institute of Australia; Deputy Chairman, Ainsworth Charitable Foundation 2016 – Present; Surf Life Saving Australia, over 51 years of active patrol service and dedication; Life Member, Long Reef Surf Life Saving Club Inc.; Life Member - Collaroy Surf Life Saving Club Inc.; Director, Vice President - United Nations Australia Association (NSW) 2017 – 2019; Appointed Australia's United Nations Goodwill Ambassador Oceans – Life Under Water SDG-14 and The Pacific, 2018 – 2019 and Principal Advisor, Marine Life, and Oceans and The Pacific; Awarded Honorary Associate Life Membership of the Thoracic Society of Australia and New Zealand (TSANZ) 2020; Appointed to the Board of ARC in 1997; President of ARC 2000-2013; 2019 - Present. Vice President of ARC 2013 - 2019; Elected Life Governor of ARC in 2010.

ROBYN JOHNSON

GAICD



Robyn Johnson has had a prominent career in the tourism and event sector in senior management roles. She has worked extensively in the not-for-profit sector and has a background in the development and implementation of business growth strategies and establishing start-ups or re-aligning existing organisations and programs to achieve successful outcomes. Robyn has developed and designed accredited education and training programs to upskill the workforce and she has commissioned research into industry skills to identify and measure skills shortages and trends to advocate to government on behalf of the meetings and events sector. Robyn is currently working with Destination NSW on a new regional program following the successful delivery of the pilot program on the NSW South Coast. She is a graduate of the Australian Institute of Company Directors. Appointed to the Board of ARC in 2012, Vice President of ARC 2021 – Present.

AMANDA CHRISTENSEN AM

Registered Nurse



Appointed as the ARC Executive Director from April 2008 to May 2009 and April 2013 – Present. NSW Tuberculosis (TB) Program Manager 1997- 2013; various positions in public health for three decades including: clinical nurse consultant in public health Corrections Health Service and TB Prevention and Control Services for the NSW Ministry of Health. Member of the NSW Ministry of Health TB Advisory Committee 1997 to Present. Member of the Commonwealth Department of Health National TB Advisory Committee 1997 – 2013. Treasurer & Executive Committee Member for the International Union Against TB and Lung Disease (The Union) Asia Pacific Region 2015 to 2022. Elected as the Vice President of The Union Asia Pacific Region 2022 – Present; Programme Secretary of The Union Nursing and Allied Health Professionals Sub–Section 2017 – 2019. Chair of the Nurses and Allied Health Professionals Sub-Section of The Union 2019 to 2022. Immediate Past Chair of the Nurses and Allied Health Professionals Sub-Section of The Union 2022 – Present. Appointed a Member of the Order of Australia June 2019 "For service to community health particularly to respiratory diseases". Director of the Macintosh Foundation 2021 – Present. Appointed to the Board of ARC in 2001. Elected as a Life Governor of ARC in 2011.

PROFESSOR GREG FOX

PhD MIPH FRACP MB BS BSc(Med) GAICD



Director (interim) of the Sydney Southeast Asia Centre and Professor of Respiratory Medicine at The University of Sydney; Respiratory Physician at Royal Prince Alfred Hospital, Sydney, and serves as Area Director of Tuberculosis Services for Sydney Local Health District. NHMRC Leadership Fellow and a Research Leader for the Woolcock Institute of Medical Research. Professor Fox heads a number of NHMRC- and internationally-funded clinical trials and translational research studies relating to tuberculosis (TB), lung disease and antimicrobial resistance. His research aims to develop new approaches to TB control, COPD, asthma and tobacco control in resource-limited settings. Appointed to the Board of ARC in 2017.

JEAN MARIE SANTOS

BSCS IT



Jean Santos is an adept and forward-thinking leader with over two decades of experience. Jean has successfully spearheaded global digital transformation, infrastructure enhancement, application development, and business optimisation initiatives. Jean holds a Bachelor of Science in Computer Science with a focus on Information Technology. Her passion for technology stems

from its capacity to drive tangible business value, a goal she has consistently achieved through the execution of digital and agile transformation programs across various sectors and multinational corporations. Beyond her professional endeavours, Jean is committed to corporate social responsibility, environmental advocacy, and philanthropy, which greatly influences her approach to work, characterised by empathy and a proactive attitude. Her expertise in these areas has led to prominent roles, including Director of the Australian Respiratory Council; Advisory Board Member for the United Nations Association of Australia (UNAA) NSW Division (2023-Present); Non-Executive Director for the United Nations Association of Australia (UNAA) NSW Division (2018-2023); Director of the National Peace Program (2013-2018); and Executive Committee Member of the UN Women Australia NSW Chapter (2012-2014). Appointed to ARC's Board of Directors in 2019.

PROFESSOR HIRAN SELVADURAI

MBBS FRACP PhD FThorSoc



Professor Selvadurai is the Head of Respiratory Medicine at The Children's Hospital, Westmead as well as the Director of Children's Chest Research Centre. He graduated from the University of Sydney and trained at the Royal Alexandra Hospital for Children, Sydney. He completed his PhD at the University of Sydney on the "The Utility of Exercise testing in children with lung disease" in 1999. He was appointed as Consultant in Respiratory medicine, Hospital for Sick Children, Toronto in 2000 and became the Director of Cystic Fibrosis. In 2006, he was appointed Consultant in Respiratory Medicine at The Children's Hospital, Westmead. He has published over a 100 peer reviewed publications and 10 Book chapters. He is on the Editorial Board of the Annals of the American Thoracic Society and Pediatric Pulmonology. He has supervised nine PhD students to completion and currently supervises two PhD students through the University of Sydney. He holds an TSANZ Innovation grant. He has received funding from NHMRC, Canadian CF Foundation, Canadian Institute of Health Research and National Institute of Health. He is an investigator on numerous CFTR modulator clinical trials. Appointed to Board of ARC in 2023.

KERRIE SHAW

Registered Nurse



TB Coordinator South Eastern Sydney Local Health District (Northern Sector) 2013 - Present; Executive Officer Australian Respiratory Council 2009-2013; Manager Department of Respiratory Medicine, TB Coordinator, TB and Respiratory Clinical Nurse Consultant 1998-2009; Asthma Coordinator and TB Clinical Nurse Specialist South Eastern Sydney and Illawarra Area Health Service (Southern Sector) 1992-1998; Chair and Program Secretary, Nurses and Allied Health Sub-Section International Union Against TB and Lung Disease 2009-2013; Appointed to the National Asthma Expert Advisory Group 2006; Appointed to the Board Asthma Educators Association (NSW) 1992 and Board Australian Asthma and Respiratory Educators Association 2006, Life Member 2011; Appointed to Board of ARC in 2013; elected as a Life Governor of ARC in 2021.

MICHAEL G. SMITH AO

Major General (Retd)



Development Advisor to the Calleo Indigenous Community Fund; Chair of the Gallipoli Scholarship Fund; Non-executive Director of the Institute for Economics and Peace; Past National President of the United Nations Association of Australia; former Visiting Fellow at the Asia-Pacific College of Diplomacy at the Australian National University; former Adjunct Professor at the Key Centre for Ethics, Governance, Law and Justice at Griffith University; founding Executive Director of the Australian Civil-Military Centre and the CEO of Austcare (now Action Aid Australia). Mike Smith had a distinguished military career spanning 34 years, graduating with the Sword of Honour from the Royal Military College Duntroon in 1971, and including numerous command appointments. Mike Smith holds a Master of International Relations from the Australian National University and a Bachelor of Arts in History from the University of New South Wales. He is a Graduate of the Australian College of Defence and Strategic Studies, the Cranlana leadership program in Melbourne, and the Company Directors Course at the University of New England. Appointed to the Board of ARC in 2022.

CHRISTPOHER TURNER

BCom Dip FS FPA



Principal Financial Planner for 'Turner Wealth Pty Ltd' (Corporate Authorised Representative (No.1241514) of Capstone Financial Planning Pty Ltd. ABN 24 093 733 969. Australian Financial Services License No.223135. December 2019 – to Current; Principal Financial Planner for 'Turner Wealth Pty Ltd' (Corporate Authorised Representative of Commonwealth Financial Planning Limited) May 2016 – December 2019; Senior Financial Planner - Relationship Managed Clients (Representative of Commonwealth Financial Planning Limited) Oct 2010 – May 2016; Branch Financial Planner (Inner and Mid-West suburbs of Sydney) (Representative of Commonwealth Financial Planning Limited) May 2007 – October 2010; Business Analyst / Project Manager (CMLA) (Commonwealth Bank of Australia) January 2004 – May 2007, Diploma of Financial Planning 2006; Manager of Operations/ Projects, Resource Planning (Commonwealth Bank of Australia) September 2002 – January 2004; Service Consultant / Resource Analyst (Commonwealth Bank of Australia) August 1999 – September 2002; Senior Sales & Marketing Manager (Sarran Pty Ltd) 1994 – 1995; B. Commerce Newcastle University 1990 – 1993. Appointed to Board of ARC as Finance Director in 2017.

ARC Research Committee



Professor Greg Fox

(Chair of the Committee)

NHMRC Career Development Fellow and Professor in Respiratory Medicine at Sydney University and Royal Prince Alfred Hospital, Sydney. Area Director of Tuberculosis Services, Sydney Local Health District.



Professor Justin Denholm

Medical Director, Victorian Tuberculosis Program, Melbourne Health; Senior Staff Specialist at the Victorian Infectious Diseases Service Royal Melbourne Hospital, and Professorial Research Fellow in the Department of Infectious Diseases at the University of Melbourne.



Professor Peter Gibson

Conjoint Professor, School of Medicine and Public Health, University of Newcastle. Co-Director of the Hunter Medical Research Institute Infections/ Immunity, Viruses and Asthma Research Program, Co-Director of the University of Newcastle's Priority Research Centre for Asthma and Respiratory Diseases.



David Macintosh AM KMG

ARC President



Professor Carol Armour AM

Executive Director Woolcock Institute of Medical Research and Respiratory Researcher.



Associate Professor Claudia Dobler

Conjoint Associate Professor University of NSW, Associate Professor Bond University, Consultant Respiratory Physician NSW Health



Professor Emma McBryde

Professorial Research Fellow - Infectious Disease and Epidemiology Australian Institute of Tropical Health & Medicine, Centre for Tropical Bioinformatics and Molecular Biology, James Cook University.



ARC Presidents & Life Governors

THE NATIONAL ASSOCIATION FOR THE PREVENTION AND CURE OF CONSUMPTION

YEAR	PRESIDENT
1913 - 1917	Sir Phillip Sydney Jones
1918 - 1922	Dr Frederick Sobieski Vladimir Zlotkowski
1922 - 1928	Hon. George Frederick Earp MLC
1929 - 1930	Thomas Ernest Rofe

ANTI-TUBERCULOSIS ASSOCIATION OF NSW (from 1931)

YEAR	PRESIDENT
1931 - 1934	Thomas Ernest Rofe
1935 - 1941	William Grazebrook Layton CBE
1941 - 1942	Phillip Lazarus JP
1942 - 1944	Sir Ernest Thomas Fisk
1944 - 1953	Zade Lazarus
1954 - 1955	Hon. Justice Edward Parnell Kinsella CBE
1955 - 1959	Ebenezer Richard Bagery-Parker
1959 - 1960	Harold Bruce Gibson
1960 - 1967	Hon. Justice Edward Parnell Kinsella CBE
1967 - 1972	Professor Noel Desmond Martin AM

COMMUNITY HEALTH AND ANTI - TUBERCULOSIS ASSOCIATION (from 1973)

YEAR	PRESIDENT
1973 - 1994	Professor Noel Desmond Martin AM
1995 - 1999	Professor Ann J Woolcock AO
1999 - 2000	Dr Gregory Joseph Stewart
2000 - 2001	David Hugh Macintosh AM KMG

TUBERCULOSIS AUSTRALIA (from 2001)

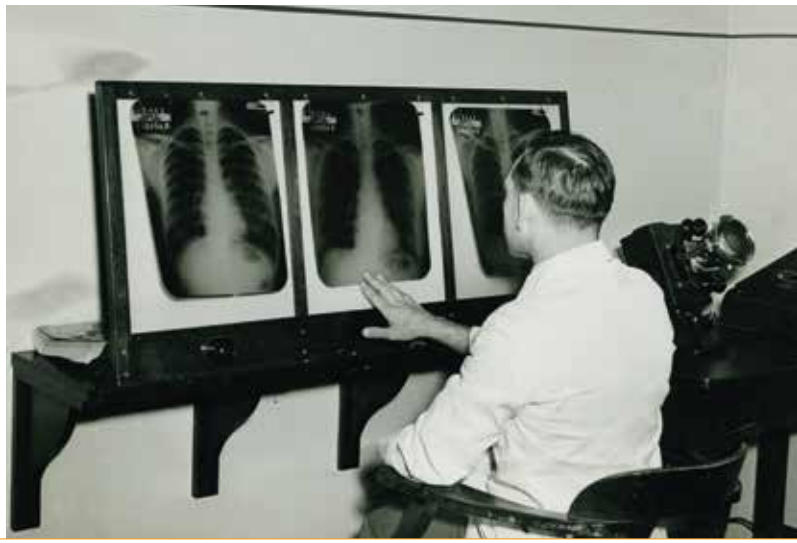
YEAR	PRESIDENT
2001 - 2006	David Hugh Macintosh AM KMG

AUSTRALIAN RESPIRATORY COUNCIL (from 2006)

YEAR	PRESIDENT
2006 - 2013	David Hugh Macintosh AM KMG
2013 - 2019	Emeritus Professor J Paul Seale AM
2019 - Present	David Hugh Macintosh AM KMG

YEAR	LIFE GOVERNORS
1932	Honourable George Frederick Earp MLC, CBE (C)
1934	Sir John Sulman
1934	Sir Kelso King and Lady King
1966	Sir Harry Wyatt Wunderly
1996	Dr Keith Wellington Hills Harris AM
2003	Professor Noel Desmond Martin AM
2003	Clinical Professor Iven Young AM
2003	Emeritus Professor Ian W Webster AO
2007	Emeritus Professor Charles Baldwin Kerr AM
2007	Emeritus Professor J Paul Seale AM
2009	David Hugh Macintosh AM KMG
2011	Amanda Christensen AM
2011	Professor Gavin Frost
2012	Robert Horsell OAM
2012	Clinical Associate Professor Peter Gianoutsos OAM
2021	Kerrie Shaw





ARC Research Support Grants 2023

The ARC supports prevention, treatment and research into tuberculosis (TB) and respiratory disease at a national and international level. The ARC has been committed to building expertise and sustainable capacity in respiratory health by fostering innovative research to promote respiratory health. ARC's contribution to the discovery of new knowledge and enhanced scientific understanding in the field of respiratory health is through research grants.

In 2023, ARC funded four research projects, these projects addressed basic science, clinical research and public health relating to the following themes: (i) infectious lung diseases due to M. tuberculosis or other respiratory pathogens, and (ii) chronic respiratory diseases related to environmental factors.

Research funding is awarded in open competition, on the basis of merit, utilising the following criteria: alignment with ARC's research themes and priority areas, the scientific quality of the application, the capability of the applicant and potential impacts of the proposed work. A report on the outcomes, to date for each project is provided in this report.

Interim Progress Report: Accuracy of two novel TB-specific skin tests in diagnosing TB infection



Professor Mark Nicol School of Biomedical Sciences, University of Western Australia, Perth, Australia

Summary - Tuberculosis (TB) preventive treatment is used to prevent TB disease in people with TB infection. The tuberculin skin test (TST) is the most widely used test for diagnosis of TB infection, however, TST may give false positive results in people exposed to non-tuberculous mycobacteria or those who have been BCG-vaccinated. In 2022, the World Health Organization recommended novel tuberculosis antigen-specific skin tests (TBST) as alternatives to TST for diagnosis of TB infection. The WHO guideline supports the use of three different TBST: C-Tb (Serum Institute of India), C-TST (Anhui Zhifei Longcom, China) and Diaskintest (Generium, Russian Federation). However, there are no head-to-head comparisons of the accuracy of the new TBST. Such information is critical for TB programme managers to make informed decisions on which TBST to implement. We will therefore conduct a head-to-head comparison of the accuracy of C-Tb and C-TST, in three groups of participants (people with active TB, people at low risk of TB infection and people at high risk of TB infection) in Thailand. We will compare their accuracy to that of TST and the reference standard test for TB infection, the interferon-gamma release assay.

Thailand Principal Investigator

Phatharajit Phatharodom, M.D.,
Assistant Professor at the Department of Preventative and Social Medicine, Siriraj Hospital, Mahidol University, 2 Wang Lang Road, Bangkok Noi, Bangkok, Thailand

Thailand Sub-investigators

Tararaj Dharakul, M.D., Ph.D.,
Professor at the Department of Immunology, Faculty of Medicine, Siriraj Hospital, Mahidol University, 2 Wanglang Rd., Bangkok Noi, Bangkok, Thailand

Winai Ratanasuwan, M.D.,
Associate Professor at the Faculty of Medicine Siriraj Hospital, Mahidol University, 2 Wanglang Rd., Bangkok Noi, Bangkok, Thailand

Kulkanya Chokephaibulkit, M.D.,
Professor at the Department of Pediatrics, Faculty of Medicine, Siriraj Hospital, Mahidol University, 2 Wanglang Rd., Bangkok Noi, Bangkok, Thailand

Suvimol Niyomnaitham, M.D., Ph.D.,
Assistant Professor at the Department of Pharmacology, Faculty of Medicine, Siriraj Hospital, Mahidol University, 2 Wanglang Rd., Bangkok Noi, Bangkok, Thailand

Australian Principal Investigator

Mark Nicol, MBBCh, MMed, PhD
Professor in Microbiology, School of Biomedical Sciences, University of Western Australia, Perth, Australia

Over the past year, we assembled the investigator team, as detailed above. To enhance capacity development opportunities, Dr Phatharajit Phatharodom, an emerging researcher from Mahidol University was appointed as Thailand Principal Investigator for this project. The team in Thailand took primary responsibility for drafting the detailed research protocol. After two rounds of amendments the study was given local ethical approval from the Siriraj Institutional Review Board committee, Mahidol University. Revisions incorporated amendments following advice from the Thai FDA regarding the wording used in the patient information sheet. In the second amendment, we addressed concerns about potential interference with test results if two tests were performed on one forearm. As a result, we changed the location of the skin tests to both forearms (C-TB and T-TST randomly) and the right leg (TST).

In parallel to ethical approvals, we conducted negotiations with the suppliers of the C-TB and T-TST to import the tests for research use into Thailand. Following successful completion of these negotiations, we are now in the process of importing the skin tests from India and China.

The Thailand investigator team was also successful in obtaining supplementary funding from a Thailand funding agency, the Health Systems Research Institute (HSRI), based on the successful award from the Australian Research Council. This funding will enable us to strengthen the composition of the Thailand team, and to conduct follow on work following completion of this project.

The project completion timeline has been extended to the 31st December, 2024.

Understanding the experience of women in a TB hot spot in Solomon Islands to help effectively find, treat and care for people with TB

Associate Professor Michelle Redman-MacLaren James Cook University & Dorothy Esau Baru Conservation Alliance

This interim report describes further progress Baru Conservation Alliance (BCA) and James Cook University (JCU) researchers have made towards the ARC-funded study titled, Understanding the experience of women in a tuberculosis hot spot in Solomon Islands to effectively find, treat and care for people with tuberculosis. The aim of this community-led qualitative study is to explore and describe women's experience of tuberculosis in East Kwaio using a Solomon Islands research method called Tok Stori.

An extension was sought to the project (from April 2024 to August 2024) to allow for a final visit by an Australian partner to travel to Solomon Islands to confirm the final research outputs. This travel was not possible in March/ April 2024 as planned as the National Elections (held 17 April 2024) meant travel around the country was highly disrupted, and many BCA colleagues were travelling to vote.

Baru Conservation Alliance TB Rangers and Health Committee members with Associate Professor Michelle Redman-MacLaren and Dr Sue Devlin



What has been done?

Previously the Women and TB study team have reported on the planning process of the study, the data co-creation led by Dorothy Esau and Emmy Foroasi and the collective data analysis.

All activities sought to answer the research questions:

In summary, activities to date are:

1. What is the experience of women who are diagnosed with TB, including testing and treatment support?
2. What is the experience of women who care for women family members with TB?
3. What is the experience of women conservation rangers who find, and support women with TB?
4. What steps needs to be taken to effectively find, treat and support people with tuberculosis?
5. In March 2023, BCA Executive and JCU researchers met with East Kwaio women from Tribal Health Committees and BCA TB Rangers to plan the steps needed for the Women and TB study to succeed; Malaita Solomon Islands

- July 2023, data co-creation occurred with the four tribes in the East Kwaio, led by Dorothy Esau and Emmy Foroasi. A total of 35 participants from the four tribes participated – participant details below
- September 2023, tok stori data was collaboratively analysed by BCA and JCU researchers at four-day workshop at JCU Nguma-bada campus, on the lands of the Yirrganydji and Djabugay peoples, near Gimuy (Cairns), Australia
- Outputs have been finalised and distributed (policy brief, conference presentation abstracts), are in the final editing stages (a'imae), or are being drafted (found poem and manuscript for publication). Details of the research outputs are listed below.

Study participants

23 women participated in tok storis

- 17 adults (i.e. married or mothers) – 1 also participated in individual tok stori
- 2 female Rangers (married) – 1 also participated in an individual tok stori
- 4 young women/girls (not yet married or had children).

12 men participated in tok storis

- 5 are male Rangers including 1 that also participated in an individual tok stori
- 2 are chiefs
- 2 are community leaders including 1 with extensive TB experience who participated in an individual tok stori
- 3 are Baru employees.

Ethics approval was obtained from Atoifi Hospital (HR-23/01) and JCU (H9112; Reciprocal Ethics).



Researchers Dorothy Esau (pictured at front, playing the bamboo pieces), Emmy Foroasi and Kwaio women practice the a'imae, led by Kwaio artist, Fi'iringi and sung by Kwaio tribal women (Photo: Michelle Redman-MacLaren)



Researchers Emmy Foroasi (pictured at front left), Dorothy Esau and Kwaio women record the a'imae, led by Kwaio artist, Fi'iringi (second from right). The ai'mae was videoed by Maasafi Alabai and Langa Wilson (who also edited the video). (Photo: Michelle Redman-MacLaren).

Recent research activity and research outputs

1. The a'imae

Kwaio woman gathered in Uru Harbour under the leadership of researchers Dorothy Esau and Emmy Foroasi with Kwaio artist, Fi'iringi to perform an a' imai - a traditional song format for sharing knowledge. The a'imae has now been video recorded with women wearing kastom 'uniform'. The film has been edited, with a few final changes to the English translation to be made. This film will be shared with community, service providers, policy makers, academics, and TB advocates.

The composing and recording of the a'imae, which was an inclusive activity done alongside a Kwaio gathering (BCA AGM), has in fact started addressing recommendation 3 in the policy brief, that is: Promote the function and success of the TB Ranger program. Advocacy that emphasizes women's leadership and experiences by BCA with (i) people in tribal areas.

Understanding the experience of women in a TB hot spot in Solomon Islands to help effectively find, treat and care for people with TB (cont.)

2. The Policy Brief

A policy brief was written and distributed to inform key stakeholders who are responsible for TB services and system improvements in Solomon Islands. Dr Sue Devlin led the development of the policy brief, in close collaboration with Ms Dorothy Esau, BCA Executive members and JCU colleagues.

The stakeholders who have received the policy brief include the Global Fund, Solomon Islands Ministry of Health and Medical Services, World Vision Solomon Islands (administrators of Solomon Islands TB services, 2024 - 2026), the Provincial TB services and Atoifi Hospital, Malaita, Solomon Islands.

Outcomes

The findings of this study informed the development of a TB Tribal model brief that was included in the Solomon Islands National Strategic Plan for Tuberculosis. Global Fund and World Vision have responded by committing additional support for one of the key recommendations from the participants – the establishment of an aid post with a nurse and GenXpert machine for point of care testing in the mountains of East Kwaio.

These actions have paved the way for National and Provincial TB programs to provide funding for bottom-up, community-based TB services, such as their TB Ranger program in the Kwaio Mountains - responding to findings in the policy brief.

An abstract has been submitted for the upcoming The International Union Conference on Lung Health being held in November 2024. Details: D. Esau, S. Devlin, E. Foroasi, K. Cheer, E. Kekeubata, P. Massey, D. MacLaren, M. Redman-MacLaren. Experiences of women with tuberculosis or caring for people with tuberculosis in East Kwaio, Solomon Islands. The International Union Conference on Lung Health, Bali, Indonesia. 12-16 November, 2024.

3. The found (data) poem

The found poem is in draft stage. The findings, as presented by Emmy Foroasi and recorded during her stay at JCU, are the basis for this data poem. This Women and TB study, including the data poem and other poems written during this study, will be presented at the upcoming International Symposium of Poetic Inquiry in October 2024.

Redman-MacLaren, M. & Esau, D and the Women and TB Study team. Connecting care in a community forgotten: women's experience of tuberculosis prevention, detection, and treatment in East Kwaio, Solomon Islands. (Oral Presentation). International Symposium of Poetic Inquiry, Auckland, New Zealand. 23rd-26th October 2024.

4. Additional output: manuscript for publication

Dr Sue Devlin is leading the writing of a manuscript for the special edition of Qualitative Research journal to be submitted mid-2024. The introduction, methods and findings are in draft and the manuscript is being developed in a timely manner. Having this additional research output will inform other policy makers and academics about the importance of tribal-led and tribal-embedded approaches to TB research for improved TB services and will help move us towards elimination of TB in Kwaio and beyond.

Next steps

i) Dorothy Esau and Emmy Foroasi will meet with a JCU colleague in Solomon Islands to review all research outputs and prepare for conference presentations by August 2024.

ii) A Final report will be submitted to the Australian Respiratory Council in August 2024.

A case control study investigating the high incidence of TB among Nepalese immigrants in NSW: Descent from altitude or a legacy of genetic adaptations to hypoxia?

Associate Stephen Corbett for the Study Consortium

Introduction

Since 2019 we have been investigating high rates of tuberculosis (TB) in Nepalese immigrants to Western Sydney and NSW as a whole. (Norton et al. 2019; Corbett et al. 2022) We have shown that Nepalese people consistently have rates of TB which are almost double the rates seen in immigrants from adjacent countries such as India, Pakistan and Bangladesh. This is not a new phenomenon - it had been known for over 150 years that when people from Nepal or Tibet descend to lower altitudes, their rates of TB climb – although no explanation has ever been forthcoming.



We have proposed a new hypothesis (Corbett et al. 2022) – that alone or in combination, descent from altitude and the possession of mutations in the genes in the Hypoxia Inducible Factor (HIF) may be responsible for this upsurge in TB rates upon descent to lower atmospheric oxygen at sea level. The HIF mutations, known to be present in almost all Tibetans and in approximately 20% of Nepalese, are thought to be adaptations to hypobaric hypoxia to enable Tibetans to live and reproduce at high altitudes.

To this end we initiated a case control study with incident TB cases from the 1st January 2022 onwards as cases and controls drawn from the Nepalese community in Western Sydney. Controls are Nepalese people without TB. They are drawn from a number of sources – close contacts of people with TB, health workers, health students or those attending the Chest Clinic for assessment of latent TB. A questionnaire has been devised to elicit risk place of residence in Nepal in the 10 years and 12 months prior to migration, ethnicity and language groups, and other risk factors for TB such as a personal or family history of TB or occupational exposure to TB. Blood has been collected for IGRA testing and genomic analysis looking for the presence of known "Tibetan mutations at the HIF loci.

The stated purpose of our application to the Australian Respiratory Council was to extend this study to other local health districts in Sydney where Nepalese people live. We also sought to include the small Tibetan population in Northern Sydney Local Health District to see if they also had high TB rates and if possible to include Tibetan people in our study.

Progress Report

Nepalese Study - At the present time we have completed data collection for the pilot study on 15 cases and 19 controls. The results of the investigations on these subjects are presented below. Considerable difficulties have been encountered in recruiting controls. We have tried recruiting Nepalese health students, employees within the health service, household members of cases and patients from largely Nepalese general practices. Two factors seem to be responsible for this hesitancy – fear of blood collection and the possible impacts of revealing latent TB status on employment or student enrolment.

It is important to note that Nepalese migration continues at a high level in NSW and Australia, Western Sydney now has fewer Nepalese than South East Sydney Local Health District. TB rates among Nepalese in this district remains high.

Tibetan Study - Approaches have been made to TB services in Northern Sydney Area Health Service (NSAHS). Australia's largest Tibetan community of about 1000 people live in the suburbs around Dee Why on Sydney's Northern beaches. Many work in local hospitals and aged care facilities.

There is in principal agreement from these services to participate in this study, the health service and local GPs have established good relations with the community. There seems little doubt that TB rates are high in these communities and although absolute numbers are small.

The study questionnaire has been amended for the Tibetan community and the first steps have been taken to obtain ethical approval for the study to proceed in NSAHS. The community may be hesitant in disclosing details of where they lived in Tibet. It is also clear that many Tibetans left Tibet many years ago and have been resident in either in Dharamshala (Altitude 1500 metres) in India or in other places prior to migration to Australia.

Bhutanese Study - In 2022-23, there began a sharp rise in immigration to Australia of young Bhutanese people, mostly students, particularly to Western Australia but also to Queensland and the ACT. This influx seems to be the result of a successful recruitment drive by tertiary institutions in Australia.

What is remarkable in terms of this study and the hypothesis which underpins it is that these students have rates of TB, at least in Western Austral which is an order of magnitude or more higher than even Nepalese migrants in that state. (Figure 1) The Commonwealth Department of Health and Ageing also report that Bhutanese have the highest reported rates of Multiple Drug Resistant (MDR) TB in Australia.

Bhutan began as a Tibetan colony in the eighteenth century and genetically they are much close to Tibetans than are Nepalese, on average.(Arciero et al. 2018) They also live at higher altitude. Their capital Thimphu is at 2000 metres altitude compared to Kathmandu at 1500 metres. It is likely that extending or even confining this study to Bhutanese, at least in the short term, may be the most efficient means of testing our hypothesis. If sample sizes necessary to reliably test just one of the hypotheses are calculate for Nepalese, Tibetan and Bhutanese people, a much smaller sample size is need for Bhutanese people. (Table 1).

Adaptation of the questionnaire to the Bhutanese population is now complete.

Figure 1 TB Incidence in WA in 2021, by country of birth

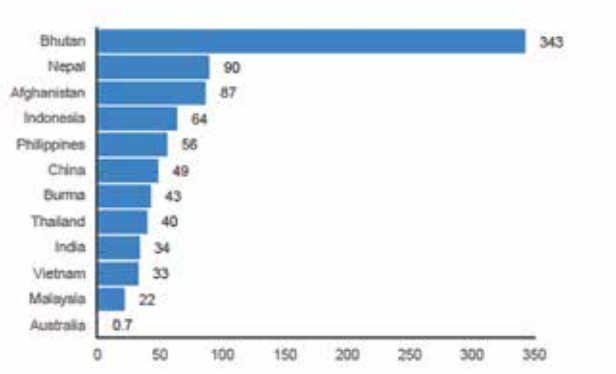


Table 1 Sample size calculation for CC study for Tibetan, Nepalese and Bhutanese populations based upon known prevalence of high altitude adaptation

Country		Nepal		Bhutan		Tibet	
Controls/case		1	2	1	2	1	2
Allele Frequency		20	20	60	60	90	90
Control Homzygosity %		4	4	36	36	81	81
Odds Ratio							
2	cases	634	429	136	100	274	221
	controls	634	857	136	200	274	442
	Total	1276	1286	272	300	548	663
5	cases	85	52	28	21	78	68
	controls	85	104	28	42	78	136
	Total	170	156	56	63	156	204
10	cases	34	20	16	13	54	50
	controls	34	40	16	25	54	99
	Total	68	60	32	38	108	149

Involvement of the Commonwealth Department of Health and BUPA

In February 2024 a meeting between TB services in NSW, Western Australia, Queensland and the Australian Capital Territory, the Commonwealth Department of Health and BUPA was held. BUPA are contracted by the Commonwealth to conduct TB screening of migrants , including migrants from Tibet, Nepal and Bhutan, who wish to work in health or aged care. The purpose of the meeting was to explore the practicalities of recruiting controls during the screening process. Blood is already collected for IGRA testing at this screening, so obtaining consent will be confined to responding to the questionnaire and agreeing to have genomic testing done.

There was agreement by all states that this is feasible. At present ethical approval is being pursued in each state using the ethics application approved in NSW as a temple. The questionnaires are being adapted to Bhutan, particularly the questions eliciting information about altitude of residence. A meeting with medical officers involved in the screening program nationally is scheduled for May, 2024.

Results - Descriptive Data

Descriptive data for some key variables is presented for the first 34 enrolled Nepalese participants. The key points emerging from these pilot data are that there are 15 cases and 19 controls. Females are a larger proportion of the controls than cases, probably because of recruitment within health care facilities. Controls are on average older than cases, again because nurses from hospitals in Western Sydney were recruited as controls. Cases have a broader range of ethnicities than controls.

There are no dramatic differences in the elevation of the place of origin of cases and controls. Most people come from Kathmandu at 1500 metres elevation. There is a paucity of IGRA negative controls.

Table 2 Age Group and Gender for Cases and Controls

	Gender	Case	Control				Control Total	Grand Total
Age Group			Close contact of a TB case	Health student	Health worker	Latent TB referral		
20-29y		**11**	**1**	**2**	**1**	**6**	**10**	**21**
	Female	7	1	2		6	9	**16**
	Male	4			1		1	**5**
30-39y		**2**			**4**	**2**	**6**	**8**
	Female	1			4	1	5	**6**
	Male	1				1	1	**2**
40-49y		**2**			**1**	**1**	**2**	**4**
	Female	1			1		1	**2**
	Male	1				1	1	**2**
50-59y					**1**		**1**	**1**
	Female				1		1	**1**
Grand Total		**15**	**1**	**2**	**7**	**9**	**19**	**34**

Table 3 Ethnicity of Nepalese participants

Ethnicity	Case	Control	Grand Total
Brahmin Hill/Bahun	2	4	6
Dalit	1		1
Dholi	1		1
Gurung	1		1
Chhetri	4	4	8
Magar	1		1
Newar	1	9	10
Rai	1		1
Tamang	2	2	4
Tibetan	1		1
Grand Total	**15**	**19**	**34**

Table 4 Years since Migration for study participants

Years since migration	Case	Control	Grand Total
<1y	3	1	4
1-<5y	6	6	12
5-<10y	4	6	10
10+	2	6	8
Grand Total	**15**	**19**	**34**

Table 5 Elevation of the former place of residence in Nepal of study participants

	Elevation for 10 years before migration			Elevation for 12 months before migration		
Elevation	**Case**	**Control**	**Grand Total**	**Case**	**Control**	**Grand Total**
<500m	2	2	4	3	3	6
500-999m		2	2		2	2
1000-1499m	12	14	26	11	13	24
1500-1999m		1	1		1	1
>=2000m	1		1	1		1
Grand Total	**15**	**19**	**34**	**15**	**19**	**34**

Genotypic Analysis

Analysis of the 16 genotyped participants has been completed in the laboratory of Prof Josef Prchal at the University of Utah.

EPAS1

The presence of at least one allele for EPAS1 mutation is present in 3/7 (40.2%) and 0% in controls. Of note is that in one sample of a man of Tibetan origin the DNA extraction failed (at CHW). As almost all Tibetans are homozygous for these mutations, this would make it 50% positive.

EGLN1

The presence of the EGLN1D4E/C127S and EGLN1C127S mutation is 2/7(28%) in cases and 2/9 (22%) in controls.

These numbers are small but is reassuring that we are able to tests for these mutations and that they are present in significant numbers tested so far.

Table 6 Results of Genomic Testing in 16 participants

EPAS1			
	Case	**Control**	**Grand Total**
Ancestral genotype	4	9	13
"Tibetan" EPAS1 homozygote	1		1
"Tibetan" EPAS1 heterozygote	2		2
Grand Total	**7**	**9**	**16**

EGLN1			
	Case	**Control**	**Grand Total**
Ancestral	5	7	12
"Tibetan" EGLN1	2	2	4
Grand Total	**7**	**9**	**16**

Conclusions

We believe we have fulfilled the ambitions put forward in our application for this grant from the Australian Respiratory Council. Although difficulties have been encountered in recruiting controls among the large number of Nepalese migrants in Sydney we have developed a promising strategy to overcome this.

The remarkably high rates of TB among the recent influx of Bhutanese immigrants provides us with an opportunity to test our hypothesis in a relatively small number of study subjects. They are an ideal and perhaps unique group and Australia is an ideal location in which to study this hypothesis. Low rates of TB transmission here mean that TB diagnosis is almost always the result of re-activation of latent TB.

Initial steps have been taken to extend this study nationally, a process made much easier by the preliminary work done in NSW. We will be requesting to extend the project to complete more genomic testing and ethics approval in other jurisdictions.

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The impact of heated-tobacco-product use on gene expression in the lung – are they really a better alternative to cigarette smoking?



Associate Professor Alex Larcombe & Dr Katherine Landwehr
Curtin University/Telethon Kids Institute, WA

In this project, we explored the effects heated-tobacco-product emissions had on differential gene expression in a human airway epithelial cell exposure model. Primary airway epithelial cells obtained from volunteers were grown at the Telethon Kids Institute to generate air-liquid-interface (ALI) cultures. This is the most appropriate in vitro model for studies such as this as the cells differentiate to structurally mimic the human airway, in addition to producing cilia, mucous and appropriate inflammatory markers etc (Figure 1).





FIGURE 1 – Dr Landwehr showing the air-liquid-interface (ALI) cell cultures used in this study.

These cultures were then exposed to the emissions from three different types of heated-tobacco-product (HTP) – the IQOS3 Duo, the glo and the Ploom S (Figure 2) for one hour. We also exposed cells to cigarette smoke or air as comparators/controls.



FIGURE 2 – the three heated-tobacco-product devices used in this study. A = Philip Morris International IQoS 3 Duo, B = Japan Tobacco International Ploom S, C = British American Tobacco glo.

We extracted RNA from these airway epithelial cell cultures which were then sequenced using Poly A HS2 stranded RNASeq library preparation, iSeq QC and NovaSeq sequencing (2x50 cycles) to yield 20 M reads per sample. The sequencing data were quality checked and aligned using the well documented and freely available nf-core/rnaseq pipeline. The aligned data were then analysed for differential gene expression (DEG) using the R statistical program loaded with the limma-voom RNAseq package. DEG analysis was performed successfully, and the results were further analysed using the R Package ClusterProfiler to find biological pathways that had been most altered after exposure to cigarette smoke and HTP emissions.

Exposure to cigarette smoke and all HTP emissions caused large numbers of differentially expressed genes (DEGs) compared to air exposed controls (Figure 3a). Cigarette smoke exposure elicited the largest number of changes with 7102 DEGs, followed by IQOS at 4033, glo at 2509 and Ploom at 329. A total of 130 DEGs were shared across all exposures, with each exposure additionally having its own unique DEGs (Figure 3b). IQOS shared the greatest number of DEGs with cigarette smoke, followed by glo and then Ploom shared the least. This indicates that the HTP emissions induce many of the same gene expression changes as cigarette smoke and that each exposure type also induced their own unique changes that may progress to different downstream negative effects.

Of note, both IQOS and glo share many of the same altered biological processes as cigarette smoke exposure. The main difference is a suppressed organonitrogen compound biosynthetic process in both HTP emissions compared with cigarette smoke. This could be due to the increased presence of organic nitrogen containing compounds within HTP emissions, but nonetheless shows altered metabolic function of the cell beyond oxidative stress processes typically localised to the mitochondria. What this may cause after prolonged exposure is uncertain, but does indicate that the HTP devices contain their own separate toxic effects beyond just those observed after cigarette exposure. In contrast, the majority of altered pathways after Ploom emission exposure were broadly related to tissue repair, indicating damage to the exposed airway epithelial cells is the main toxic effect of Ploom emissions.

In conclusion, this study shows that HTP emission exposure in an ALI cell culture model, results in fewer differentially expressed genes compared with traditional cigarette smoke exposure. Importantly, these data can't be interpreted as HTP emission exposure being less harmful than cigarette smoking, as the specific genes that were up or downregulated were not identical between exposure types. This means that HTP emissions result in a "different" risk, rather than a "reduced" risk compared with cigarette smoking. Further studies are warranted to explore this further, and also to investigate the impacts of HTP emission exposure on people with existing lung disease.

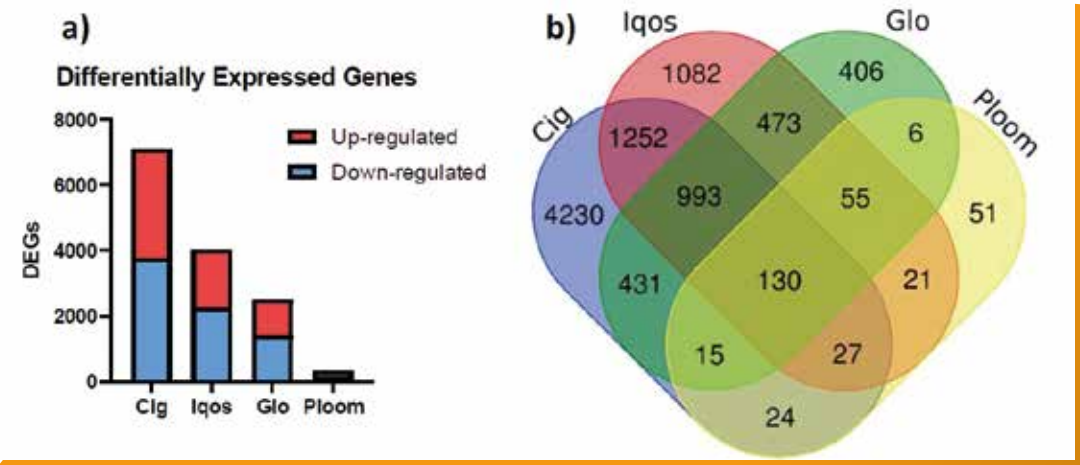


FIGURE 3 – Di erentially Expressed Genes (DEGs) a) Total number of DEGs compared to air controls. Red colouration indicates up-regulated, or increased, expression and blue down-regulated, or decreased, expression. b) Venn-diagram of unique and shared number of DEGs for each exposure.

Annual Report of the Australasian Clinical Tuberculosis Network (ACTnet)

Report provided by Dr Andrew Burke - ACTnet Chair



The Australasian Clinical Tuberculosis Network is a network of clinicians and researchers in Australia and New Zealand who aim to conduct high-quality multicenter clinical research. The focus of ACTnet is the development of new evidence to support TB elimination in Australia and beyond. The Australian Respiratory Council (ARC) is the principal partner organization of ACTnet. The ARC provides funding for administration officer salary support for which we are grateful.

The aims of ACTnet are to be met through 3 main activities.

1. **Establishing collaborative networks of researchers in key areas which facilitates discussion at a high level of expertise.**
2. **Education to clinicians/ researchers and public health professionals**
3. **Facilitating TB research projects – particularly those that allow for collaboration between different health services within Australia and New Zealand**

ACTnet has standing representation from the Australian Society of Infectious Diseases (ASID), the Thoracic Society of Australia and New Zealand (TSANZ) and the ARC.

Membership: Our current membership number is 96. We have a larger number of people who follow ACTnet through twitter/social media. It is planned to increase our membership by increasing circulation of the TBPod podcast, sharing information about our activities widely (including to TSANZ, ASID and the TB CRE) and through our research networks across all states and territories.

As ACTnet does not hold funding for research, it is expected that our main role will be in connecting researchers acknowledging that many ACTnet members will be conducting their TB research in institutions independent of ACTnet.

ACTnet Steering Committee: Late 2023 saw a significant change in membership of the steering committee with a number of long-term members completing their six-year terms. We thank Professor Justin Denholm, Associate Professor James Trauer , Dr Ella Meumann and Associate Professor Suman Majumdar for their contributions to the steering committee and we look forward to their ongoing association with ACTnet.

As per our terms of reference we circulated EOIs for the committee through our partner associations ASID and TSANZ. We were delighted with the strong interest and the excellent candidates who put themselves forward.

Our new steering committee members are:

- **Dr Gail Cross, ID physician and clinical TB researcher, Burnet Institute.**
- **Dr Catherine Berry, ID physician, MSF and John Hunter, Newcastle**
- **Dr Simone Barry, respiratory and TB physician, Director of TB services, South Australia.**
- **Dr Alice Sawka, respiratory and TB physician, Royal Adelaide Hospital.**

Continuing as ARC representatives are Professor Greg Fox, University of Sydney and Royal Prince Alfred and Dr Andrew Burke (chair), University of Queensland and ID/respiratory physician, The Prince Charles Hospital, Brisbane.

In addition, we have established a NZ observership role on the committee in order to foster trans-Tasman links. Dr Mitzi Nisbet, Auckland, has kindly agreed to continue in this role.

Finally, as part of our commitment to mentoring emerging TB clinicians and researchers we have established two new observership roles for two colleagues completing their specialty training in thoracic medicine and infectious disease. These have been filled by Dr Jack Cross and Dr Victoria Grey respectively. These will likely be for 3 year terms.

Educational activities: In February 2023 we had our first online symposium on TB genomics. We were delighted to have in excess of 100 participants online with many virtual links representing institutional groups so the actual number of people in attendance was higher. The interest levels represent the rapid advances in molecular diagnostics in TB and we had a broad representation of attendees from clinical infectious disease, microbiology, and public health.

The speakers were: Dr Chris Coulter, 'Introduction to Genomics', Dr Norelle Sherry "Implementation of TB

Genomics for AMR and Public Health", and Prof Vitali Sintchenko "Case Studies in TB Genomics"

On 11th October 2023 with partnered with ARC in our first online seminar on public health and nursing in TB. This was aimed primarily at TB and public health nurses although a broad group of clinicians and researchers attended. Again, there were in excess of 100 attendees primarily from a nursing background. The session was chaired by Amanda Christensen of the ARC. Based on the success we aim to have a similar TB nursing forum regularly.

The speakers and topics were:

- **Hannah Ndungu & Dr. Belinda Greenwood-Smith, Northern Territory - Topic: Navigating Tuberculosis Patient Care in Central Australia**
- **Catherine White & Gemma Devlin, Queensland - Topic: Utilization of the Queensland Public Health Act in coordinating TB treatment in an actively infectious patient**
- **Carolyn Gill, South Australia - Topic: Contact Tracing and Community Screening in remote settings, following the TB outbreak in the Anangu Pitjantjatjara Yankunytjatjara (APY) Lands.**

Educational webinars planned for 2024 include: (1) difficult TB cases (4 June) and (2) symposium on TB clinical trials (likely October)

Tuberculosis Journal Club: In conjunction with Burnet Institute, ACTnet through Dr Gail Cross is planning a monthly TB journal club with colleagues in the Asia-Pacific Region. ACTnet members have been surveyed as to desired format and this is expected to commence second half of 2024.

ACTnet Podcast: ACTnet established The TBPod. The TBPod is a podcast designed for clinicians and policy makers caring for patients with tuberculosis. The TBPod consists of conversations with expert clinicians, researchers, policy makers and advocates about their work in the field of tuberculosis. Over the past 2 years we have increased the frequency of our TB podcasts under the initiative of Dr Jack Callum who is now a member of the steering committee.

Thirteen high quality podcasts were recorded from a range of domestic and international experts. Our new website has links to these podcasts which are also available through the TBpod app and Spotify. A measure of our success is that international TB experts are now approaching us requesting to be on the ACTnet podcast. We continue to record higher numbers of downloads and are now increasingly receiving positive feedback from international listeners.

TB Consumer Advisory Board (CAB): In order to enhance the role of TB survivors in setting the agenda for TB research in Australia and New Zealand, ACT net has established a Consumer Advisory Board in 2023. It has been widely recognized that strengthening the involvement of patients in all stages of clinical research, from identifying research priorities to the design and implementation of projects, is crucial to developing evidence-based health outcomes that best serve the needs of those living with the disease. With that in mind, the purpose of this CAB is to provide community perspectives on TB research in Australasia, assist in the translation of research outcomes, and promote awareness around TB research.

The goals and structure of the ACTnet TB CAB have been developed after comprehensive discussions with TB clinicians, epidemiologists, and program officers. Furthermore, we consulted experienced CAB leaders from other settings and reviewed literature in this area to ensure that the workings of the CAB are in alignment with best practices used globally. We are in the process of recruiting TB survivors or their family members to be members of the CAB. We believe this will be a significant resource for the TB research community in Australia and New Zealand.

Newsletter: A goal in 2024 is to improve the content and regularity of our newsletter and expand its role from merely notifications of educational activities to including clinical case studies, grant opportunities, researcher profiles and summaries of recent guideline updates. We also intend to provide a regular opportunity for ARC to contribute content of interest, e.g., a brief outline of research or other projects being supported by them.

2024- The Evolution of ACTnet: In 2023 we were approached by the TB Forum which was planning on ceasing its formal activity and they have requested we incorporate their membership into ACTnet. TB Forum was established primarily as a TB advocacy charity and already shares some active members with ACTnet. One of the reasons we were approached by TB Forum was the perceived need to have a more prominent single "brand" in the Australasian TB research landscape. At the time of writing TB Forum has not made a final decision on this however the ACT steering committee expressed its willingness to be of assistance. It is unlikely that this would change the overall function or role of ACTnet.

New research administration assistant: With the completion of her medical studies in late 2023 we say thank you to Dr Tania Mukherjee who has now taken an internship position at Nepean Hospital . We welcome Kye Clements to this role. Kye is undertaking a Masters of Biostatistics at the University of Sydney and has redesigned the ACTnet website making it much more professional and raising our organizations profile. Kye's position is funded through the financial support of ARC.

ACTnet thanks the ARC for its continuing support. Membership to ACTnet is free. Please see our website www.actnet.org.au for further information.

ARC Sheila Simpson OAM Nursing Education Scholarships

Building Nursing Capacity in Australia



Sheila Simpson OAM

To support tuberculosis (TB) elimination efforts in Australia, ARC has been working in partnership with Western Sydney University, School of Nursing and Midwifery and the National TB Program stakeholders to develop and implement the Master of Nursing (TB Management). The course implemented in 2020 represents a significant educational opportunity for developing nursing workforce capacity within the Australian TB Program. The ARC is committed to supporting capacity building for the Australian TB Program through the development of specialist nurses. To date, four nurses have completed the course and have been awarded a specialist Master qualification in TB Management.

In 2023, Kerrie Shaw, Chris Lowbridge and Amy Peachey were the tutors for the TB specialist units within the course. The ARC thanks Kerrie, Chris and Amy for their ongoing contribution to nursing education and support for their peers undertaking the course.

Work is continuing of developing a fourth specialist TB unit of study for the course, Screening and Vaccination for TB. The fourth unit will be implemented in July 2024 and will enable students to extend their specialist knowledge and skills.

To support future students, ARC awards scholarships each year to enable nurses to undertake the speciality units within the Master in Nursing (TB Management) course. The scholarship program has been named in recognition of the outstanding contribution of Sheila Simpson OAM, to the work of ARC, her clinical leadership and mentoring of the nursing workforce within the speciality area of TB, over four and a half decades.

Further information about the work of Sheila Simpson and the scholarships can be found on ARC's website: https://www.thearc.org.au/scholarships/

ARC Sheila Simpson OAM Nursing Education Scholarship Recipients 2020 – 2023

2023	Noel Paradero
2022	Emma Hunt, Emma Just and Amy Peachy
2021	Cathie McKenna and Amy Peachy
2020	Cathie McKenna, Amy Peachy and Sherri Towle



Noel Paradero

Overview of the 2023 Scholarship Recipient Noel Paradero

In 2023 two scholarships were awarded to Noel Paradero. Noel is the TB District Care Coordinator for NSW Health Murrumbidgee Local Health District. Noel coordinates and provides care for people with TB across the Riverina Region in rural NSW. Noel advises that his motivation for undertaking the Master of Nursing (TB Management) relates to his personal experience with TB. Noel has seen people sick and dying from TB in his country, the Philippines. Noel observed the pain and stigma experienced by people with TB, he is committed to helping people affected by TB and contributing to the TB elimination goals. Noel's nursing career has led him to many places across three continents, he has undertaken post graduate public health studies in the United Kingdom.

Through studying the Master of Nursing in Tuberculosis Management Noel believes he will be able to achieve his goals, he would like to undertake research and further develop his knowledge and skills in TB management. Noel advises that he is grateful for the opportunity to receive a scholarship to support his studies.

Noel has provided an overview of the key learnings from the three TB speciality units he completed within the Master of Nursing (TB Management) course.

Clinical Management of TB, completed June 2023

- Noel reports that through this unit of study he learnt the importance of care planning, communication and providing holistic care using a person centred approach. Noel gained further knowledge of clinical skills, procedures and policies required to care for people with TB. Noel notes that a TB nurse should find ways to support conversations whenever necessary to help the patient understand the diseases process and treatment plans giving reassurance, guidance and a sense of hope.

Care of People with TB, completed June 2023

- From this unit Noel learnt that utilising a case management approach ensures that clients become effective partners in their care and treatment.

Public Health Management of TB, Completed November July 2023

- In this unit Noel learnt about the principles of social determinants of health, health inequalities and their connections to TB, Noel noted that many of the people affected by TB are the most vulnerable in society
- Empowerment through health literacy allows people to become an active participant in their health care plans and promotes the persons rights to self-determination.

The ARC wishes Noel well in the completion of his studies.

ARC Projects Report

Graduate Diploma/Master of Nursing (TB Management) Course University of Western Sydney

The ARC continues to support the development and delivery of the University of Western Sydney Graduate Diploma/Master of Nursing (TB Management) Course. The course is seen as an important opportunity to further develop the speciality of TB nursing within Australia and enhances national efforts towards TB elimination. The course is delivered online, current students are Australian and international nurses working in a range of TB and public health services, roles and activities.

This year, ARC's Nurse Consultants Kerrie Shaw, Lauren Deakin and Amanda Christensen worked to develop the fourth speciality unit for the course – TB Screening and Immunisation. The unit has been designed to equip nurses with the essential knowledge and skills required to perform TB screening and immunisation and meets the National Standards for Immunisation Courses. Through the unit students examine the skills required to perform, advocate and promote screening for TB, latent TB infection and immunisation to prevent TB in at risk populations. Students clinical skills are assessed in an online environment which incorporates virtual clinical placements and assessment making the course readily available to students, nationally and internationally.

In 2023, Kerrie Shaw, Chris Lowbridge and Amy Peachey were the tutors for the three TB specialist units within the course. As tutors the group provide advice on the academic content of the units, provide support for, and assess the students undertaking the course. The ARC thanks Kerrie, Chris and Amy for their ongoing contribution to nursing education and support for their peers undertaking the course.

The ARC is committed to supporting local and global TB elimination efforts through supporting the development and delivery of the University of Western Sydney Graduate Diploma/Master of Nursing (TB Management) Course.

Building capacity through training and education in the US Affiliated Pacific Islands -Pacific Island TB Controllers Association (PITCA) Annual Conference

The Division of TB Elimination of the US Centers for Disease Control (CDC) host an annual training event for the National TB Program (NTP) staff of the US Affiliated Pacific Islands (USAPI). The ARC has been involved since 2006 in delivering the nurses and outreach workers program as part of the annual PITCA training activities.

In 2023, ARC was invited to participate in the planning meetings, develop and deliver the PITCA conference program. David Macintosh, Amanda Christensen and Kerrie Shaw attended the conference representing ARC.

The conference was held in American Samoa, from the 31st October to the 4th November, 2023. Program managers, community health outreach workers, medical, nursing and laboratory staff from the USAPI NTPs participated in the conference. The following partners attended and contributed to the conference: CDC; US National TB Controllers Association, the Mayo TB Center of Excellence, World Health Organisation – Western Pacific Region and Diagnostic Laboratory Services Hawaii.

The conference consisted of plenary and breakout sessions for the respective professional groups over a five-day program. Site visits to the American Samoa Department of Health laboratory (Tafuna Health Center), the Lyndon B. Johnson Tropical Medical Center Laboratory and TB Clinic were undertaken by meeting delegates. The nurses and community health outreach workers breakout sessions covered the following topics:

PITCA 2023 – Conference delegates



- TB 101 & disease timeline
- Management and care of people with TB
- Managing people with infectious TB in the healthcare, home and community setting
- Workshop – Developing cultural competency guides for the USAPIs
- Diagnosis and management of children with TB
- Overview of contact investigation
- Contact investigation workshop USAPI, presentations and group discussion
- Case Study – impact of social issues in the care of people with TB
- Motivational interviewing and counselling workshop
- Managing TB treatment side effects – A nursing and community health workers perspective
- Case Study – Paediatric TB
- Understanding old and new TB lab testing
- Report back from the USAPIs on key activities/ achievements in the past year and plans for the year ahead.

Pacific Island TB Nurses Network Meetings

Each month the ARC Nurse Consultants meet online with the NTP staff of the USAPI and the CDC to present cases, discuss clinical and public health issues, and undertake educational activities. The monthly meetings are coordinated by ARC and hosted by the CDC. Each of the countries within the USAPI actively participate in the meetings, the USAPI nursing staff present complex and challenging cases for discussion and review at each of the meetings. The case presentations and discussions are used to promote problem solving and identifying local solutions and approaches to TB prevention and control. The number of people attending the meetings within the USAPI countries continued to increase over the year, as the network continues to expand.

The ARC Nurse Consultants Group provide ongoing technical support, coordinate and lead the educational sessions and mentoring for the nurses and outreach workers of the USAPI TB Programs. The CDC provide funding for ARC to undertake the planning, coordination and delivery of the annual PITCA training and Pacific Island TB nurses network meetings and related activities.

Support for Homeless and Vulnerable People with TB

Over the past six years, ARC with the financial support of the Clubs Grant NSW Scheme and donors has implemented a project to support homeless and vulnerable people with TB within the Greater Sydney metropolitan area. The people ARC supports through the grant scheme are people who are unable to obtain financial support through welfare and emergency payments. The grants recognise the benefits to individuals and community of caring for our most vulnerable during a difficult period in their life.

Through this scheme, ARC was able to provide funding for people experiencing financial hardship, which was particularly important given the increasing costs of living, reduced access to affordable housing and casualisation of the workforce experienced by many people in the community.

In the past 12 months funding of $7,502 was received from a donor. With this funding ARC was able to provide five grants to people affected by TB. The financial support was used to contribute to the costs associated with accommodation, food, utilities and transport (to attend medical appointments).

Homelessness in Australia continues to be a significant social issue that can have a long-term impact on individuals and families. Homelessness is complex issue leading to significant vulnerability within communities. Homeless people often have a poor general health status, coexistent substance and mental health issues, limited financial resources and support networks in the community which make people particularly susceptible to TB.

The ARC is working to identify additional funding to expand the grant scheme nationally as it is recognised that supporting homeless and vulnerable people with TB is an important social and public health issue.

Interim Report - In-language Resources to Empower Top End Communities Against TB. Report from the Project Leader Dr Chris Lowbridge, Menzies Institute, Darwin

In 2023 ARC funded Dr Chris Lowbridge from the Menzies Institute in Darwin to undertake the project In-language Resources to Empower Top End Communities Against TB. The project team applied for an extension to complete the project and provide the following interim report.

Some communities in the 'Top End' of Australia's Northern Territory continue to experience rates of TB that are far in excess of the national rate. Delayed diagnosis and low uptake of TB preventive treatment are two key drivers of ongoing transmission of TB and poor patient outcomes in these communities. Empowering people with a deeper knowledge and understanding of the risk of TB and the rationale for treatment and prevention strategies is vital to improving the management of TB. Messaging and information around TB need to be culturally and linguistically appropriate, particularly in remote Top End communities, where English is often not a first language. Existing resources aimed at patients and community members are typically limited to factsheets which are available only in English, and using biomedical concepts of health and disease that are not necessarily in line with First Nations' knowledge systems and ways of understanding. This gap has been identified by people from these communities who have been affected by TB as an issue that should be addressed.

This project aims to use a community participatory approach to develop a range of TB resources, such as stories and videos in key local Aboriginal languages in select TB-affected communities in the Northern Territory.

The team has received ethical approval for the work and has been engaging with a number of community leaders and other community members to understand their lived experience of TB. The team will continue to work with the community to develop resources for local use. It is envisaged that this project may lead to a framework that can assist other jurisdictional TB programs to better engage with First Nations communities around TB.

Pathway to the Elimination of Antibiotic Resistant and Latent TB (and Leprosy) in the Pacific: The PEARL Study

The Australian Government through the Medical Research Futures Fund Global Health Initiatives Grant Scheme awarded $ 4.25 million in funding to support research around the diagnosis, prevention and treatment of drug resistant tuberculosis (DR-TB) in Pacific Island Countries.

The funding is for research that will be undertaken over the next three years to enhance knowledge and develop tools to combat threats to national health security posed by the regional and global challenges of DR TB. The study is being undertaken in collaboration with researchers from pacific countries to promote capacity building to ensure the risks associated with TB can be managed on both sides of the border, in Australia and overseas.

The Australian Respiratory Council (ARC) is partnering with a team of researchers and capacity building experts led by Professor Ben Marais and Professor Warwick Britton to deliver the study. The team includes: the Kiribati Ministry of Health and Medical Services (MHMS), the NHMRC TB Centre of Research Excellence, Sydney University, Monash University, the Australian National University, the WHO Western Pacific Region Office END TB & Leprosy Unit and ARC. The Government of Kiribati has expressed a commitment to the project to support local efforts and progression towards elimination for TB and Leprosy within their country.

Background

The emergence and spread of antibiotic resistant strains of TB is a major concern globally. Within the Pacific, TB and Leprosy hotspots such as Kiribati pose a particular challenge and threat. The incidence of TB and Leprosy in Tarawa (the main population centre in Kiribati) are amongst the highest globally, combined with the population density and ongoing transmission of TB and Leprosy, the potential for amplification of TB, DR TB and Leprosy is a public health concern.

The main objective of the study is to mitigate the threat posed by DR-TB in the Pacific, by enhancing knowledge and testing new strategies to combat TB within the pacific island nations. The Pathway to the Elimination of Antibiotic Resistant and Latent tuberculosis in the Pacific (PEARL) Study, proposes a body of work that will provide a pathway towards DR-TB prevention, TB and Leprosy elimination in the Pacific.

The project aims to strengthen collaborative partnerships between Australia and Pacific Island Countries. The training and mentoring program will establish better surveillance and care networks across the Pacific to prevent the emergence and spread of DR-TB, while the intervention and modelling data will have direct impact on practice and policy. Overall, the project will strengthen regional Health Security by reducing the threat of DR-TB and Leprosy in the Pacific and play a role in regional TB and Leprosy elimination efforts.

The ARC is leading the component of the study relating to building workforce capability through training and education for TB elimination in Kiribati, and more broadly within the Pacific. This will be achieved through a program of training and mentoring. The work undertaken by ARC is building on existing expertise and activities within the northern pacific to deliver in-country training, technical assistance and clinical mentoring.

The project team and ARC continue to build relationships with the Kiribati government and MHMS, the National TB Program staff, community leaders, health services and the general population.

The training tools and resources developed by the ARC Nurse Consultants have been used to support orientation training for the project team. These training resources will be adapted and used to train health care workers across the south pacific over the next three years.

Screening and Active Case Finding Plan

In late 2022, early 2023 the PEARL project team began screening the population of Tarawa, Kiribati. A team of twenty local staff have been employed to work in collaboration with the project team to undertake the screening activities. Every person aged three years & older in a population of more than 60, 000 people in South Tarawa, Kiribati is being offered screening for TB & Leprosy.



A mobile clinic has been set up in the community for people to access with the team also working house to house to reach the community. The mobile screening site will move around Tarawa over a three-year period to reach maximum numbers of people.

People with active TB and/or Leprosy will be referred to the Kiribati National TB and Leprosy Program for TB care and treatment. People identified with TB infection (sleeping TB) are being treated with preventative therapy to reduce the number of people at risk of developing active TB in the future. Single dose preventive therapy is being given to people to prevent people developing Leprosy.

Amanda Christensen and Kerrie Shaw will visit Kiribati in February, 2024 to offer training for the project staff, to assess the screening plans and processes and provide technical advice to the project to support scale up of the project in the coming year.

Report from Dr Jeremy Hill

The PEARL project entered a phase of maintenance and consolidation during 2023. Establishing a pathway to elimination of TB in Kiribati and the Pacific remains highly relevant high level goal for the project, with strong buy-in from government and implementation partners. The project was highly successful in maintain a quality set of public health services for our target population, while also supporting and expanding project capacity and collaborations for future scale-up.

Delivery of a systematic, community-based, multi-disease screen, treat and prevent intervention in South Tarawa, Kiribati is the flagship intervention for the PEARL project. Following on from the successful pilot in Q4 2022, the project team moved to make some crucial adjustments to our data capture, supply chain and screening workflow in preparation for establishing operations in Betio – one of the most densely urbanised areas in the country, and where transmission of TB and leprosy is extreme. Using the newly opened PEARL office/operations centre in Betio as a base, screening commenced in Betio in March 2023 and continued without interruption until early November. During this period, the team registered more than 4,500 participants, covering 85% of the eligible population in households reached, and with more than 4,000 of those participants completing all screening components. Among those who completed screening, 1% were identified and treated for active TB, more than 1,000 participants had positive tuberculin skin test and approximately 800 supported to take TB preventive treatment.

Several barriers limited scale up during 2023, for which the project developed collaborative solutions. First, the supply chain of medicines for active TB and TB prevention interrupted project activities. This is a well-recognised challenge in geographically isolated, low-resource settings such as Kiribati, with considerable attention and support in place from many health sector partners. PEARL project staff worked closely with the Ministry of Health in Kiribati to reprogramme activities, donate goods, repurpose existing supplies and support quantification and ordering. In response to a request from national programme staff, the PEARL team conducted screening until November, and then switched to focus only on prevention from November onwards. Other barriers included limitations on human resources available and human resources management in Sydney and Tarawa; through continuous engagement with all organisations involved, these issues have largely been resolved, providing a strong position for scale-up during 2024.

Capacity building and stakeholder engagement activities in the wider central and southern pacific region provide a crucial mechanism to sustain high-quality epidemic response, diagnosis, treatment and care. During 2023, the PEARL project successfully supported a wide range of activities and interventions to promote this. The ARC led the development of a world-first curriculum for masters-level TB nursing, which has led to a number of additional opportunities at country level already in 2024. In Kiribati, project staff partnered with the National TB Programme to establish reliable internet connectivity, expand laboratory capacity to include additional tests and staff, updated training materials and epidemic response and contribution to national strategic planning efforts.





Solomon Islands Project

Community-based tuberculosis (TB) case finding and treatment support: working with, and advocacy for, Baru Conservation Alliance Rangers in the remote mountain of East Kwaio, Malaita, Solomon Islands. 2023

Report by Dorothy Esau

This report describes the progress Baru Conservation Alliance made in 2023 towards achieving a sustainable community-based TB program in the remote mountains of East Kwaio, Malaita province, Solomon Islands.

Background TB in East Kwaio mountains – TB remains at unacceptably high rates in the East Kwaio area of Malaita Province. Generations of Kwaio people have died, and continue to die, from TB. Although gains have been made in recent years, there are many more undiagnosed cases known to occur in mountain areas and distant villages of East Kwaio.

Illness and death from moamoata (TB) were experienced and recognised by Kwaio people before TB was understood in Western medicine terms. The western medicine concept of TB as a microorganism (germ) passing from one person to another is now familiar and widely accepted by tribal people in the East Kwaio mountains. TB is seen as a small invader giant that attacks people. TB causes suffering – known in Kwaio as nonifiinga.

Through the ARC-funded TB Ranger program, East Kwaio people learned the medical explanations for how TB is circulated and treated and accepted these understandings of TB alongside Falafala. There is a set of traditional Kwaio social, cultural and spiritual systems that inform everyday life and underpin social order for Kwaio people.

Health services are hard to reach in East Malaita. The Malaita province has no TB outreach program and no locally appropriate TB service for people living in the mountains. There are no roads to the hospital from the mountain hamlets and people with TB symptoms are expected to walk for up to two days to be tested at the hospital. Kwaio people from mountain areas are systematically overlooked. Equitable access to TB testing and treatment is urgently required. The ARC-funded TB Ranger program has assisted TB awareness, detection and treatment reaching the isolated East Kwaio people living in the remote mountains. The Baru Conservation Alliance (BCA) now has a well-trained TB Ranger workforce, including female and male Rangers, that each work 3 days per week to enable good access to TB detection and support for all the tribes in each of the BCA four conservation areas.

The TB Rangers program has saved lives: seven East Kwaio people from the mountains completed TB treatment in 2023 and three people continue on community-based treatment, as of March, 2024. All would have not been treated, and some would have died, without the support of the project.

TB Ranger activities - The TB Rangers continued to visit each family in their area to talk about TB, to find people with TB symptoms and support people to access healthcare and get TB tests. The TB Rangers support people taking TB treatment through the Tribal TB model that is founded on Kwaimanga, a Kwaio concept that encompasses love, care, respect and reciprocity. The rangers also provide culture-centred nutritional supplements for TB patients such as protein-rich fa'afuru (grasshopper) and uura (small freshwater shellfish). In Kwaio culture this gift communicates to the TB patient that they are a special and valued member of the tribe.

Through the project an advocacy video was produced to raise awareness about the TB Ranger program. The video was shared with the National TB Program, NGOs and communities. The video includes testimonies from East Kwaio women and men about their experiences and challenges relating to TB, and the positive impact of the TB Ranger program. One man said he had been near death, but support of the TB Rangers meant they took the TB medicine and lived. A mother described her suffering when her two children had TB and thanked the TB Rangers for the support they provided. The video also includes some Rangers' perspectives, challenges and potential solutions. The feedback from the Kwaio people was that the video really helps them to understand how TB affects their people. Some relatives that live outside of the BCA Conservation





Some of the participants at the workshop at Kwainaa'isi Cultural Centre, May 2023. Front centre: Chief John Laete'esafi, Chief Waneagea and Chief Esau Kekeubata. Front far left: Traditional Healer and knowledge holder Tenia Kwaruala

Area boundary were staying with the tribes when BCA and the TB Rangers visited and they requested TB screening for their families, which was undertaken. Link to video on ARC's website: https://www.thearc.org.au/wp-content/uploads/2024/04/TB-Ranger-Video-2024-final-720.mp4

Workshop at Kwainaa'isi Cultural Centre for two-way learning - In May 2023, Australian partners from James Cook University, Dr Sue Devlin and Associate Professor David MacLaren, were escorted by TB Rangers onto tribal lands to learn with Kwaio people at the Kwainaa'isi Cultural Centre, in the central mountains. The journey from Auki (on the west coast of Malaita) to Kwainaa'isi involved a day of boat travel around the northern tip of the island to Atoifi on the east coast, and then two days walking up mountain trails in thick rainforest terrain.

The workshop at Kwainaa'isi enabled Kwaio people who still practice ancestral religion and others who live on their ancestral tribal lands to meet and exchange knowledge with some of BCA's Australian partners. The relationships built through spending time together on ancestral tribal land helped Kwaio people to trust the TB program. Over two-days at Kwainaa'isi, people shared and demonstrated cultural knowledge.

Sue Devlin, a TB Nurse Practitioner in Australia and a Registered Nurse in the Solomon Islands, held a clinic to assess and advise 32 people who were concerned about symptoms that were outside the scope of the TB Rangers training, or had typical TB symptoms but could not attend health services on the coast. Most people assessed were referred to the TB Rangers for sputum collection for TB testing. Assistance and medications were obtained from clinicians in Auki for people with conditions other than TB.

TB treatment success was established for several people who had started and completed their treatment in the mountains without face-to-face assessment by a clinician. After observing Sue doing TB assessments, the TB Rangers initiated deeper discussions about the index of suspicion for TB and expansion of the Kwaio TB Tribal Model. These discussions further developed the skills and capacity of BCA TB rangers to identify people with TB, conduct contact screening and to facilitate care, treatment completion and recovery for people with TB. The two-way learning is essential for health programs in cross-cultural setting such as East Kwaio whereby BCA Rangers provide education to health experts about culturally appropriate methods to implement the TB activities.



David MacLaren and Sue Devlin (centre back) with Kwaio escorts preparing to leave A'edingale village on the second day of walking up to Kwainaa'isi Cultural Centre, May 2023.



The journey from Atoifi to the remote Kwainaa'isi Cultural Centre: the steep, wet, muddy and slippery track is natural to Kwaio people but is very challenging for inexperienced people.

Solomon Islands Project (cont.)





Raising TB awareness with Kwaio Tribes in the Kwaio mountains - women, men and children participated in the two-way knowledge exchange at Kwainaa'isi Cultural Centre, May 2023

Advocacy to implement solutions and to increase integration with the National TB Program

Throughout the year, the BCA Tribal TB model and TB Ranger program were successfully piloted in Western Province, Solomon Islands, demonstrating the transferability of the program to other Solomon Island contexts.

In May, the BCA executive was invited by the Burnet Institute Australia to submit a report on their Tribal Model of TB Prevention & Control for inclusion in the evaluation of the Solomon Islands TB Program and for development of the Solomon Islands Tuberculosis National TB Strategic Plan 2024-2026 (NSP). In collaboration with Australian TB experts and James Cook University partners, the BCA executive prepared a report that included mapping the TB outcomes of the Tribal Model to the project log framework in the Technical and Operational Guidelines for the Community Based Integrated Service Delivery Project in the Solomon Islands.

In August 2023, Chief Esau Kekeubata, BCA Managing Director Dorothy Esau, Associate Professor David MacLaren and Dr Sue Devlin joined (via zoom) the National TB Strategic Planning meeting in Honiara. At the meeting, Chief Esau and David highlighted some achievements of the Baru Tribal Model and raised the TB testing problems faced with



Sandra Irbe (Global Fund) via zoom from Switzerland, Peter Massey (JCU) via zoom from Australia, and TB Rangers on zoom in Solomon Islands, Esau Kekeubata (BCA Chief and Founder) and Dorothy Esau (BCA Managing Director) in Auki, at the announcement of Global Fund support for a Babala (TB Aid Post) in the East Kwaio mountains.

Atoifi Hospital and Kilu'ufi Hospital. Chief Esau strongly advocated for the establishment of a culturally informed/ competent sustainable system of TB case detection, treatment and support in partnership between BCA TB rangers and the provincial and national TB Program. Following the meeting the BCA executive was advised that the Tribal TB Model and Baru TB Ranger program will be included in the TB National Strategic Plan.

The BCA executive met with World Vision, administrators of Solomon Islands' TB Program 2024 - 2026. World Vision have indicated they are keen to work in partnership with the BCA. In addition, the BCA and Australian partners met with the Global Fund Senior Fund Portfolio Manager, South East Asia Regional Team. Global Fund representatives have acknowledged the BCA Tribal TB Model and Baru TB Ranger program as perfect examples of community-based TB programming.

The Global Fund have allocated funds to establish a TB Aid Post (Babala in Kwaio). The funds will be used to employ a nurse and purchase a GenXpert machine for point of care testing at Kafurumu village which will be within 1.5 days walk for all people residing in the mountains. Construction of the Babala will commence in 2024.

The above advocacy activities are big steps towards a sustainably-funded East Kwaio Fataia TB Program so the people in the central mountains of Malaita are not left behind in the fight against TB.



HISTORY OF FUNDING FOR RESEARCH ACTIVITIES 1999 – 2023

Research Awards 2001 – 2023

ARC Research Support Grants (2020 – 2023)

Date	Recipient	Subject	Award
2023	Dr Lauren Fairley *University of Technology Sydney/ Centenary Institute*	Mitochondrial transplantation as a next generation therapeutic for chronic obstructive pulmonary disease	$19,366
2023	Professor Steve Graham *University of Melbourne*	Evaluation of detect-treat-prevent for MDR/RR-TB in Indonesian children	$20,000
2023	Dr Emily MacLean *University of Sydney*	Finding tuberculosis among adolescents: new diagnostic tools and strategies	$18,500
2023	Professor Guy Marks *Woolcock Institute of Medical Research*	Barriers to Latent Tuberculosis Treatment in Ca Mau, Vietnam	$20,000
2022	Associate Professor Stephen Corbett *Sydney University, Western Clinical School*	A case control study investigating the high incidence of TB among Nepalese immigrants in NSW: Descent from altitude or a legacy of genetic adaptations to hypoxia?	$20,000
2022	Associate Professor Larcombe *Curtin University/Telethon Kids Institute*	The impact of heated-tobacco-product use on gene expression in the lung - are they really a better alternative to cigarette smoking?	$20,000
2022	Professor Mark Nicol *University of Western Australia*	A comparative evaluation of the accuracy of tuberculosis-specific skin tests in Thailand	$19,923
2022	Associate Professor Michelle Redman-MacLaren *James Cook University, Queensland*	Understanding the experience of women in a TB hot spot in Solomon Islands to help effectively find, treat and care for people with TB	$20,000
2021	Associate Professor Anna Coussens *Walter & Eliza Hall Institute, Victoria*	Identifying Age, Sex and Vitamin D Modified Immune Correlates of TB Risk	$20,000
2021	Professor Graeme Zosky *University of Tasmania*	The role of the placenta in determining the post-natal effects of in utero exposure to bushfire smoke	$20,000
2020	Professor Gary Lee *Institute for Respiratory Health, University of Western Australia*	Mechanisms of Streptococcus pneumoniae mesothelial cell invasion	$20,000
2020	Associate Professor Katharina Ronacher *Mater Research Institute, The University of Queensland*	Pre-clinical validation of a novel target for host-directed therapy for the treatment of TB	$20,000
2020	Dr Hannah Moore *Telethon Kids Institute, WA*	Understanding the true burden of paediatric respiratory syncytial virus in order to optimise prevention programs	$20,000

ARC Harry Windsor Medical Research Grants (2001 - 2019)

Date	Recipient	Subject	Award
2019	Warwick Britton *Centenary Institute, University of Sydney, NSW*	Protecting the lungs against TB by pulmonary delivery of a novel TB Service.	$20,000
2019	Chris Degeling *University of Wollongong, NSW*	TB elimination: a qualitative investigation of the perspectives of South Asian migrant communities in the Illawarra.	$20,000
2019	Justin Denholm *University of Melbourne, VIC*	Evaluating the impact of LTBI treatment strategies in Australia	$20,000
2018	Paul King *Monash Medical Centre and Monash University, VIC*	Influenza A virus (IAV) infection induces the formation of phagocytic extracellular traps, which contribute to the pathogenesis of exacerbations of COPD	$50,000

Date	Recipient	Subject	Award
2018	Cynthia Whitchurch *University of Technology Sydney, NSW*	Understanding the immunology of Pseudomonas aeruginosa lung infection.	$50,000
2017	Michael Berk *Deakin University, VIC*	Can we reduce tobacco smoking using N-acetylcysteine as a cessation treatment	$50,000
2017	Greg Fox *University of Sydney, NSW*	New digital strategies to enhance tuberculosis treatment adherence in Vietnam	$50,000
2016	Graeme Zosky *University of Tasmania, TAS*	Iron laden particulate matter enhances bacterial growth in the lung	$50,000
2016	Paul Foster *University of Newcastle, NSW*	Understanding the role of the newly discovered 2D4 T helper(TH) - 22 cell subset in models of respiratory infection and inflammation	$50,000
2016	Ian Yang *University of Queensland, QLD*	Using the lung microbiome to predict responses to continuous antibiotics in COPD	$50,000
2015	Brian Oliver *The Woolcock Institute and* *The University Of Technology, NSW*	Understanding the aetiology of small airway fibrosis in COPD	$50,000
2015	Harin Karunajeewa *The Walter and Eliza Institute, VIC*	Getting the dose right in Tuberculosis: Pharmacokinetics to improve outcomes in Tuberculosis	$50,000
2014	Daniel Chambers *The Prince Charles Hospital, QLD* *Lung Transplant Service, QLD*	Disease tolerance and transplant tolerance – two sides of the same coin?	$50,000
2013	Brian Oliver *University of Sydney, NSW*	Why do fibroblasts from people with COPD produce extracellular matrix proteins in response to ciagraette smoke?	$50,000
2012	Bernadette Saunders *Centenary Institute, Sydney, NSW*	Microparticles and microRNA as biomarkers of TB disease	$50,000
2011	Ross Coppel, Paul Crellin et al *Monash University, Melbourne, VIC*	Identification of inhibitors of PimA, a new target for tuberculosis therapy	$50,000
2010	Peter Bye *Royal Prince Alfred Hospital,* *Sydney, NSW*	Novel interventions for the diverse population of Australia with bronchiectasis	$50,000
2009	Sandra Hodge *Hanson Institute, Adelaide, SA*	Investigation of macrophage function as a therapeutic target in chronic obstructive pulmonary disease/emphysema (COPD)	$50,000
2008	Jenny Alison *University of Sydney, NSW*	Optimising mucus clearance with exercise in cystic fibrosis	$50,000
2008	Stephen Stick, Anthony Kicic & Siobhan Brennan *University of WA, Perth, WA*	A randomised controlled trial of L-arginnine or vitamin D to improve outcomes in pulmonary tuberculosis	$50,000
2007	Siobhain Brennan and Anthony J Kettle *Telethon Institute for Child Health* *Research, Perth, WA*	Investigating markers of oxidative stress in young children with cystic fibrosis: a driving mechanism of pulmonary investigation	$50,000
2007	Stephen Bozinovski and Ross Vlahos *University of Melbourne, VIC*	Cigarette smoke chemically modifies and inactivates lung innate immunity mediated by the bacterial receptor, TLR4	$50,000

Date	Recipient	Subject	Award
2006	Paul Kelly, Graeme Maguire, Peter Morris, Ivan Bastian & Nicholas Anstey *Menzies School of Health Research, Darwin, NT*	Nutritional intervention to improve tuberculosis treatment outcome in Timika, Indonesia: the NUTTS study	$50,000
2006	David Jans *Monash University, Melbourne, VIC*	Role of phosphorylation in regulating nuclear trafficking during infection of respiratory syncitial virus matrix protein	$50,000
2006	Robert Capon *University of Queensland, QLD*	A new non-toxic approach to controlling bacterial infection	$49,000
2005	Paul Reynolds, Gregory Hodge, Sandra Hodge, Mark Holmes *Royal Adelaide Hospital, Adelaide, SA*	Infection versus rejection in lung transplant related bronchiolitis obliterans syndrome: can intracellular cytokines help?	$50,000
2005	Kwung Fong & Annalese Semmler *Prince Charles Hospital, WA*	Novel methylated genes in lung cancer	$52,250
2004	Warwick Britton, Guy Marks and Bernadette Saunders *Centenary Institute of Cancer Medicine & Cell Biology, Sydney, NSW*	Evaluation of genetic and environment risk factors for progression to active tuberculosis in the Liverpool cohort	$44,701
2004	Paul Kelly, Nick Anstey, Graeme Maguire et al *Menzies School of Health Research, Darwin, NT*	Pulmonary Function in Tuberculosis patients in Timika District, Papua Province, Indonesia	$43,267
2002-2003	James Triccas & Warwick Britton *Centenary Institute of Cancer Medicine & Cell Biology, Sydney, NSW*	New strategies to vaccinate against Mycobacterium tuberculosis	$112,588
2002	Amanda Leach, Heidi Smith-Vaughan Marius Puruntamerri, Ross Baillie & Peter Morris *Menzies School of Health Research, NT*	Improved hygiene measures for reduced infection in Australian Aboriginal Children: a randomised controlled trial	$48,424
2002	Evangelia Daviskas, Sandra Anderson & Iven Young *Royal Prince Alfred Hospital, Sydney, NSW*	Effect of mannitol on the clearance of mucus in patients with COPD	$38,593
2001	Amanda Baker and Vaughan Carr *University of Newcastle, NSW*	Randomised controlled trial of a smoking cessation intervention among people with a mental illness	$63,370
2001	Terence Amis and John Wheatley *Westmead Hospital, NSW*	The role of snoring and obstructive sleep apnoea in the pathogenesis of hypertension	$45,665
2001	James Wiley and Tania Sorrell *University of Sydney, NSW*	The monocyte-macrophage P2x7 receptor and susceptibility to tuberculosis	$45,000
2001	John Wiggers, Afaf Girgis, Robyn Considine, Jenny Bowman *University of Newcastle, NSW*	Preventing infant exposure to tobacco smoke: evaluation of an early childhood intervention	$53,006

ARC Ann Woolcock Fellowship Awards (2005 - 2014)

Date	Recipient	Subject	Award
2010-2014	Jodie Simpson *Newcastle University, NSW*	Characterisation and treatment of innate immune dysfunction in older people with obstructive airway disease	$258,763
2005-2009	Ingrid Laing *Telethon Institute for Child Research, Perth,WA*	Genetic Influences on causal pathways of ALRIs in highly susceptible infants	$285,000

ARC Ann Woolcock Biomedical And Postgraduate Research Scholarship Awards (2002 - 2004)

Date	Recipient	Subject	Award
2003-2004	Corrina Parker *Australian National University, Canberra, ACT*	Detection, isolation and characterisation of novel anti-effective agents from cultured micro-fungi	$40,143
2003-2004	Kylie Turner *University of Sydney, NSW*	Investigation of the structure of cryptococcal phospholipases	$40,143
2002- 2004	Zoe Barker-Whittle (McKeough) *Royal Prince Alfred Hospital, Sydney, NSW*	Evaluation of lung volume reduction surgery in patients with chronic airflow limitation	$59,214
2002-2003	Shoma Dutt *Westmead Hospital, Sydney, NSW*	Biliary lipids in liver disease and interstitial phospholipid metabolism in children with cystic fibrosis	$41,793
2002-2003	Rita Machaalani *University of Sydney, NSW*	Neurone receptor systems in sudden infant death and piglets exposed to hypercapnic-hypoxia	$29,214
2002- 2003	Anup Desai *University of Sydney, NSW*	The contribution of obstructive sleep apnoea to driver fatigue in transport drivers	$55,793

ARC Harry Windsor Biomedical And Postgraduate Research Scholarship Awards (1999 - 2001)

Date	Recipient	Subject	Award
2001	Anup Desai *University of Sydney, NSW*	Interaction of mild obstructive sleep apnoea, sleep deprivation and circadian factors in cognitive function	$27,793
2000-2001	Shoma Dutt *Westmead Hospital, Sydney, NSW*	Biliary lipids in liver disease and interstitial phospholipid metabolism in children with cystic fibrosis	$40,311
2000-2001	Rita Machaalani *University of Sydney, NSW*	Neurone receptor systems in sudden infant death and piglets exposed to hypercapnic-hypoxia	$37,454
1999-2001	Anna Hansen *University of Sydney, NSW*	The role of cytokines in the immunity and pathology of malaria	$56,703
1999-2001	Rosemary Santangelo *Westmead Hospital, Sydney, NSW*	Phospholipases of Cryptococcus neoformans	$63,498
1999-2001	George Latouche *University of Sydney, NSW*	Phopholipases as potential virulence factors of Cryptococcus neoformans variety Gattii	$55, 089



HISTORY OF FUNDING FOR PROJECT ACTIVITIES 1999 – 2023

Project Funding 1999 – 2023

Date	Recipient/Project	Award
2023	East Kwaio, Malaita, Solomon Islands Baru Conservation Alliance TB Rangers program to support community-based TB control and advocacy in remote mountain areas of East Kwaio, Malaita, Solomon Islands	$21,983
2023	Australia In-Language Resources to Empower Top End Communities Against TB	$19,040
2022	East Kwaio, Malaita, Solomon Islands Community-based TB case finding and treatment support: working with Baru Conservation Alliance rangers in the remote mountain areas of East Kwaio	$19,757
2022 – 2023	Kiribati and the South Pacific (Fiji, Kiribati, Nauru, Solomon Islands, Tuvalu and Vanuatu) Pathway to the Elimination of Antibiotic Resistant and Latent TB (and Leprosy) in the Pacific "PEARL Study"	$557,829
2021	Development of Cultural Competency Guides for the USAPIs	$13,593
2020	Solomon Islands Cough and Premature Death in the Solomon Islands	$18,000
2020-2021	East Kwaio, Solomon Islands Community based TB case finding and treatment support	$19,703
2018-2023	Australia Support for homeless and vulnerable people with TB	$37,542
2018	The Safe Working Practices Laboratory Handbook - a Global Resource	$13,500
2018-2020	Pacific Island TB Network Sputum Quality project	$10,000
2017	Marshall Islands Funding A1c kits for the screening activity on Ebeye Island	$5,264
2017-2018	Papua New Guinea Economic evaluation of patient costs associated with tuberculosis and care in Papua New Guinea.	$25,000
2015-2023	Australia Establishing a framework for TB nursing education in Australia	$142,121
2013-2016	Solomon Islands Improving TB control in remote area of Solomon Islands	$64,744
2012	Bangladesh Bangladesh MDR-TB Project, an investigation into risk factors for MDR-TB in communities in Bangladesh	$10,000
2011	Australia Kimberley Aboriginal Medical Services Council (KAMSC) Cultural exchange of Be Our Ally Beat Smoking Study (BOABS) workers to visit Maori Tobacco Control Programs in New Zealand	$10,000
2011-2018	Vietnam MECOR Course - Level 1, Level 2 and Level 3 workshops	$90,000
2010	Secretariat of Pacific Community Evaluation of the effectiveness of the Community Component of the Kiribati Quality TB Epidemic Control Project	$4,800

PROJECT ACTIVITIES & FUNDING

Date	Recipient/Project	Award
2010	Australia Menzies School of Health Research Development of educational resources, 3 Talking posters and 3 flipcharts on pneumonia, bronchiolitis and bronchiectasis	$35,000
2009	Federated States of Micronesia Capacity Building for TB nurses and related health workers in the Federated States of Micronesia (FSM) A partnership with Eli Lilly	$31,424
2009-2012	Cambodian Anti-Tuberculosis Association Cambodia: TB control in elderly and vulnerable groups and in factories	$110,637
2008-2009	Secretariat of Pacific Community TB Drama Video Production in Kiribati	$35,000
2008-2009	Federated States of Micronesia (Chuuk) Support of a tutor and education materials for children for MDRTB	$5,537
2007-2009	Australia Aboriginal Health Council of Western Australia (AHCWA) Beyond the Big Smoke: a clear vision for Aboriginal tobacco control in Western Australia	$200,000
2007-2009	Australia Aboriginal Health and Medical Research Council (AH&MRC) BREATHE: Project. This project aims to reduce smoking-related disease and morbidity for Aboriginal people in NSW communities	$490,200
2007-2008	Secretariat of Pacific Community Enhancing Community involvement in TB control through Theatre in Kiribati	$40,926
2006-2023	US Affiliated Pacific Islands - Capacity building through education and training PITCA – Training of nurses and related workers in the Northern Pacific	$249,636
2006	Kiribati Nurse training in Kiribati	$41,699
2006	Building of TB Laboratory at Tunguru Hospital Kiribati	$30,000
2005	Maningrida Lung Health Community Awareness Raising Pilot Project Funding (James N Kirby Foundation $12,000)	$20,000
2002 - 2005	TB laboratory Training Tonga, Samoa, Kiribati and the Cook Islands	$189,231
2001	Distribution of books: Clinical Tuberculosis and Tobacco or Health: A Global Threat through Teaching Aids at Low Cost.	$2,000
2000	Sponsored Professor Don Enarson, Scientific Director of IUATLD, to be guest speaker at the NSW Health Department TB Nurses Conference	$3,000
2000	Participation in the WHO, “First Stop TB Meeting in the Pacific Islands” in Noumea	$4,000
1999	Provided funding for the translation of “Tobacco or health: A Global Threat” through Teaching Aids at Low Cost	$3,000
1999	Visit to Port Moresby and Lae to evaluate the DOTS TB Programme	$4,000
1999	Funded purchase of course textbooks for Epidemiology Workshop in Port Moresby	$1,000

2023 FINANCIALS and ACFID SUMMARY

Directors' Report

Your Directors present their report on the Company for the financial year ended 31 December 2023.

Australian Respiratory Council (A Company Limited by Guarantee) A.B.N. 11 883 368 767

Directors

The Directors at any time during or since the end of the financial period are:

Name and Qualifications Experience and Special Responsibilities

David Macintosh AM KMG
BBS (UTS) FCA
Appointed to the Board 19 June 1997. President
Interest in contracts: Nil

Robyn Johnson
GAICD
Appointed to the Board on 5 November 2012. Vice President
Interest in contracts: Nil

Christopher Turner
BCom Dip FS FPA
Appointed to the Board 22nd May 2017. Finance Director
Interest in contracts: Nil

Kerrie Shaw
Registered Nurse
Appointed to the Board 4 February 2013
Chair ARC Project Group
Interest in contracts: Nil

Professor Gregory Fox
PhD MIPH FRACP MB BS BSc(Med) GAICD
Appointed to the Board 22 May 2017. Chair ARC Research Committee
Interest in contracts: Nil

Jean Santos
BSCS IT
Appointed to the Board on 27 May 2019
Interests in contracts: Nil

Michael Smith AO
Major General - Retired
Appointed to the Board 10 July 2022
Interests in contracts: Nil

Professor Hiran Selvadurai
MBBS FRACP PhD FThorSoc
Appointed to the Board on 16 February 2023
Interests in contracts: Nil

Amanda Christensen AM
Registered Nurse
Appointed to the Board on 22 January 2001.
Executive Director, Company Secretary
Interests in contracts: Nil

Meetings of Directors

The number of Directors' meetings held during the financial period and the number of meetings attended by each Director were:

Name of Director	Number Held while in Office	Number attended
David Macintosh AM KMG	4	4
Robyn Johnson	4	4
Christopher Turner	4	4
Kerrie Shaw	4	3
Gregory Fox	4	4
Jean Santos	4	3
Michael Smith AO	4	4
Hiran Selvadurai	4	4
Amanda Christensen AM	4	4

PRINCIPAL ACTIVITIES

The principal activity of the Company during the financial year was to provide funding and expertise of research and projects aimed at improving lung health.

The Company's short term objectives are to:

i) continue to build expertise in respiratory health.

ii) foster innovation in respiratory health research.

iii) deliver and measure positive impacts to communities and research.

iv) enhance ARC's role in the country as a unique non-government organisation in the area of lung health.

v) advocate to improve respiratory health, particularly in relation to TB and smoking at state, national and international levels.

The Company's long term objectives are to:

i) develop and support innovative and effective approaches to research and development in lung health.

ii) to improve lung health in communities, with an emphasis on disadvantaged groups.

To achieve these objectives, the Company has adopted the following Strategies:

i) the Board strives to attract sustainable partnerships.

ii) the Board undertakes fundraising.

iii) the Board actively seeks funding.

The Company is incorporated under the Corporations Act 2001 and is a Company limited by guarantee. If the Company is wound up, the Constitution states that each member is required to contribute a maximum of $1.00 towards meeting any outstanding obligations of the Company. At 31 December 2023 the collective liability of members was $24 (2022:$24)

AUDITORS' INDEPENDENCE DECLARATION UNDER SECTION 307C OF THE CORPORATION ACT 2001

A copy of the Auditor's Independence Declaration follows this Directors' Report.

Signed in accordance with a resolution of the Board of Directors:

Christopher Turner
Director
Sydney, 26th April 2024

Amanda Christensen AM
Executive Director
Sydney, 26th April 2024

Auditor's Independence Declaration Under Section 307C of the Corporations Act 2001 to the Directors of Australian Respiratory Council

In accordance with s 307C of the Corporations Act 2001, I am pleased to provide the following declaration of independence to the directors of the Australian Respiratory Council. As the lead audit partner for the audit of the financial report of Australian Respiratory Council for the year ended 31/12/2023, I declare that, to the best of my knowledge and belief, there have been no contraventions of:

i. the auditor independence requirements of the Corporations Act 2001 in relation to the audit; and

ii. any applicable code of professional conduct in relation to the audit.

The audit opinion expressed in this report has been fromed on the above basis.

CONROY AUDIT AND ADVISORY

D R Conroy FCA
Principal
Auditor No: 2251
Sydney, 26th April 2024

Statement Of Profit Or Loss And Other Comprehensive Income

For the Year Ended 31 December 2023

	Note	2023 $	2022 $
Revenue	2	618,527	3,031,859
Depreciation and amortisation expense	3	(23,417)	(3,282)
Research grants, fellowships and scholarships		(101,006)	(90,000)
Education & scholarships		(17,828)	(12,769)
Project funding & Unexpended Funds		(372,116)	(376,585)
Investment expense		(19,978)	(19,890)
Employee benefits expense		(190,732)	(195,757)
Other expenses		(143,903)	(99,483)
Profit/(Loss) before income tax		(250,453)	2,234,093
Income tax expense	1	-	-
Profit/(Loss) for the year		(250,453)	2,234,093
Other comprehensive income after tax:			
Net gain on revaluation of investment property		-	-
Net gain /(Loss) on revaluation of financial assets		23,560	(205,820)
Other comprehensive income for the year net of tax		23,560	(205,820)
Total comprehensive income for the year		(226,893)	2,028,273

Statement Of Financial Position

As at 31 December 2023

	Note	2023 $	2022 $
ASSETS			
Current Assets			
Cash and cash equivalents	5	4,147,097	6,209,826
Trade and other receivables	6	5,265	43,000
Other current assets	7	7,022	6,986
Total Current Assets		**4,159,384**	**6,259,812**
Non-Current Assets			
Financial assets	8	1,794,312	1,719,646
Property, plant and equipment	9	2,035,776	39,870
Total Non-Current Assets		**3,830,088**	**1,759,516**
TOTAL ASSETS		**7,989,472**	**8,019,328**
LIABILITIES			
Current Liabilities			
Trade and other payables	10	32,536	18,284
Unexpended Funds	11	891,706	678,035
Employee Entitlements	12	80,770	74,884
Total Current Liabilities		**1,005,012**	**771,203**
TOTAL LIABILITIES		**1,005,012**	**771,203**
NET ASSETS		**6,984,460**	**7,248,125**
EQUITY			
Reserves	13	2,475,563	2,452,003
Retained earnings		4,508,897	4,796,122
TOTAL EQUITY		**6,984,460**	**7,248,125**

Statement Of Changes In Equity

For The Year Ended 31 December 2023

	Capital Profits Reserves $	Asset Revaluation Reserves $	Retained Earnings/ (Accumulated Losses) $	Total $
Balance at 1 January 2022	2,411,980	2,116,900	690,972	5,219,852
Profit/(Loss) attributable to members	-	-	2,234,093	2,234,093
Total comprehensive income for the year	-	(2,076,877)	1,871,057	(205,820)
Balance at 31 December 2022	**2,411,980**	**40,023**	**4,796,122**	**7,248,125**
Profit/(Loss) attributable to members	-	-	(287,225)	(287,225)
Total comprehensive income for the year	-	23,560	-	23,560
Balance at 31 December 2023	**2,411,980**	**63,583**	**4,508,897**	**6,984,460**

Statement Of Cash Flows

For The Year Ended 31 December 2023

	Note	2023 $	2022 $
Cash Flows From Operating Activities			
Receipts from customers		658,148	995,927
Payments to suppliers and employees		(776,911)	(932,757)
Interest received		138,533	70,725
Distributions received		69,625	65,148
Net cash provided by (used in) operating activities	**17(b)**	**60,533**	**199,043**
Cash Flows From Investing Activities			
Proceeds from sale of Investment Property		-	5,409,485
Payment for property, plant and equipment		(2,023,490)	(1,814)
Payment for available-for-sale investments		(73,000)	(143,677)
Proceeds for available-for-sale investments		10,000	-
Net cash provided by (used in) investing activities		**(2,086,490)**	**5,263,994**
Net Increase/(Decrease) in Cash Held		(2,025,957)	5,463,037
Cash at beginning of financial year		6,209,826	746,789
Cash at end of financial year	**17(a)**	**4,183,869**	**6,209,826**

Notes To And Forming Part Of The Accounts

For The Year Ended 31 December 2023

Note 1 - Summary Of Significant Accounting Policies

Basis of Preparation

The financial statements are general purpose financial statements that have been prepared in accordance with Australian Accounting Standards – Simplified Disclosures (SD) of the Australian Accounting Standards Board (AASB) and the Corporations Act 2001. The entity is a not-for-profit entity for financial reporting purposes under Australian Accounting Standards.

Australian Accounting Standards set out accounting policies that the AASB has concluded would result in financial statements containing relevant and reliable information about transactions, events and conditions. Material accounting policies adopted in the preparation of these financial statements are presented below and have been consistently applied unless stated otherwise.

The financial statements, except for the cash flow information, have been prepared on an accrual basis and are based on historical costs, modified, where applicable, by the measurement at fair value of selected non-current assets, financial assets and financial liabilities. The amounts presented in the financial statements have been rounded to the nearest dollar.

The financial statements are signed in accordance with a resolution of the directors.

Accounting Policies

Income Tax

No provision for income tax has been raised as the entity is exempt from income tax under DIV 50 of the Income Tax Assessment Act 1997. The Australian Taxation Office also endorsed the Company as a deductible gift recipient.

Inventories

Inventories are measured at the lower of cost and net realisable value.

Investment Property

Investment property is property held either to earn rental income or for capital appreciation or for both, but not for sale in the ordinary course of business use in the production or supply of goods or services or for administrative purposes. Investment property is measured at cost on initial recognition and improvements have been depreciated over their useful life.

When the use of a property changes such that it is reclassified as property, plant and equipment, its fair value at the date of reclassification becomes its cost for subsequent accounting.

Depreciation

The depreciable amount of all fixed assets, including buildings and capitalised lease assets, but excluding freehold land, is depreciated on a straight line basis and diminishing value basis over their useful lives to the Company commencing from the time the asset is held ready for use.

The depreciation rates used for each class of depreciable assets are:

Class of Fixed Asset	Depreciation Rate
Plant and Equipment	7.5% - 50%
Land & Buildings	2.50%

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at each balance sheet date.

Gains and losses on disposals are determined by comparing proceeds with the carrying amount. These gains and losses are included in the statement of profit or loss.

Impairment of non-financial assets

Non-financial assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount.

Recoverable amount is the higher of an asset's fair value less costs of disposal and value-in-use. The value-in-use is the present value of the estimated future cash flows relating to the asset using a pre-tax discount rate specific to the asset or cash-generating unit to which the asset belongs. Assets that do not have independent cash flows are grouped together to form a cash-generating unit.

Leases

At inception of a contract, the entity assesses if the contract contains or is a lease. If there is a lease present, a right-of-use asset and a corresponding lease liability is recognised by the entity where the entity is a lessee. However all contracts that are classified as short-term leases (lease with remaining lease term of 12 months or less) and leases of low-value assets are recognised as an operating expense on a straight-line basis over the term of the lease.

Initially the lease liability is measured at the present value of the lease payments still to be paid at the commencement date. The lease payments are discounted at the interest rate implicit in the lease. If this rate cannot be readily determined, the entity uses the incremental borrowing rate.

Lease payments included in the measurement of the lease

Notes To And Forming Part Of The Accounts

For The Year Ended 31 December 2023

liability are as follows: –fixed lease payments less any lease incentives;

- variable lease payments that depend on an index or rate, initially measured using the index or rate at the date;
- the amount expected to be payable by the lessee under residual value guarantees;
- the exercise price of purchase options, if the lessee is reasonably certain to exercise the options;
- lease payments under extension options, if the lessee is reasonably certain to exercise the options; and
- payments of penalties for terminating the lease, if the lease term reflects the exercise of an option to terminate the lease.

The right-of-use assets comprise the initial measurement of the corresponding lease liability as mentioned above, any lease payments made at or before the commencement date, as well as any initial direct costs. The subsequent measurement of the right-of-use assets is at cost less accumulated depreciation and impairment losses.

Right-of-use assets are depreciated over the lease term or useful life of the underlying asset, whichever is the shortest. Where a lease transfers ownership of the underlying asset or the cost of the right-of-use asset reflects that the entity anticipates to exercise a purchase option, the specific asset is depreciated over the useful life of the underlying asset.

Trade and other payables

These amounts represent liabilities for goods and services provided to the company prior to the end of the financial year and which are unpaid. Due to their short-term nature they are measured at amortised cost and are not discounted. The amounts are unsecured and are usually paid within 30 days of recognition.

Employee Benefits

Short-term employee benefits

Liabilities for wages and salaries, including non-monetary benefits, annual leave and long service leave expected to be settled wholly within 12 months of the reporting date are measured at the amounts expected to be paid when the liabilities are settled.

Other long-term employee benefits

The liability for annual leave and long service leave not expected to be settled within 12 months of the reporting date are measured at the present value of expected future payments to be made in respect of services provided by employees up to the reporting date using the projected unit credit method. Consideration is given to expected future wage and salary levels, experience of employee departures and periods of service. Expected future payments are discounted using market yields at the reporting date on national government bonds with terms to maturity and currency that match, as closely as possible, the estimated future cash outflows.

Revenue recognition

The company recognises revenue as follows:

Revenue from contracts with customers

Revenue is recognised at an amount that reflects the consideration to which the company is expected to be entitled in exchange for transferring goods or services to a customer. For each contract with a customer, the company: identifies the contract with a customer; identifies the performance obligations in the contract; determines the transaction price which takes into account estimates of variable consideration and the time value of money; allocates the transaction price to the separate performance obligations on the basis of the relative stand-alone selling price of each distinct good or service to be delivered; and recognises revenue when or as each performance obligation is satisfied in a manner that depicts the transfer to the customer of the goods or services promised.

Variable consideration within the transaction price, if any, reflects concessions provided to the customer such as discounts, rebates and refunds, any potential bonuses receivable from the customer and any other contingent events. Such estimates are determined using either the 'expected value' or 'most likely amount' method. The measurement of variable consideration is subject to a constraining principle whereby revenue will only be recognised to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur. The measurement constraint continues until the uncertainty associated with the variable consideration is subsequently resolved. Amounts received that are subject to the constraining principle are recognised as a refund liability.

Sales revenue

Interest revenue

Interest revenue is recognised as interest accrues using the effective interest method. This is a method of calculating the amortised cost of a financial asset and allocating the interest income over the relevant period using the effective interest rate, which is the rate that exactly discounts

estimated future cash receipts through the expected life of the financial asset to the net carrying amount of the financial asset.

Donations
Donations are recognised when received.

Grants
Grant revenue is recognised in profit or loss when the company satisfies the performance obligations stated within the funding agreements.

If conditions are attached to the grant which must be satisfied before the company is eligible to retain the contribution, the grant will be recognised in the statement of financial position as a liability until those conditions are satisfied.

Other revenue
Other revenue is recognised when it is received or when the right to receive payment is established.

Current and non-current classification
Assets and liabilities are presented in the statement of financial position based on current and non-current classification.

An asset is classified as current when: it is either expected to be realised or intended to be sold or consumed in the company's normal operating cycle; it is held primarily for the purpose of trading; it is expected to be realised within 12 months after the reporting period; or the asset is cash or cash equivalent unless restricted from being exchanged or used to settle a liability for at least 12 months after the reporting period. All other assets are classified as non-current.

A liability is classified as current when: it is either expected to be settled in the company's normal operating cycle; it is held primarily for the purpose of trading; it is due to be settled within 12 months after the reporting period; or there is no unconditional right to defer the settlement of the liability for at least 12 months after the reporting period. All other liabilities are classified as non-current.

Deferred tax assets and liabilities are always classified as non-current.

Cash and cash equivalents
Cash and cash equivalents includes cash on hand, deposits held at call with financial institutions, other short-term, highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

Trade and other receivables
Other receivables are recognised at amortised cost, less any allowance for expected credit losses.

Goods and Services Tax (GST)
Revenues, expenses and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the Australian Tax Office. In these circumstances the GST is recognised as part of the cost of acquisition of the asset or as part of an item of the expense. Receivables and payables in the statement of financial position are shown inclusive of GST.

Comparative Figures
Where required by Accounting Standards comparative figures have been adjusted to conform with changes in presentation for the current financial year.

Financial Instruments
Recognition and initial measurement

Financial instruments, incorporating financial assets and financial liabilities, are recognised when the entity becomes a party to the contractual provisions of the instrument.

Financial instruments are initially measured at cost plus transactions cost where the instrument is not classified as at fair value through profit or loss. Transaction costs related to instruments classified as at fair value through profit or loss are expensed to profit or loss immediately. Financial instruments are classified and measured as set out below.
Classification and subsequent measurement

1. Financial assets at fair value through profit or loss
   Financial assets are classified at fair value through the profit or loss when they are held for trading for the purpose of profit or loss in the short term profit taking. Realised and unrealised gains and losses arising from changes in fair value are included in profit or loss in the period in which they arise.

2. Loans and receivables
   Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market and are subsequently measured at amortised cost using the effective interest rate method.

Notes To And Forming Part Of The Accounts

For The Year Ended 31 December 2023

3. Held to maturity investments
   Held to maturity investments are non-derivative financial assets with fixed maturities and fixed or determinable payments, and it is the entity's intention to hold these investments to maturity. They are subsequently measured at amortised cost using the effective interest rate method.
4. Available for sale financial assets
   Available for sale financial assets are non derivative financial assets that are either designated as such or that are not classified in any of the other categories. They comprise investments in the equity of other entities where there is neither a fixed maturity nor fixed or determinable payments.
5. Financial Liabilities
   Non derivative financial liabilities (excluding financial guarantees) are subsequently measured at amortised cost using the effective interest rate method.

Fair value measurement

When an asset or liability, financial or non-financial, is measured at fair value for recognition or disclosure purposes, the fair value is based on the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date; and assumes that the transaction will take place either: in the principal market; or in the absence of a principal market, in the most advantageous market.

Fair value is measured using the assumptions that market participants would use when pricing the asset or liability, assuming they act in their economic best interests. For non-financial assets, the fair value measurement is based on its highest and best use. Valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, are used, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.

Critical Accounting Estimates Judgments and Assumptions

The preparation of the financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts in the financial statements. Management continually evaluates its judgements and estimates in relation to assets, liabilities, contingent liabilities, revenue and expenses. Management bases its judgements, estimates and assumptions on historical experience and on other various factors, including expectations of future events, management believes to be reasonable under the circumstances. The resulting accounting judgements and estimates will seldom equal the related actual results. The judgements, estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities (refer to the respective notes) within the next financial year are discussed below.

Estimation of useful lives of assets

The company determines the estimated useful lives and related depreciation and amortisation charges for its property, plant and equipment and finite life intangible assets. The useful lives could change significantly as a result of technical innovations or some other event. The depreciation and amortisation charge will increase where the useful lives are less than previously estimated lives, or technically obsolete or non-strategic assets that have been abandoned or sold will be written off or written down.

Impairment of non-financial assets other than goodwill and other indefinite life intangible assets

The company assesses impairment of non-financial assets other than goodwill and other indefinite life intangible assets at each reporting date by evaluating conditions specific to the company and to the particular asset that may lead to impairment. If an impairment trigger exists, the recoverable amount of the asset is determined. This involves fair value less costs of disposal or value-in-use calculations, which incorporate a number of key estimates and assumptions.

Employee benefits provision

As discussed in note 1, the liability for employee benefits expected to be settled more than 12 months from the reporting date are recognised and measured at the present value of the estimated future cash flows to be made in respect of all employees at the reporting date. In determining the present value of the liability, estimates of attrition rates and pay increases through promotion and inflation have been taken into account.

The Notes to the Financial Statements

The notes present information that is relevant to an understanding of the material items contained in the financial statements. The notes give prominence to areas that are considered to be most relevant to an understanding of the statement of financial position and the profit or loss and other comprehensive income and statement of changes in equity and cashflows and are cross referenced to those statements.

Notes To The Financial Statements

For The Year Ended 31 December 2023

		2023 $	2022 $
2.	**Revenue**		
	Operating Activities		
	Appeals	68,237	69,728
	Net profit/(loss) on sale of investments	(11,894)	21,243
	Rental revenue for property investment	-	123,096
	Interest received	138,533	70,725
	Fund distributions from investments	69,625	65,148
	Legacies & donations	12,945	3,408
	Member subscriptions	591	545
	Miscellaneous income	-	1,732
	Project Funding	312,406	363,749
	Sundry income	28,084	36,828
	Profit on Sale of Investment Property	-	2,275,657
	Total Revenue	618,527	3,031,859
3.	**Profit From Ordinary Activities**		
	Expenses		
	Depreciation of Non-Current Assets:		
	Land & Buildings	4,167	-
	Plant and equipment	23,417	3,282
		27,584	3,282
4.	**Auditor's Remuneration**		
	Remuneration of the Auditor of the Company for:		
	- Auditing the Financial Report	17,000	16,250
5.	**Cash and Cash Equivalents**		
	Cash at bank	1,147,097	1,059,826
	Term Deposit	3,000,000	5,150,000
		4,147,097	6,209,826
6.	**Trade and Other Receivables**		
	Trade debtors	-	-
	Accrued Income	5,265	43,000
		5,265	43,000
7.	**Other Current Assets**		
	Prepayments	7,022	6,986

Notes To The Financial Statements

For The Year Ended 31 December 2023

		2023 $	2022 $
8.	**Financial Assets**		
	Non Current		
	Managed funds - at fair value	1,794,312	1,719,646
	Total financial assets	**1,794,312**	**1,719,646**
9.	**Property, Plant & Equipment**		
	Non Current		
	Property		
	Land & Buildings at Cost	2,017,775	-
	Less: accumulated depreciation and impairment	(4,167)	
		2,013,608	-
	Plant & equipment at cost	80,698	74,983
	Less: accumulated depreciation and impairment	(58,530)	(35,113)
		22,168	39,870
	Total property, plant and equipment	**2,035,776**	**39,870**

The Company exchanged contracts for the purchase of 152 Walker Street Sydney on the 24th April, 2023. The purchase price was $2,010,000 plus relevant charges.

Movements in Carrying Amounts

Movement in the carrying amounts for each class of property, plant and equipment between the beginning and the end of the current financial year:

	Property $	Plant and Equipment $	Total $
Balance at the beginning of year	-	39,870	39,870
Additions	2,017,775	5,715	2,023,490
Disposals	-	-	-
Depreciation expense	(4,167)	(23,417)	(27,584)
Carrying amount at the end of year	**2,013,608**	**22,168**	**2,035,776**

10.	**Trade and Other Payables**		
	Unsecured liabilities		
	Trade payables	10,608	6,084
	Sundry payables and accrued expenses	21,928	12,200
	Total	**32,536**	**18,284**

Notes To The Financial Statements

For The Year Ended 31 December 2023

		2023 $	2022 $
11.	**Unexpended Funds**		
	Unexpended Funds	891,706	678,035
	Total	**891,706**	**678,035**

The Company has carried over Funds of $792,071 for Pearl Project and $99,635 from various other projects. These amounts will be applied in future years as per relevant grant conditions.

12.	**Employee Entitlements**		
	Provision for annual leave	46,155	44,292
	Provision for long service leave	34,615	30,592
	Total	**80,770**	**74,884**
	Number of employees		
	Number of employees at year end	2	2
13.	**Reserves**		
	Capital profits reserve	2,411,980	2,411,980
	Asset revaluation reserve	63,583	40,023
	Total	**2,475,563**	**2,452,003**
	Nature and purpose of reserves		
	(a) Capital Profits		
	The capital profits reserve is used to accumulate realised capital profits		
	Balance at end of year	2,411,980	2,411,980
	(b) Asset revaluation		
	The asset revaluation reserve is used to record increments and decrements in the value of non current assets		
	Balance at beginning of year	40,023	2,116,900
	Revaluation increment/(decrement)	23,560	(2,076,877)
	Transfers	-	-
	Balance at end of year	**63,583**	**40,023**

14. Members' Guarantee

The Company is limited by guarantee. If the Company is wound up, the Constitution states that each member is required to contribute a maximum of $1 each towards meeting any outstanding obligations of the Company. At 31 December 2023 the number of members was 24 (2022:24).

Notes To The Financial Statements

For The Year Ended 31 December 2023

15. Key Management Personnel

Any person(s) having authority and responsibility for planning, directing and controlling the activities of the entity, directly or indirectly, including any Director (whether executive or otherwise) of that entity is considered key management personnel.

The totals of remuneration paid to key management personnel (KMP) of the Company during the year are as follows:

	2023 $	2022 $
Key management personnel compensation	183,238	192,052

16. After Balance Day Events

From 31st December 2022 to the date of this report, there has been no subsequent event that would have a material effect on the financial position of the company except as disclosed in these financial statements.

17. Cash Flows Information

(a) Cash at the end of the financial year as shown in the cash flow statementis reconciled to items in the balance sheet as follows:

Cash and cash equivalents	4,147,097	6,209,826

(b) Reconciliation of Cash Flow from Operations with Profit after Income Tax		
Net income/loss for the period	(250,453)	2,234,093
Cash flows excluded from profit attributable to operating activities		
Non cash flows in profit		
Depreciation	27,584	3,282
Net (gain)/loss on disposal of investments	11,894	(2,295,929)
Changes in assets and liabilities, net of the effects of purchase and disposal of subsidiaries		
(Increase)/decrease in trade and term receivables	37,735	(25,000)
(Increase)/decrease in prepayments	(36)	203
Increase/(decrease) in trade payables and accruals	14,252	(48,991)
Increase/(decrease) in unexpended funds	213,671	323,176
Increase/(decrease) in provision for employee benefits	5,886	8,209
Net cash inflow/(outflow) from operating activities	60,533	199,043

Notes To The Financial Statements

For The Year Ended 31 December 2023

	2023 $	2022 $
Information and declarations to be furnished under the Charitable Fundraising Act 1991, Section 23		
(a) Details of aggregate gross income and total expenses of fundraising appeals		
Gross proceeds from fundraising appeals	69,655	73,137
Less: Total direct costs of fundraising	9,824	11,823
Net surplus from fundraising activities	**59,831**	**61,314**
(b) Statement showing how funds received were applied to charitable purposes		
This surplus is used for research grants, fellowships and scholarships.		
(c) Fundraising appeals conducted during the financial period		
Appeals only.		
(d) Comparisons		
Total cost of fundraising/gross income from fundraising	14%	16%
Net surplus from fundraising/gross income from fundraising	86%	84%
Total cost of services/total expenditure	100%	100%
Total cost of services/total income received	14%	16%

Summary Financial Report
Income Statement

For The Year Ended 31 December 2023

	2023 $	2022 $
REVENUE		
Donation and Gifts - Monetary & Non monetary	69,655	73,137
Grants		
Other Australian	28,084	105,458
Other overseas	535,412	520,445
Investment Income	196,263	280,212
Profit on Sale of Investment Property	-	2,275,657
Other Income	591	2,277
TOTAL REVENUE	**830,005**	**3,257,186**
EXPENDITURE		
International Aid and Development		
International programs		
Funds to international projects	305,906	310,375
Program Support Costs	66,210	66,210
Community education	17,828	14,469
Fundraising Costs		
Public	9,824	11,823
Accountability and Administration	261,513	214,952
Total International Aid and Development Programs Expenditure	**661,281**	**617,829**
Domestic projects	155,941	124,998
Investment Expenditure	19,978	38,387
Grants Unexpended	223,006	225,326
Other Expenses	20,252	16,553
TOTAL EXPENDITURE	**1,080,458**	**1,023,093**
EXCESS/(SHORTFALL) OF REVENUE OVER EXPENDITURE	(250,453)	2,234,093
Net gain/(loss) on revaluation of financial assets and investment property	23,560	(205,820)
EXCESS/(SHORTFALL) OF REVENUE OVER EXPENDITURE	(226,893)	2,028,273

During the financial year the Australian Respiratory Council had no transactions in the Revenue or Expenditure for International Political or Religious Adherence Promotion Program categories.

The above disclosures are prepared in accordance with the requirements set out in the ACFID Code of Conduct. For further information on the Code please refer to the ACFID website “www.acfid.asn.au”.

Summary Financial Report
Balance Sheet

As at 31 December 2023

	2023 $	2022 $
ASSETS		
Current Assets		
Cash and cash equivalents	4,147,097	6,209,826
Trade and other receivables	5,265	43,000
Other current assets	7,022	6,986
Total Current Assets	**4,159,384**	**6,259,812**
Non-Current Assets		
Financial assets	1,794,312	1,719,646
Property, plant and equipment	2,035,776	39,870
Total Non-Current Assets	**3,830,088**	**1,759,516**
TOTAL ASSETS	**7,989,472**	**8,019,328**
LIABILITIES		
Current Liabilities		
Trade and other payables	32,536	18,284
Unexpended Funds	891,706	678,035
Provisions	80,770	74,884
Total Current Liabilities	**1,005,012**	**771,203**
TOTAL LIABILITIES	**1,005,012**	**771,203**
NET ASSETS	**6,984,460**	**7,248,125**
EQUITY		
Reserves	2,475,563	2,452,003
Retained earnings	4,508,897	4,796,122
TOTAL EQUITY	**6,984,460**	**7,248,125**

At the end of the financial year the Australian Respiratory Council had no balances in the Inventories, Assets held for sale, Non current Trade and other receivables, Intangibiles, Current tax liabilities and Non Current Liabilities categories.

The above disclosures are prepared in accordance with the requirements set out in the ACFID Code of Conduct. For further information on the Code please refer to the ACFID website “www.acfid.asn.au”.

Summary Financial Report
Statement of Changes in Equity

For The Year Ended 31 December 2023

	Capital profits Reserves $	Asset Revaluation Reserves $	Retained Earnings/ (accumulated losses) $	Total $
Balance at 1 January 2022	2,411,980	2,116,900	690,972	5,219,852
Excess of revenue over expense	-	-	2,234,093	2,234,093
Total comprehensive income for the year	-	(2,076,877)	1,871,057	(205,820)
Balance at 31 December 2022	2,411,980	40,023	4,796,122	7,248,125
Excess of revenue over expense	-	-	(287,225)	(287,225)
Total comprehensive income for the year	-	23,560		23,560
Balance at 31 December 2023	**2,411,980**	**63,583**	**4,508,897**	**6,984,460**

The above disclosures are prepared in accordance with the requirements set out in the ACFID Code of Conduct. For further information on the Code please refer to the ACFID website "www.acfid.asn.au".

Directors' Declaration

The directors of the registered entity declare that, in the directors' opinion:

1. The financial statements and notes, are in accordance with the Australian Charities and Not-for-profits Commission Act 2012 and:
   i. comply with Australian Accounting Standards - Simplified Disclosures (SD) applicable to the entity; and
   ii. give a true and fair view of the financial position of the registered entity as at 31 December 2023 and of its performance for the year ended on that date.
2. There are reasonable grounds to believe that the registered entity will be able to pay its debts as and when they become due and payable.

This declaration is signed in accordance with subs 60.15(2) of the Australian Charities and Not-for-profits Commission Regulation 2013.



Christopher Turner
Director
Sydney, 26th April 2024



Amanda Christensen AM
Executive Director
Sydney, 26th April 2024

Independent Auditor Report

To The Members of the Australian Respiratory Council

Australian Respiratory Council
(A Company Limited by Guarantee)
A.B.N. 11 883 368 767

Report on the Audit of the Financial

Report Opinion

We have audited the financial report of Australian Respiratory Council (the registered entity), which comprises the statement of financial position as at 31 December 2023, the statement of profit or loss and other comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, notes comprising a summary of significant accounting policies and other explanatory information, and the directors' declaration.

In our opinion, the accompanying financial report of Australian Respiratory Council has been prepared in accordance with Div 60 of the Australian Charities and Not-for-profits Commission Act 2012, including:

(i) giving a true and fair view of the registered entity's financial position as at 31 December 2023 and of its financial performance for the year then ended; and

(ii) complying with Australian Accounting Standards - AASB 1060: General Purpose Financial Statements - Simplified Disclosures for For-Profit and Not-for-Profit Tier 2 Entities and the Corporations Regulations 2001.

We have also audited the summary financial reports of Australian Respiratory Council which in our opinion are in accordance with the requirements set out in the ACFID Code of Conduct. For further information on the Code please refer to the ACFID website "www.acfid.asn.au".

Basis for Opinion

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Report section of our report. We are independent of the registered entity in accordance with the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110: Code of Ethics for Professional Accountants (the Code) that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Information Other than the Financial Report and Auditor's Report Thereon

The directors are responsible for the other information. The other information comprises the information included in the registered entity's annual report for the year ended 31 December 2023, but does not include the financial report and our auditor's report thereon. Our opinion on the financial report does not cover the other information and accordingly we do not express any form of assurance conclusion thereon. In connection with our audit of the financial report, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial report or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Directors for the Financial Report

The directors of the entity are responsible for the preparation of the financial report that gives a true and fair view in accordance with Australian Accounting Standards – AASB 1060: General Purpose Financial Statements – Simplified Disclosures for For-Profit and Not-for-Profit Tier 2 Entities and the Corporations Act 2001 and the Australian Charities and Not-for-profits Commission Act 2012 and for such internal control as the directors determine is necessary to enable the preparation of the financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

In preparing the financial report, the directors are responsible for assessing the registered entity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the company or to cease operations, or have no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Report

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material

misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

As part of an audit in accordance with the Australian Auditing Standards, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.

Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial report or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the company to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial report, including the disclosures, and whether the financial report represents the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.



D R Conroy FCA
Principal
Auditor No: 2251
Sydney, 26th April 2024



CONROY AUDIT & ADVISORY
Chartered Accountants

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Sydney NSW 2000
Telephone: 02 9267 9227
Fax: 02 9261 3384
Email: admin@byranrush.com.au

Breath of Life

A Bequest to ARC provides a way to continue a lifetime of generous giving



One of the most important ways that ARC's loyal donors are helping ARC's work is by including a bequest to ARC in their Will. Bequests left to ARC are made from people from all walks of life, not just the wealthy. Even a modest gift can be life-changing. When you choose to leave a gift in your Will, it benefits the whole community.

Your Will allows you to express support for your fundamental values and can have an impact on the health and well-being of future generations – not only by the inheritance you leave to your family and friends but also the gift you can leave for the well-being of the community through ARC. After you have made provision for your family and friends in your Will, you may like to consider the ARC as a worthy recipient.

Such a gift to ARC would ensure that your name would always be remembered. By informing us of your intended bequest, ARC will be able to acknowledge you as a member of The Breath of Life group. The Breath of Life is a group of people who have told us that they plan to leave at least part of their estate to ARC. Through the Breath of Life group ARC can recognise the generosity and honour the contribution of its members. There is no obligation to becoming a member of The Breath of Life other than letting us know that you intend leaving a bequest in your Will.

A bequest can be of any size and can be given as cash, property or shares. All gifts large or small are important and greatly appreciated. All gifts make a difference.

Whatever amount you bequeath to ARC, be assured that it will be an enduring tribute to your generosity and concern for the welfare of your fellow man. Your bequest ensures the personal link and "journey' you have had with ARC over many years continues into the future.

Your Bequest will allow ARC to continue to offer the quality of service you have come to expect from us - reducing the incidence and impact of tuberculosis and respiratory disease in Australia and the Indo-Pacific Region.

If you would like to consider leaving a Bequest to ARC, please contact us for a copy of our Bequest booklet, "Your Security, Your Future".

HONOUR ROLL

breath of life

MS ELIZABETH AMY
MR & MRS AUSLEBROOK
MR PAUL DONALD BUCKLAND
MR JW DE B PERSSE
MR KENNETH JERVIS CARRICK
MRS NORA MAILFERT
MRS H NETTLESHIP
MR B REYNOLDS
MS MAUREEN SHARPE
MR JEFFREY WALKER
MRS VIOLET WILSON

MS SARAH AULD
MR GODFREY BARRINGTON GOODERE
MR GEOFFREY ROBERT BURFOOT
MS EILEEN HOOK
MR ROBERT LETTICH
MS JEAN MCIVER CALDWELL
MS ZULA NITTIM
MR JOHN ROBINSON
MS ALEXANDRA VAN RAALTE
MS L WALKER
ANONYMOUS (35)

Milestones
Over 100 years of service

1910
The National Association for the Prevention and Cure of Consumption forms at a public meeting in Sydney

1912
Australia's first tuberculosis (TB) dispensary opens in Sydney

1913
First Annual General Meeting of the National Association for the Prevention and Cure of Consumption was held

1941
Subscription from donors funds the acquisition of the first mobile x-ray unit

1954
Mobile x-ray units in NSW and other parts of Australia take more than 500,000 x-rays in a year

1982
Mobile vans are handed over to NSW Health

1986
The first grants are provided for respiratory research and overseas TB Control

2002
Laboratory skills training programs begin in the Pacific Region

2005
Dr Ingrid Lang is appointed as the first Ann Woolcock Research Fellow. Dr Lang's research is on Genetic influences on causal pathways of acute lower respiratory tract infections in highly susceptible infants

2005
In collaboration with the US Centers for Disease Control and Prevention the ARC Nurse Consultants commence annual training for nurses and health care workers across the Northern Pacific TB Programs

2006
Name changes from Community Health and Tuberculosis Australia (CHATA) to Australian Respiratory Council (ARC), reflecting our wider focus on respiratory health

2007
ARC funds two Aboriginal Tobacco Cessation Projects; The Aboriginal Health and Medical Research Council's BREATHE Project and the Aboriginal Health Council of Western Australia's Beyond the Big Smoke Project

2008
Development of a TB Resource Kit for professional and community education

2009
Funding and technical support for the project - Combating TB in factory workers and the elderly commences. ARC partners with the Cambodian Anti-TB Association to deliver this project

2010
Dr Jodie Simpson commences as the Ann Woolcock Research Fellow. Dr Simpson's research is on Characterisation and treatment of innate immune dysfunction in older people with obstructive airway disease

2011
ARC contributes funds for training medical officers to build research skills and capacity in future leaders in respiratory public health in Vietnam

2013
ARC celebrates 100 years of service and advocacy for TB and respiratory health in Australia and the Asia Pacific Region

2015
ARC hosted the 5th Conference of The Union Asia Pacific Region, held in Sydney, Australia

2016
Launch of "Funding the Discovery of New Knowledge"- a compilation of reports from Harry Windsor grant recipients 1986 -2015

2018
ARC contributes to the work of The Union Asia Pacific Region and The Union Nurses and Allied Professionals Sub-Section

2020
Graduate Diploma/Master of Nursing (TB Management) commenced

2022
PEARL Project - TB and Leprosy screening and capacity building activities commenced

2023
ARC continues to provide technical assistance and deliver capacity building activities for the PEARL Project.



arc
australian respiratory council
prevention and cure of respiratory illness

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