



SAHMRI

South Australian Health &
Medical Research Institute

Annual Report 2018



Acknowledgement **Of Country**

The South Australian Health and Medical Research Institute (SAHMRI) acknowledges the Kurna People as the Traditional Custodians of the Adelaide region, where our buildings are located.

We recognize the Kurna peoples' cultural, spiritual, physical and emotional connection with the land. We honour and pay our respects to Kurna elders, both past and present, and all generations of Kurna people, now and into the future.

We acknowledge the other Traditional Owners who live across South Australia, where SAHMRI research may be conducted.

Pictured: A segment from SAHMRI's Inaugural Reconciliation Action Plan (RAP) 2018-2020 Artwork

Karrawirra Pari by Allan Sumner



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A letter from the **Executive Director**

At this time each year I pause to reflect on SAHMRI's achievements and I continue to be amazed by our ability to grow in size, staff, output and influence while continuing to live by our mission of conducting inspired research leading to better health outcomes.

Though having just recently celebrated our fifth birthday, SAHMRI came in at number 40 in this year's esteemed The Times Higher Education list of the world's best research institutes. Only two other Australian institutes were rated higher.

SAHMRI's reputation for research excellence continues to attract significant investment in a range of fields, notably neonatal nutrition and cancer research. The National Health and Medical Research Council earlier this year committed to establishing the NHMRC Centre of Research Excellence in Targeted Nutrition to Improve Maternal and Child Health Outcomes, under the guidance of our Healthy Mothers, Babies and Children theme leader, Professor Maria Makrides. More recently, our Cancer theme leader, Professor Tim Hughes, accepted a grant to establish the Australian Cancer Research Foundation Centre for Integrated Cancer Systems Biology.

The SAHMRI-based Health Translation SA centre plays a vital role in ensuring our research delivers tangible benefits for patients. In July this year, that role was formally recognised by the Federal Government through more than \$6 million from the Medical Research Future Fund to support its operations for at least the next three years.



These achievements are not just a source of pride and validation for SAHMRI, they speak to another of our core values – collaboration. September this year saw the formalisation of partnerships within the Adelaide BioMed City precinct which includes SAHMRI, the Royal Adelaide Hospital, the University of Adelaide, the University of South Australia, Flinders University and the yet-to-be-built SAHMRI 2, incorporating the Bragg Centre for Proton Therapy and Research.

2018 saw SAHMRI's research funding grow more than 10 per cent to \$29.1m. We generated \$21.1m in commercial revenue and a total turnover of \$65.2m. Our main building on North Terrace is at capacity with around 450 staff, 200 students and 200 other partners.

But numbers can never truly tell the story of any organisation. Our strength is the quality of our people and that is why we remain committed to not just attracting the best minds and best people but providing support



and structures for those people to get the best from themselves. To that end, we have established our People and Culture Group to promote open conversations about life at SAHMRI and are preparing for an institute-wide engagement survey to identify sentiment around what we are doing well and areas we can improve.

While change is a constant in the health and medical research world, a departure that can't go without mention is that of one of SAHMRI's founding recruits and leaders, Professor Steve Nicholls. Our outgoing Deputy Director and Heart Health theme leader is transitioning to a new role as Director of Monash Heart with Monash Health in Melbourne. While we are sorry to see Professor Nicholls go we are rightly proud that one of our own has been chosen for such an eminent position. Our search for the right person to replace Professor Nicholls is underway and we are certain whoever is selected will bring energy, knowledge, vision and leadership.

The broad SAHMRI community can look forward to the end of year break with pride in another year of significant advancement and confidence that 2019 will bring with it further successes.

Professor Steve Wesselingh
Executive Director

A letter from the **Chair of the Board**

In November we celebrated SAHMRI's fifth birthday in the building. It was a great occasion, celebrating many great achievements; but my overwhelming thought was simply 'where has the time gone?'.

It is humbling to have been a part of those incredible formative years and inspiring to have seen SAHMRI grow so quickly into an institute of significance locally, nationally and internationally. The measures of our success are manifold, but a recent one I would like to highlight is the appointment of our Executive Director, Professor Steve Wesselingh, as Chair of the National Health and Medical Research Council's Research Committee.

This appointment is testament to Professor Wesselingh's body of work and standing in scientific circles but also an endorsement of the world-class research being done under his leadership and a indication of the esteem in which SAHMRI is held.

As proud as we are of the achievements of our individuals and groups, SAHMRI's greatest strength comes from our collaborations – internally between ourselves and externally with our partners.

SAHMRI was created by, and for, partnerships. So it was a natural progression for us to make those partnerships official through the formal constitution of Adelaide BioMed City. The ever-expanding SAHMRI, with work to begin soon on a second building to our eastern side, has joined with the Royal Adelaide Hospital, the University of Adelaide, the University of South Australia and Flinders University in committing to a shared vision of better research, education, innovation, investment and clinical care for South Australia and beyond.



But our collaborations aren't confined to the BioMed precinct at the western end of North Terrace. This year leading nutrition experts including Professor Gary Wittert have been instrumental in helping the Adelaide Convention Centre redesign its menus with a focus on health and sustainability. The 'Honest Goodness' menu's philosophy is to, as far as possible, serve unprocessed food with minimal salt, sugar and preservatives without compromising the exceptional taste and quality.

Though science and research are at our core, we take seriously our broader responsibilities to the communities we are part of. No responsibility is more important than Reconciliation. Reconciliation cannot be passive and so, on the 10th anniversary of the apology to the Stolen Generations in February this year, SAHMRI released its inaugural Reconciliation Action Plan.



The RAP lays out, in detail, measures to promote understanding of Indigenous cultures and engagement across cultures with the aim of far-reaching impact on staff, research projects and broader communities.

Indigenous cultures were also at the heart of this year's South Australian Living Artists (SALA) Festival installation, 'Heartlines'. Aboriginal Health researcher, Anna Dowling, in partnership with artist Laura Wills, invited staff and visitors to contribute to the enormous canvas spread over SAHMRI's entrance foyer. The spectacular finished work tells a tale of how connections between individuals, groups and their environment are essential in promoting physical health and mental wellbeing.

While SAHMRI will continue to be active contributing to the culture of Adelaide and South Australia, science and medical research will always be where we truly make our name. To that end I was delighted to witness another inspiring SAHMRI Annual Scientific Meeting this year; and under a theme that could scarcely be more befitting of SAHMRI - *The Future of Health and Medicine*.

Raymond Spencer
Chair of the Board

The Board Of Directors



Mr Raymond Spencer

Non-executive Chairman

Mr Spencer is Chairman or a board member of a number of private and public companies in Australia and the USA. Mr Spencer was appointed to the Board as Chairman on 21 December 2009.



Mr Alan Young

AM, MSAA, SAFin, AFPA (Snr), FAICD, SIA (Aff), C.UnivFlin

Non-executive Deputy Chairman

Mr Young was co-author of the Shine Young Report, a review of health and medical research in South Australia commissioned by the South Australian Government which led to the establishment of SAHMRI. Mr Young is Co-Founder and Joint Managing Director of Baker Young Stockbrokers Limited. He is also the current Founder/Chair of Belvidere Winery, Chair of the Australian Central School of Art, Vice Chair of Solstice Media Ltd, Co-Founder/Chair of Flinders Medical Centre Foundation, Founder/Chair of Flinders Bio Medical Engineering Pty Ltd, Director of NoQ Holdings USA and Director of eGrowcery Inc (USA). In 2013 he was made a Companion of Flinders University, an award recognising his contribution to the University through his commitment to medical research and the visual arts. Mr Young was appointed to the Board as a Founding Member on 21 December 2009.



Professor Alastair Burt

BSc (Hons), MBChB, MD (Hons)

Non-executive Director

Professor Burt is the Executive Dean of the Faculty of Health and Medical Sciences at The University of Adelaide and is the Editor in Chief of “MacSweens Pathology of the Liver” and the journal “Histopathology”. Professor Burt was appointed to the Board on 16 May 2017.



Mr Ross Haslam

Non-executive Director

Mr Haslam is a Chartered Accountant with extensive expertise in corporate responsibility, audit procedures, investment due diligence and company restructures. He has experience across the health sector and is also currently a Director of the Port Adelaide Football Club and a Director of the Women’s and Children’s Health Network (WCHN) Governing Board. Mr Haslam is Chairman of the Group’s Audit, Finance and Risk Committee. Mr Haslam was appointed to the Board on 31 July 2018.



Emeritus Professor John Hopwood

AM, FAA, FAHMS, Dip.App.Chem,

PhD, FRCPA (Hons)

Non-executive Director

John Hopwood is an Emeritus Professor at The University of Adelaide and affiliate Professor in the Department of Pharmacy at the University of South Australia. Professor Hopwood was appointed to the Board on 21 December 2009.



Professor Caroline McMillen
Non-executive Director

Professor McMillen commenced in the role as Chief Scientist for South Australia in October 2018 after serving as Vice-Chancellor of the University of Newcastle for 7 years from 2011. Professor McMillen was previously a member of the Board between 2014 and 2015 and was reappointed to the Board on 1 February 2019.



Ms Jenny Richter
BA, MBA, Grad Dip Health Admin,
GAICD, AFACHSM
Non-executive Director

Ms Richter was previously the Chief Executive Officer (CEO) of Central Adelaide Local Health Network (CALHN) and the Deputy Chief Executive of SA Health. Ms Richter was appointed to the Board on 16 February 2018.



Professor Robert Saint
AM BSc (Hons), PhD
Non-executive Director

Professor Saint is Deputy Vice-Chancellor (Research) at Flinders University. He was previously a member of the Australian Research Council College of Experts and was a standing member of the Prime Minister's Science, Engineering and Innovation Council. Professor Saint was previously a member of the Board between 2014 and 2015 and was reappointed to the Board on 1 August 2017.



Professor Steve Wesselingh
BMBS, FRACP, PhD
Executive Director

Professor Wesselingh is the Executive Director of the Group and Leader of SAHMRI's Infection and Immunity Theme. He is an Infectious Diseases Physician with research interests in Neurovirology, HIV, microbiome research and vaccine development. Professor Wesselingh was appointed to the Board on 1 February 2011.



Professor Marie Wilson
GAICD
Non-executive Director

Professor Wilson is Pro Vice Chancellor (Business and Law) of the University of South Australia Business School. Her specialities include the management of performance (with a focus on professionals and knowledge work), decision-making and the human side of entrepreneurship and economic development. Professor Wilson was appointed to the Board on 29 June 2016 to 1 June 2018.



Ms June Roache
BAcc, GradCertMgt, FAICD, FCPA, FAIM
Non-executive Director

Ms Roache has extensive business experience having held several senior executive roles including Chief Executive of SA Lotteries, and a number of governance roles including Vice President of the World Lottery Association and Chair of the Asia Pacific Lottery Association. Ms Roache served as a member of the Board from 5 May 2014 to 1 February 2018.

SAHMRI

Growth at a glance

SAHMRI remains committed to recruitment and retention of the best health and medical researchers. To date, more than 65 SAHMRI staff have been recruited to Australia.

SAHMRI is home to 450 staff and approximately 200 students and 200 partners. Human Resources is currently working to better capture student and partner information.



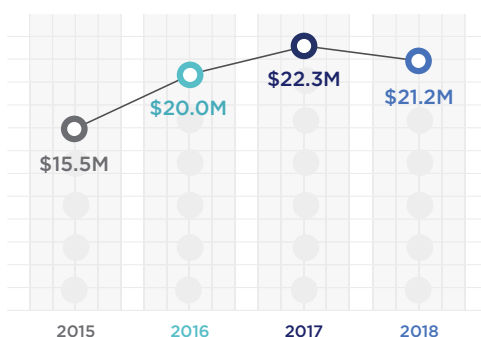
450 STAFF

200 STUDENTS

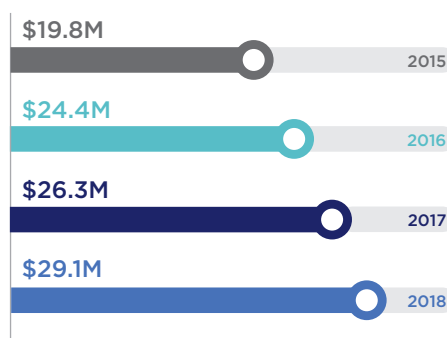
200+ PARTNERS

1 SAHMRI COMMUNITY

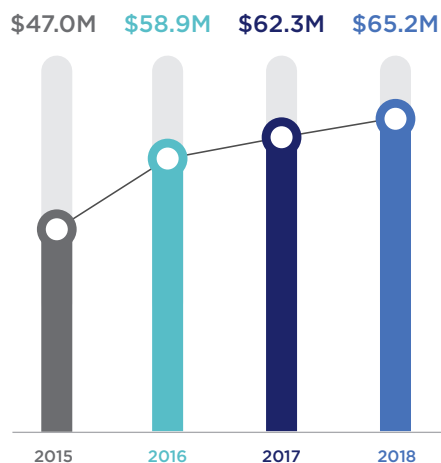
COMMERCIAL INCOME



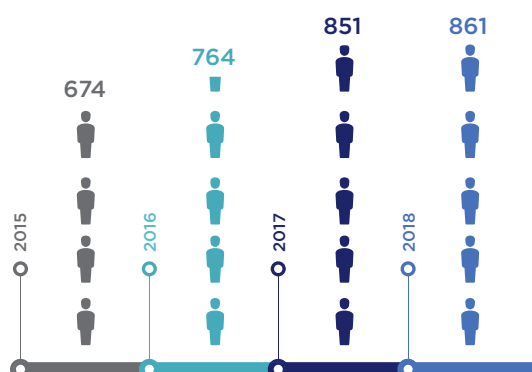
RESEARCH FUNDING



SAHMRI TURNOVER

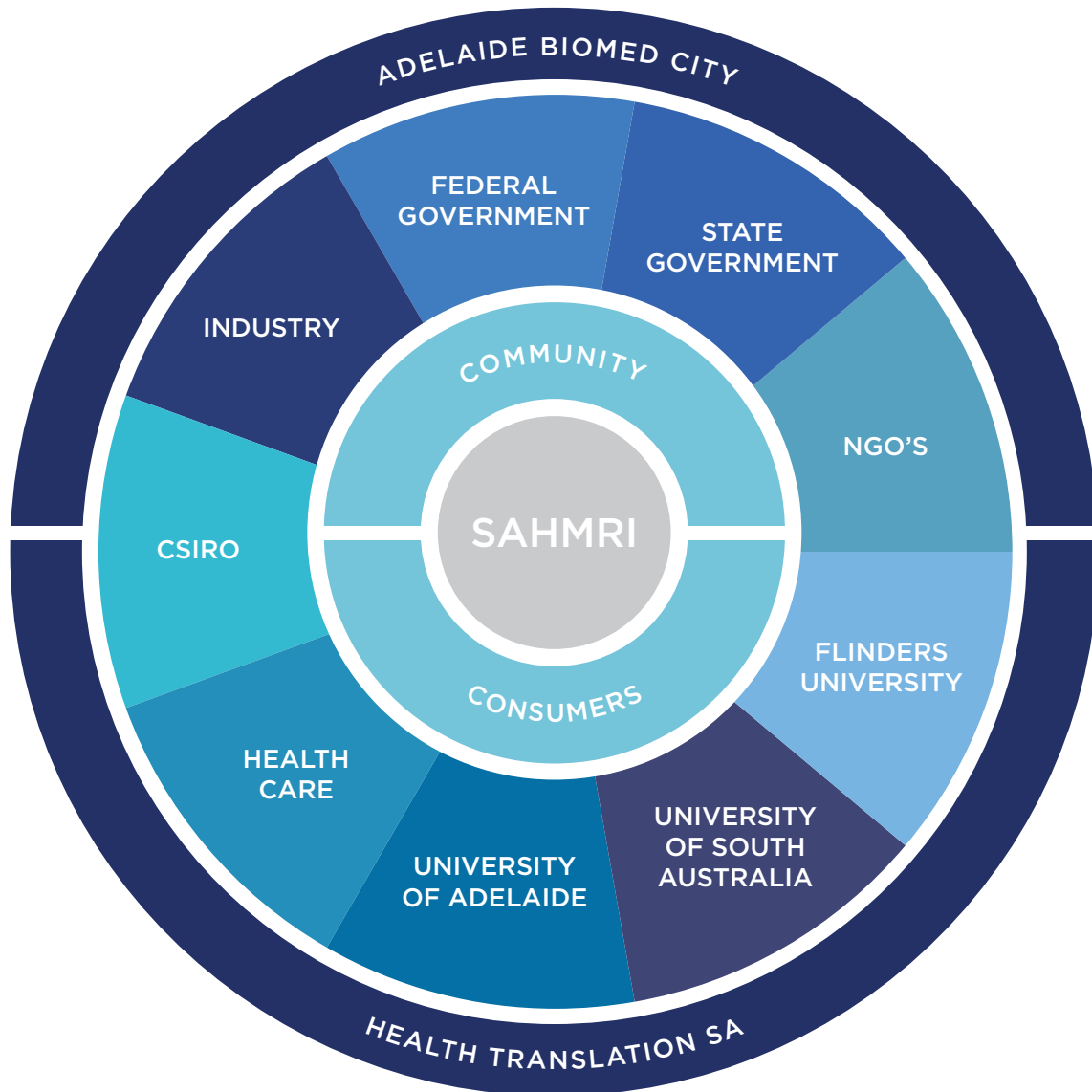


BUILDING OCCUPANCY



Our Partnerships

Collaboration and innovation are in the DNA of SAHMRI, and underpin our culture. Below shows the integration of SAHMRI's partnerships and how these synergies create a strong foundation for translational research:





Commitment to **Reconciliation**

RECONCILIATION STARTS WITH US

On the 13 February 2018, on the 10th Anniversary of the Apology to the Stolen Generation and their Descendants, SAHMRI launched its inaugural Reconciliation Action Plan (RAP) for February 2018 – February 2020, which has received endorsement from Reconciliation Australia.

Since its inception, one of SAHMRI's priorities has been to incorporate Aboriginal health research across all of its research and as a key platform of SAHMRI business – Aboriginal health is something that is at the heart of everything the team at SAHMRI does.

As a leading health and medical research institute, SAHMRI has the opportunity to develop a platform for Reconciliation that can have a far-reaching impact on staff, research projects and in turn the Aboriginal and Torres Strait Islander community and broader community.

Our RAP will influence the work of the Institute, as well as the interactions and potential outcomes of key research partners both here in South Australia and across Australia.

SAHMRI believes that our commitment to Reconciliation must be shared. We must provide a workplace that is culturally safe, free from discrimination, enables open and honest discussion, educates and empowers individuals to reflect on their journey towards Reconciliation, explores areas of improvement and facilitates opportunities to extend our reach beyond all themes and our organisation.

SAHMRI has a commitment to providing opportunities for Aboriginal communities, organisations and individuals. This commitment extends to our own Aboriginal and Torres Strait Islander staff.

SAHMRI will:

- Create a safe environment for continuous learning of Aboriginal and Torres Strait Islander peoples' culture and knowledge, history of racism and its impacts on the individual and the wider community, in contemporary life and across the lifespan
- Proactively form partnerships to improve cross-cultural relations
- Educate staff on appropriate and acceptable behaviour and language in relation to Aboriginal and Torres Strait Islander people

- Be free of discrimination with zero tolerance of racism
- Empower non-Indigenous staff in sharing the load and responsibility of enacting all elements of the RAP
- Build the Aboriginal and Torres Strait Islander health research workforce
- Strengthen our relationships with Aboriginal and Torres Strait Islander communities
- Ensure that we meet the highest ethical standards of conducting Aboriginal health research the right way by following the principles of the South Australian Aboriginal Health Research Accord and the National Health and Medical Research Council (NHMRC) National Statement
- The SAHMRI Board and Executive Team, along with the RAP Working Group, will champion the Reconciliation Action Plan across the Institute and encourage all staff to engage and participate in Reconciliation.

SOUTH AUSTRALIAN ABORIGINAL HEALTH RESEARCH ACCORD

The Accord aims to ensure that formal engagement with both communities and Aboriginal service providers is built in at the earliest development phase of research. Aboriginal communities and organisations should be involved in the priority setting, planning, design, implementation and evaluation of research. This may require a rethinking of how the research is to be conducted, to increase the focus on establishing and building relationships with Aboriginal communities and services.

ACCORD PRINCIPLES

- Priority
- Involvement
- Partnership
- Respect
- Communication
- Reciprocity
- Ownership
- Control
- Translation

Further information regarding the SAHMRI RAP and the Research Accord can be found at:
www.sahmri.org/reconciliation



OUR RAP ARTWORK

Karrawirra Pari by Allan Sumner

The development of this artwork reflects SAHMRI's commitment to Reconciliation and the building of strong partnerships with Aboriginal and Torres Strait Islander people, by providing equitable opportunities across the Institute.

The artwork, known as "Karrawirra Pari" means "redgum forest river". It is also the name given to the river by the Kaurna People. The artwork features "Wardliparingga", a Kaurna term meaning "house river place", and is also the name for the Milky Way reflected in the River Torrens, located alongside SAHMRI.



SAHMRI Student Association

HISTORY OF THE COMMITTEE

The SAHMRI Student Association Committee (SSAC) was founded in 2016 and was created to represent the interest of students studying within SAHMRI. Currently, these students are mainly from The University of Adelaide, University of South Australia and Flinders University. Students are at different stages of their study such as, PhD, Masters, Honours, Foreign or interstate exchanges, Summer Scholarships, and Undergraduate lab placements. The primary role of the committee is to foster all students' wellbeing and provide a sense of community by hosting educational, professional and social events.

Over the past 12 months, the SSAC has developed substantially. They have established and refined the committee charter, produced a committee calendar and implemented handover procedures. Collectively with SAHMRI executives and Human Resources services, student inductions and appropriate administrative protocols have been implemented. The student mailing list has been updated. Student representatives within the SAHMRI Research Executive Committee have been introduced, and the first SSAC AGM to elect new committee members has been organised.

TERMS OF REFERENCE / CHARTER

The updated SSA Charter includes a restructure of the Committee in order to account for the growing membership and workload. The new Executive Committee now consists of two Co-Presidents, a Secretary, and a Treasurer, with the remainder of the Committee comprised of three Communications Coordinators, an Honours representative, and General representatives.



Membership of the Association was more clearly defined, as was the ability of the Association to expel a member from the Association following misconduct detrimental to the interests of the Association.

Specific guidelines and a voting system were introduced for election of Committee members at Annual General Meetings, and a formal sub-committee system was created to allow for more efficient organisation of various events and programs. Clauses were also added which concern to financial reporting, winding up, and disqualification of Committee Members. A complete copy of the SAHMRI Students Association Charter is available upon request.

ACTIVITIES

The last year has been extremely productive, with a rapid increase in the number of events held by the SSAC. Five very successful Q&A seminars were held, covering a range of topics from beyond a PhD and research dissemination, to work-life balance, where expert panellists shared their advice and experience. The committee also coordinated a "Pitch Your Science" workshop, held by Start-up 61's Alex Hadley and hosted bi-monthly student seminars, enabling a comfortable forum for students to practice their presentation skills and share their projects with their peers.

In addition to educational events, the SSAC arranged several social events as follows:

- Welcome event – this event was organised at the start of the year for new and existing students to socialise and network. This event included games such as ‘Get to know you Bingo’ and a ‘SAHMRI Scavenger Hunt’.
- Quiz Night – SAHMRI-wide Quiz Night was held mid-year, which received excellent feedback and had a fantastic turn out of approximately 70 attendees.
- Inaugural SAHMRI Cocktail Ball - the final event was the exceptionally well-received Inaugural SAHMRI Cocktail Ball (an end of year celebration), which was open for all SAHMRI staff, students and partners. The ball was held at the Stamford Plaza on November 24th, with approximately 95 guests in attendance. This was a fantastic night with music, dancing, food and drinks.

These activities will be continued throughout 2019 with the new wave of students commencing at SAHMRI. There may be changes to the types of social events based on feedback provided by students in the form of surveys distributed by the SSAC.

STUDENT SUPPORT

The primary role of the committee is to care for student wellbeing and provide a sense of community to all students. This will continue to be the main focus of the SSAC and will meet the needs of the SAHMRI students through feedback provided by committee members in the various themes, and individual feedback via surveys.

FUTURE GOALS

The Committee is aiming to retain and build on the success of 2018 to further support the ever-growing body of students at SAHMRI, and continue to coordinate events that provide advice and assistance to the students in areas where they believe are of particular interest/concern. The SSAC would also like to have representatives on the committee from every major group/theme for a greater diversity.





Early to Mid-Career Researcher **Working Group**

HISTORY OF THE COMMITTEE

In mid-2017, the SAHMRI Research Executive Committee established the Early to Mid-Career (E/MCR) SAHMRI Working Group. Members from each of the SAHMRI Themes and Partner organisations were invited as representatives on this Working Group.

TERMS OF REFERENCE/ CHARTER

The Early to Mid-Career (E/MCR) SAHMRI Working Group is currently drafting a Terms of Reference after trialling structures during their inaugural year. Current structures include:

- The Working Group has adopted the National Health and Medical Research Council (NHMRC) definition for early-to-mid career researchers and define an E/MCR as any person affiliated or working with SAHMRI up to 12 years since PhD conferral.
- An E/MCR Working Group meeting is held the week prior to the SAHMRI Research Executive Committee quarterly meetings. The agenda is set around the discussion papers and agenda for the SAHMRI Research Executive Committee meeting, and business arising specifically relevant to the cohort.

- A representative of the E/MCR Working Group attends the SAHMRI Research Executive quarterly Committee (2018 Dr Merryn Netting; 2019 Dr Natasha Howard) to report on working group activities and to provide E/MCR perspectives on discussion papers.
- An additional member of the E/MCR Working Group rotates attendance at Research Executive Committee meetings to ensure Working Group members gain exposure to institutional meetings.
- Research Executive Committee minutes and action items relevant to the E/MCR cohort are distributed to the E/MCR Working Group and if appropriate to the broader E/MCR community.

ACTIVITIES

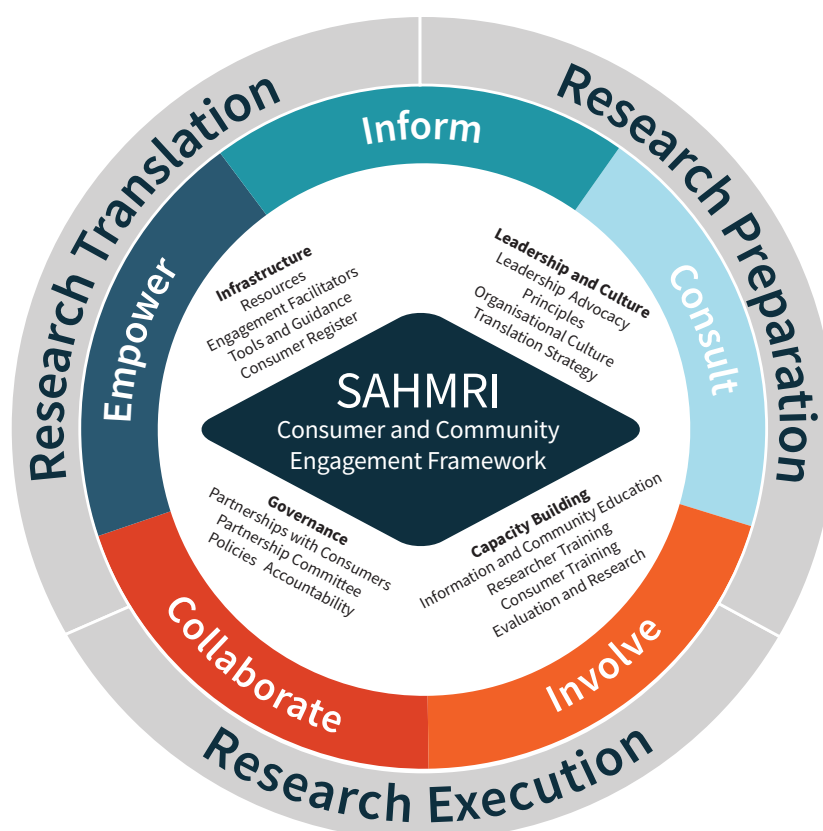
- The inaugural E/MCR Meet and Greet function was held in December 2017 and attended by 40 E/MCRs from SAHMRI and partner organisations. This function established the beginnings of a real E/MCR community at SAHMRI.
- Developed a database of E/MCR at SAHMRI (both SAHMRI and affiliated partners).

- Organised a talk from Kate Christian, an expert in the challenges faced by early-career researchers in the sciences in Australia.
- Recommendations were made for review panel of 2018 Beat Cancer Travel Fellowship applications.
- Ongoing feedback to Research Office, Research Executive Committee and Human Resources in the development of structured mentoring programs and support for SAHMRI E/MCRs.
- 2018 E/MCR networking event on 5 December 2018 attended by approximately 35 SAHMRI community E/MCRs.
- Ongoing engagement on cohort opportunities within the SAHMRI community (e.g., membership on scientific committees, peer review, professional development activities).
- Implemented a survey to characterise the SAHMRI E/MCR cohort and the future needs of this cohort.
 - The Working Group sought to review the membership of E/MCRs associated with the institution, including SAHMRI employees and members with a partner affiliation or faculty appointment. The review aimed to characterise the SAHMRI E/MCR membership to gain a better understanding of the diverse cohort profile, including member demographics, scientific background, areas of expertise, stage of career, academic affiliations and media usage. The review also sought to gain perspectives from E/MCRs on the:
 1. Perceived needs for enhancing careers as a member of the SAHMRI community;
 2. Priorities for the SAHMRI E/MCR Working Group functions.
- Overall, 87 responses were received (66.9 per cent of known email listing) of which 52.9 per cent of responses were from SAHMRI employees and 47.1 per cent from partner organisation employees.
- In summary, the top three priorities for the early-career respondents were:
 1. Support with Fellowship/grant applications,
 2. Mentoring and
 3. Workshops and professional development training.
- In contrast, the top three priorities for the mid-career respondents were:
 1. E/MCR-led seed funding,
 2. Support with Fellowship/grant applications, and
 3. Workshops and professional development training.
- The top three priorities for the SAHMRI employees (n=46) were:
 1. Application support,
 2. Seed funding and
 3. Workshops & Professional Development.
- For partner employees (n=41) the top three priorities were:
 1. Seed funding,
 2. Application Support and
 3. Workshops & Professional Development.

GOALS FOR UPCOMING FEW YEARS

1. Drawing upon the results of the 2018 E/MCR Membership survey, the Working Group will develop a “Framework for Action” outlining proposed activities and engagement within the SAHMRI community. This will include drawing upon existing activities or developing potential opportunities within the following areas:
 - Workshops and professional development training
 - Scientific interaction with peers at SAHMRI
 - Seminars/presentations from external SAHMRI speakers
 - Networking opportunities
 - Mentoring
 - Sponsorship/advocacy
 - Support with Fellowship/grant applications
 - Travel scholarships
 - E/MCR-led seed funding
 - Leadership opportunities.
2. Development of SAHMRI E/MCR communications strategy (e.g., distribution listing, Yammer platform, E/MCR Cohort SharePoint)
3. Finalisation of SAHMRI E/MCR Working Group Terms of Reference (1st Quarter 2019).

Consumer Engagement



SAHMRI'S COMMITMENT TO CONSUMER ENGAGEMENT

SAHMRI is committed to consumer and community engagement in health and medical research, and we believe consumers and the community have a right to be involved in the research that affects them. We also believe that consumers can, and should participate across all phases of research and are committed to facilitating community participation in SAHMRI's research priority setting and research practice.

SAHMRI CONSUMER AND COMMUNITY ENGAGEMENT FRAMEWORK

In 2013, SAHMRI partnered with Health Consumers Alliance of South Australia (HCASA) to bring together researchers and consumers to advance meaningful consumer and community engagement in health and medical research. A key achievement of the partnership has been the co-design of an evidence-driven Consumer and Community Engagement Framework which has subsequently been published (Miller et al, 2017).

The co-research framework aims to improve the engagement of consumers across the research spectrum in the planning of research priorities, in the research projects themselves, and in interpretation of findings and driving translation to ensure health and medical research improves the health of individuals and communities. The published Framework has also attracted national attention.

Implementation of the Framework has been governed by the Health Consumer and Community Engagement Committee. The work of the Committee has focused on the seventeen elements aligned to the four domains of the Framework; Infrastructure, Capacity building, Leadership and culture and Governance.

SAHMRI HEALTH CONSUMER AND COMMUNITY ENGAGEMENT COMMITTEE (ENGAGEMENT COMMITTEE)

The Engagement Committee was disbanded at the end of 2018 and will be re-established as an Advisory Group in early 2019, reporting directly to the SAHMRI Board. SAHMRI has appointed a consumer representative to chair the Group – Ms Ellen Kerrins.



ALIGNMENT WITH PRIORITIES OF AHRA AND HEALTH TRANSLATION SA

SAHMRI's focus on consumer and community engagement is in line with a growing national interest in this area. The Australian Health Research Alliance (AHRA) has a national system level initiative specific to consumer engagement, and representatives from both SAHMRI and Health Translation SA have been involved in the AHRA Consumer Involvement in Research Subcommittee, which has been responsible for this work.

In addition, Health Translation SA has identified consumer and community engagement as a key 'platform' area that assists in the acceleration of research findings into action. Health Translation SA is working towards implementing aspects of the SAHMRI Framework to enable consumers to have a greater voice in translational research projects and other operational activities. Opportunities for collaboration with SAHMRI on the implementation of these activities are being promoted.

CONSUMER ENGAGEMENT PROJECT OFFICER ROLE

SAHMRI and Health Translation SA employed a full-time project officer role in July 2018 to drive consumer and community engagement activities. Key responsibilities include:

- Support implementation of the 17 elements of the SAHMRI Consumer and Community Engagement Framework.
- Support national consumer engagement activities.
- Promote uptake of Framework and build the capacity of researchers to undertake consumer engagement activities across Health Translation SA partners.

FUTURE PLANNED ACTIVITIES

Using the Framework as a guide, the priority activities for 2019 include:



HEALTH TRANSLATION SA

- National initiatives; survey and environmental scan
- Action group
- MRFF grant review process and project teams
- Organisation-wide survey

JOINT INITIATIVES

- Training and development
- Toolkit and resources
- Community networking forums 'Connecting with Community'
- Community interest



SAHMRI

- Advisory group
- Model for consumer engagement
- Framework evaluation



Adelaide BioMed City



Adelaide BioMed City (ABMC) is a hub for health and life sciences. It co-locates institutions from research, education and clinical care in a precinct in the heart of Adelaide. Bringing together five partners; SAHMRI, Central Adelaide Local Health Network (CALHN), The University of Adelaide, The University of South Australia and Flinders University, ABMC is located in the north west corner of the Adelaide CBD. With a current investment of almost \$4 billion in medical, research and education infrastructure, ABMC accommodates more than 15,000 South Australians, with a shared vision for improved health. The ABMC Partnership Agreement was signed in September 2018, while the collaboration was officially launched in November 2018, at the Adelaide Convention Centre.

OUR MISSION

To be a globally recognised partnership leading in research, education, clinical care and population health.

OUR GOAL

To build impact, leverage investment and inform evidence-based healthcare and innovation in ways that could not be achieved separately.

OUR VISION

Health and wealth through collaboration.

To achieve this vision, ABMC aims to foster the entire research continuum from basic discovery, clinical, public health to health services to improve the health of South Australia, and grow jobs and build investment in South Australia.

Principles of the partnership:

- Focus on excellence with community value
- Being inclusive, flexible and agile
- Building a unified partnership with respect and good-will
- Looking outward for new opportunities
- Generating benefit beyond our borders
- Being equitable in our approach.

GOVERNANCE

ABMC partners contribute to operational and strategic oversight of ABMC, with each partner contributing two board members. ABMC Partners have a diverse range of external stakeholders including SA government departments and authorities (Department of Health and Ageing, Department of Premier and Cabinet, Department of Planning, Transport and Infrastructure, Department of State Development, Renewal SA, Health Industries SA), local government (Adelaide City Council) and other groups including the Adelaide Convention Centre, and the Riverbank Precinct. Each of the five founding partners are financially supporting the project and have committed to a five-year initial agreement.

THE FIRST PRIORITIES

The current focus of the partners is to set the strategic focus areas for 2019-2020, with a Strategic Plan under development (with consultation) by the General Manager. Among the immediate priorities are:

- A brand and communication plan to position Adelaide BioMed City on a state, national and global level
- The creation of a precinct plan for facilities, platforms and technologies
- The creation of a strategy to promote recruitment and retention through precinct partnering.

SAHMRI'S INVOLVEMENT

SAHMRI has been key in driving the formalised partnership and recruitment of the general manager, Yvette Van Eenennaam (October 2018). SAHMRI is currently represented on the ABMC Board by our Executive Director Professor Steve Wesselingh and Chief Operating Officer Amanda McIlroy. Professor Wesselingh is the current chair of the ABMC Board. In addition, SAHMRI staff sit on all ABMC working groups and have been instrumental in the initial planning of the pilot activities of the precinct.

Adelaide BioMed City partners at the launch event in November 2018.





31,000m²
total floor area

11 floors
dry lab space

First 3 floors
secured by SAHMRI
to be occupied by
400 researchers -
30% from interstate
and overseas

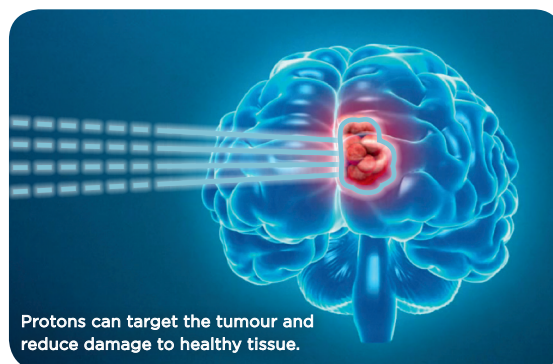
20-25
clinical trial rooms

Proton Therapy
for approximately 800
patients per year

Proton Therapy **SAHMRI 2**

Strategically located within Adelaide BioMed City and adjacent to the current SAHMRI building, SAHMRI 2 provides an opportunity for South Australia to cement its reputation as a leader in international health and medical research.

SAHMRI 2 is an innovative 'next step' that will bring together leading researchers from around the globe with ground-breaking technology to shape the future of health care practice. Housed within the **Australian Bragg Centre for Proton Therapy and Research**, the proton therapy unit is a significant advancement in radiation for cancer. It will be available in this ultra-modern building, for use in clinical trials and other research, in collaboration with other high-performance global research organisations. SAHMRI itself will house an additional 400 researchers in the building across the first three floors to ensure collaboration.



PROTON THERAPY BENEFITS

- Highly focused precision treatment
- Minimal entry and exit dose
- Delivers a very high radiation dose to the tumour
- Delivers nearly all of the dose directly to the tumour
- Can treat tumours that lie within millimetres of vital tissue
- Reduces risk of treatment induced second cancer
- Wide range of non-patient research opportunities in areas such as radiobiology, bioengineering and particle physics.

Research Events



SCIENTIFIC SEMINAR SERIES

Each Tuesday morning SAHMRI holds a regular scientific seminar. These are designed to bring researchers from across the themes together to hear about research in a variety of areas. Seminars have focused on the work of Themes and Research Groups, and have also explored cross-cutting issues of interest to many researchers. South Australian, national and international researchers have presented at the seminars.

STUDENT OPEN NIGHT

In July 2018, SAHMRI and HTSA hosted a Student Open Night, which provided an opportunity for prospective students (primarily PHD and Honours Students) to meet with representatives from the three SA universities, the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and SAHMRI to explore their options to undertake research projects with a translational focus.

2018 ANNUAL SCIENTIFIC MEETING

The focus of the Annual Scientific Meeting last year was *The Future of Health and Medicine*. The event commenced with an excellent plenary presentation by Dr Norman Swan (ABC Health Report) on the topic of 'what does the future hold in health and medicine?'. This set the scene for the remainder of day one of the event, which included presentations on advances in imaging, the route from evidence to policy and therapeutic interventions.

Day two of the meeting was once again the SAHMRI Research Showcase, with the plenary presentation delivered by Professor Sue Thomas from the Australian Research Council. Presentations were delivered by PhD and early career researchers. The day concluded with the popular SAHMRI Pitch Perfect event – an opportunity for researchers to pitch their commercialisation idea.

2018 AWARDS NIGHT

Given the success of the Awards Night in 2017, the event was held again in 2018. A few additional award categories were included based on feedback from SAHMRI staff. Award recipients are detailed below:

Category	Winner(s)
PhD	Jacquie Bowden (SAHMRI Population Health)
ECR	Fatwa Adikusuma (SA Genome Editing Facility)
MCR	Susi Woods (Cancer) Laura Eadie (Cancer)
High Impact Publication	Paul Thomas (SA Genome Editing Facility) <i>Adikusuma, F., S. Piltz, M. A. Corbett, M. Turvey, S. R. McColl, K. J. Helbig, M. R. Beard, J. Hughes, R. T. Pomerantz and P. Q. Thomas (2018). "Large deletions induced by Cas9 cleavage." Nature 560 (7717): E8-E9</i>
Research Translation	Childhood Dementia Research Group (Hopwood Centre for Neurobiology) (Nutrition and Metabolism)
Research Enabler	Xuemin Wang (Nutrition and Metabolism)
Research Facilitator	James Barona (Operations, IT)
Executive Director	Keryn Williams (Faculty Member)



Healthy Mothers, Babies and Children

The Healthy Mothers, Babies and Children Theme is committed to improving the health and wellbeing of women, children and families, particularly those most at risk of poor health outcomes. The theme has a special expertise in assessing nutritional and lifestyle interventions during early life, from conception to early childhood.

The theme's nutrition intervention trials focus on enhancing cognitive outcomes of children, achieving optimal growth, reducing preterm birth and improving the future of children born preterm, and preventing allergic diseases in young children.



Professor Maria Makrides has led clinical trials that were influential in causing The Australasian Society for Clinical Allergy and Immunology, as well as other like international

societies, to change their feeding guidance for infants. This has facilitated changes to diets that are more inclusive of allergenic foods, such as cooked egg and peanut paste, from the time a child is ready to start eating solid foods. The group provided key information to integrate guidance about the early inclusion of these allergenic foods with nutritional guidance (relating to iron rich foods and duration of breastfeeding), which were used by the Australasian Society for Clinical Immunology and Allergy and the Food Allergy CRE to harmonise wording for infant feeding guidance.



A Cochrane Review (published by **Associate Professor Philippa Middleton**): 'Omega-3 fatty acid addition during pregnancy' is already having an impact on the national pregnancy

guidelines. New evidence of substantial reductions in preterm birth with omega-3 supplementations has led to a recommended policy change for women with a singleton pregnancy to take a daily supplement of omega-3 long chain polyunsaturated fatty acids from around the 12th week of pregnancy. This recommendation is currently being integrated into the update of the NHMRC national pregnancy guidelines.



Professor Jozef Gecz

has discovered and characterised several novel genetic determinants of neurodevelopmental disabilities (THOC2, GPKOW, NAA15, SLC9A7,

YY1 or RNF12) and reported to referring clinical services on more than 200 individuals' genetics findings.



A publication and policy paper from **Ms Karen Glover**, with findings from the baseline AFS about the rates of social health issues resulted in Port Augusta using the data to modify their

Aboriginal Birthing program to include a social worker, 2017.

Aboriginal Health

The Wardliparingga Aboriginal Research Unit seeks to improve health and wellbeing through the development, implementation, evaluation and translation of interventions that reduce inequalities in health and social outcomes for Aboriginal people and the communities in which they live.

The theme's primary research interests include population health monitoring, clinical research into chronic diseases, health services research and health policy.



Wardliparingga is a Kaurna term. Its meaning is 'house river place', and is also the name for the Milky Way reflected in the River Torrens, alongside of which SAHMRI is located.

Across the state, and increasingly the nation, the **Aboriginal Health Theme** is recognised for its expertise across a wide range of public and population health research and translation capabilities. This includes leadership of novel, nationally relevant, landmark studies of chronic disease epidemiology and biology, sociocultural determinants of health, inequity and adolescent health, changing modes of health care delivery to Aboriginal communities.

The theme's state-wide focus has placed the group at the forefront of policy development in SA. The Aboriginal Health theme have undertaken consultancies, developed state-wide plans (Heart and Stroke, Diabetes, Cancer, Prisoner Health) supported government departments in epidemiological monitoring and community engagement, supported the establishment of key interagency relationships and driven mixed method health system research to guide action.





Heart Health

The Heart Health theme is working to develop better approaches to prevention, diagnosis and treatment of heart disease with a major focus on diseases of blood vessels, heart structure and function, and heart rhythm disorders.



Professor Prash Sanders leads the SAHMRI-based Centre for Heart Rhythm Disorders. Late this year his team published a paper in *Heart* that confirmed a link between mitral valve prolapse (MVP) and sudden cardiac death.

A prolapsed mitral valve affects the flow of blood from the atrium to the ventricle on the left side of the heart. Only around 1.2 per cent of the world's population suffers MVP, but Professor Sanders' team's examination of 7600 global studies found 12 per cent of sudden cardiac death victims had the condition. The next phase of their work is establishing an Australian registry for patients with mitral valve prolapse, resuscitated cardiac arrest and reported sudden cardiac death.



Associate Professor Peter Psaltis' group studies the regulation of macrophages and foam cells in atherosclerosis with the objective of developing therapies that better target

plaque inflammation and can be translated to the clinic. In an extensive body of preclinical research spanning two complementary mouse models of atherosclerosis and in vitro mechanistic studies, we have found that the anti-gout drug colchicine has an anti-atherosclerotic effect that relates to its ability to reduce the accumulation of cholesterol and foam cells in plaque, and to dampen cholesterol crystal-induced plaque inflammation. In parallel, he is leading the translational, multicentre NHMRC and NHF-funded Australian study in which the anti-atherosclerotic properties of low-dose colchicine are being investigated in patients with myocardial infarction.



Nutrition and Metabolism

The Nutrition and Metabolism theme conducts fundamental and clinical research into several important disorders. They include obesity and diabetes, where both basic mechanisms and how lifestyle or dietary changes can help prevent or manage these conditions are studied. The theme also studies neurological diseases, including inherited childhood disorders and Alzheimer's Disease.



Professor Chris Proud's

research portfolio includes several projects of potential therapeutic or commercial value, currently in the pre-clinical stages. Together with colleagues at SAHMRI and with the government research organisation A*STAR in Singapore, they are characterising the role and importance of the MNK protein kinases as potential targets in metabolic disease, especially diet-induced obesity and pre-diabetes.



Professor Gary Wittert's work relating to dietary interventions has been used as the scientific basis for the CSIRO Diet. His research on bariatric surgery

has led to changes in practice in South Australia, i.e. a greater uptake of Roux-en-Y gastric bypass and decrease in the use of banding. Basic work on the role of the stomach in the regulation of food intake has been translated and led to the use of surgical treatments for patients with hypothalamic obesity (e.g. craniopharyngioma and Prader Willi Syndrome) that have transformed the care of patients affected by these disorders.



Research by **Professor Stuart Brierley** in *JCI Insight* (Chronic

linaclotide treatment reduces colitis-induced neuroplasticity and reverses persistent bladder dysfunction) provides a paradigm shift in the way bladder pain and co-morbidities of Irritable Bowel Syndrome can be treated. This has led to interest in the first-in-class drug, linaclotide, that acts only within the gut, to be trialled as a novel treatment for bladder pain.

Infection and Immunity

The Infection and Immunity theme focuses on molecular and cellular interactions that regulate our immune response, the impact of our microbiome on health and disease, and ways to reduce the impact of sexually transmitted infections and blood borne viruses on Aboriginal people.



Associate Professor James Ward is working alongside state and federal government to influence policy and practice, whilst delivering meaningful and culturally-appropriate solutions

to reduce the transmission of blood borne viruses (BBVs) and sexually transmitted infections (STIs).



Professor David Lynn

demonstrated that early life antibiotic exposure in mice leads to significantly impaired vaccine antibody responses to commercial vaccines administered to millions of infants worldwide (Cell Host Microbe, 2018). This preclinical research led to a new, NHMRC-funded clinical trial in human infants and is informing new research on microbiota-targeted interventions to boost vaccine efficacy.



After demonstrating efficacy in both animal and human studies, **Professor Geraint Rogers** and his team have filed a provisional patent for the novel use of an existing pharmaceutical

to prevent the development of metabolic disease, as mediated by its impact on the function of the gut microbiome. Provisional investigations indicate that our approach has greater efficacy than current therapeutic options, suggesting the potential for clinical translation.



Mind and Brain

The Mind and Brain theme is at the intersection of neuroscience and mental health and is strongly supported by SAHMRI's science platforms. The theme has a precision medicine focus, and study the continuum from clinical depression to wellbeing and resilience, using the tools of psychology, behaviour, molecular biology, stem cells, genetics and imaging.



Dr Cedric Bardy designed '*BrainPhys medium*' to improve neuronal tissue culture conditions. *BrainPhys* is now distributed worldwide and used in >1000 research laboratories with ~60% increase in sale in 2018.

BrainPhys is used in preclinical research for virtually all neurological and psychiatric disorders and will have large indirect translational impact.



Ms Gabe Kelly's team at the Resilience and Wellbeing Centre delivered systematic wellbeing interventions in a Corrections setting, which reduced psychological injury and absenteeism claims, saving the SA Corrections Department \$2m. Discussion with other State corrections authorities have commenced.





SAHMRI Cancer

The unifying goal of the Cancer theme is to improve the management and outcome for patients with cancer by fostering excellence in the full spectrum of cancer-related research including fundamental discovery, systems biology, translational research, and the design and implementation of innovative clinical trials.



Professor Deb White has led the establishment of Genomic Testing for all newly diagnosed and relapsed Acute Lymphoblastic Leukaemia (ALL) cases.

To date, approximately 600 cases have had complete transcriptomic sequencing (mRNA Seq) performed. In the last year, this has translated to therapeutic change for ~30 patients and a change in risk stratification for a further ~50 patients. This critical work, in addition to providing therapeutic impact, has enabled the genomic landscape mapping of ALL in this country, which from an ethnicity perspective has been critically important. This work will become integral to ongoing guidelines in the near future.



Professor Tim Hughes and his team have pioneered the concept that kinase inhibitor therapy for CML can and should be used with curative intent, rather than as chronic

maintenance therapy. Several key papers and keynote talks have influenced attitudes to CML management globally. The team's recommendations for treatment-free remission are now included in international CML guidelines including the NCCN and ESMO recommendations.



As the chair of the "No Australians Dying of Bowel Cancer Initiative" and in his role on the board of the Jodi Lee Foundation, **Professor**

Dan Worthley's work has been pushing for creative policy on colonoscopy access and more ambitious targets of colorectal cancer screening and colorectal cancer mortality.



SAHMRI Research

At SAHMRI, translation of discovery into genuine impact for the community is our highest priority.

As such, we provide an environment to support Clinical Trial and Registry Science, to facilitate the transfer of information into action through the Health Policy Centre, to drive commercialisation success through Business Development and Entrepreneurship, and with a lens focussed on the end-user through Community and Consumer Engagement.



Led by **Professor Caroline Miller**, Population Health makes a substantial contribution to evidence-based policy and practice in tobacco control.

Professor Miller has spent two years as the lead international adviser to the Singapore Government, as it has prepared to legislate for tobacco plain packaging. The Government introduced its bill to Parliament in January 2019. Additionally, the group's evaluation of a national Aboriginal and Torres Strait Islanders Quitskills program (Government policy briefing; now in press in *ANZJ Pub Hlth*) led to the Commonwealth's renewed reinvestment in the initiative for four years. Unpublished monitoring data and policy briefings to the SA and Australian Government supported the development of state and federal e-cigarette regulation.



Led by **Professor Stephen Graves**, the Australian Orthopaedic Association National Joint Replacement Registry has been highly

successful in protecting the Australian community through the identification of poorly performed medical devices. They were also the first organisation globally to recognise and report the problems of Large Metal on Metal hips. A review of clinical quality registries commissioned by the Australian Commission on Safety and Quality in Health Care, undertaken in 2016 showed a that reduction of revision burden was directly attributable to the AOANJRR.

SAHMRI

Fundraising Update

SAHMRI acknowledges and is grateful to our growing family of supporters. Overall, there has been an increase in donations received and guests attending our events. Incredibly, over \$2 million has been donated in 2018. These funds have been directed across all our themes of research.

Most of these gifts have been the result of developing relationships with private trusts and foundations, as well as individuals who believe in supporting effective medical research.



CORPORATE CHAMPIONS

The Corporate sector across Australia plays such an important role in saving lives by supporting the ground-breaking research at SAHMRI.

A special thank you goes to our 2018 Corporate Champions:

- Absorb
- Bellberry Limited
- Boileau Business Solutions
- Flinders Clinical Trial Services
- Greateon Development
- Insurance Advisernet Foundation
- Maxxia
- Sarah Mountain Journeys P/L
- Statewide Super.

LEADERS IN PHILANTHROPY

This valued group is made up of individuals and private foundations who have donated more than \$1 million to SAHMRI. Their altruistic values and shared passion for a healthier community at large is the cornerstone of our giving program. We thank our Leaders in Philanthropy wholeheartedly for their most generous contribution in 2018.

FOUNDING AMBASSADORS

Since SAHMRI's inception in 2013, these supporters have demonstrated the true meaning of being a SAHMRI Founding Ambassador through their kind donations of \$25,000 and above. In 2018, the group grew to 42 members and we are extremely grateful for the commitment and support we receive from these committed donors.

VIRTUAL WINDOWS (VISION 5000)

100 per cent of the funds raised through Vision 5000 have been used to support our research programs, build capacity and purchase state-of-the-art equipment that our researchers need. The dedications and sentiments on the 795 virtual windows purchased are truly moving and reflect the broad desire to effectively reduce the impact of chronic illness in the community.

THE WALKER SOCIETY

It is with respect and gratitude that we recognise those who have indicated their intention to leave a lasting gift to SAHMRI. Through a gift in their will, the members of The Walker Society are providing lasting support to SAHMRI that will impact the lives of future generations.

Thank you

We are appreciative of the like-minded people, organisations and businesses who share our vision of inspired research leading to better health outcomes; thank you for your support.

Each year we rely on the generosity of our supporters. The support we receive from our donors, fundraisers, volunteers, corporate partners, as well as our Founding Members and Research Partners, allows us to continue to deliver on our vision and mission.

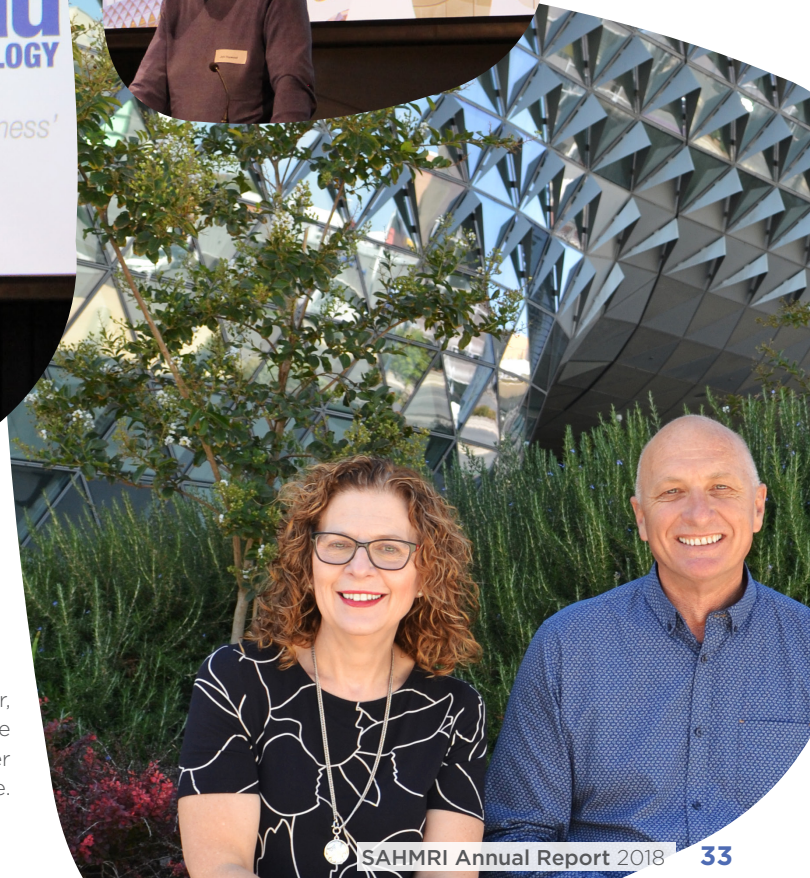
Thank you to all who are helping to secure a healthier future for all Australians, and the world.

“It always seems impossible, until it’s done”

-
Nelson Mandela



Professor Deb White, Cancer Deputy Theme Leader, and Graham Teague of Bell Potter Securities, before the Wealth and Wellbeing seminar, which raised over \$70,000 for the SAHMRI Cancer Theme.

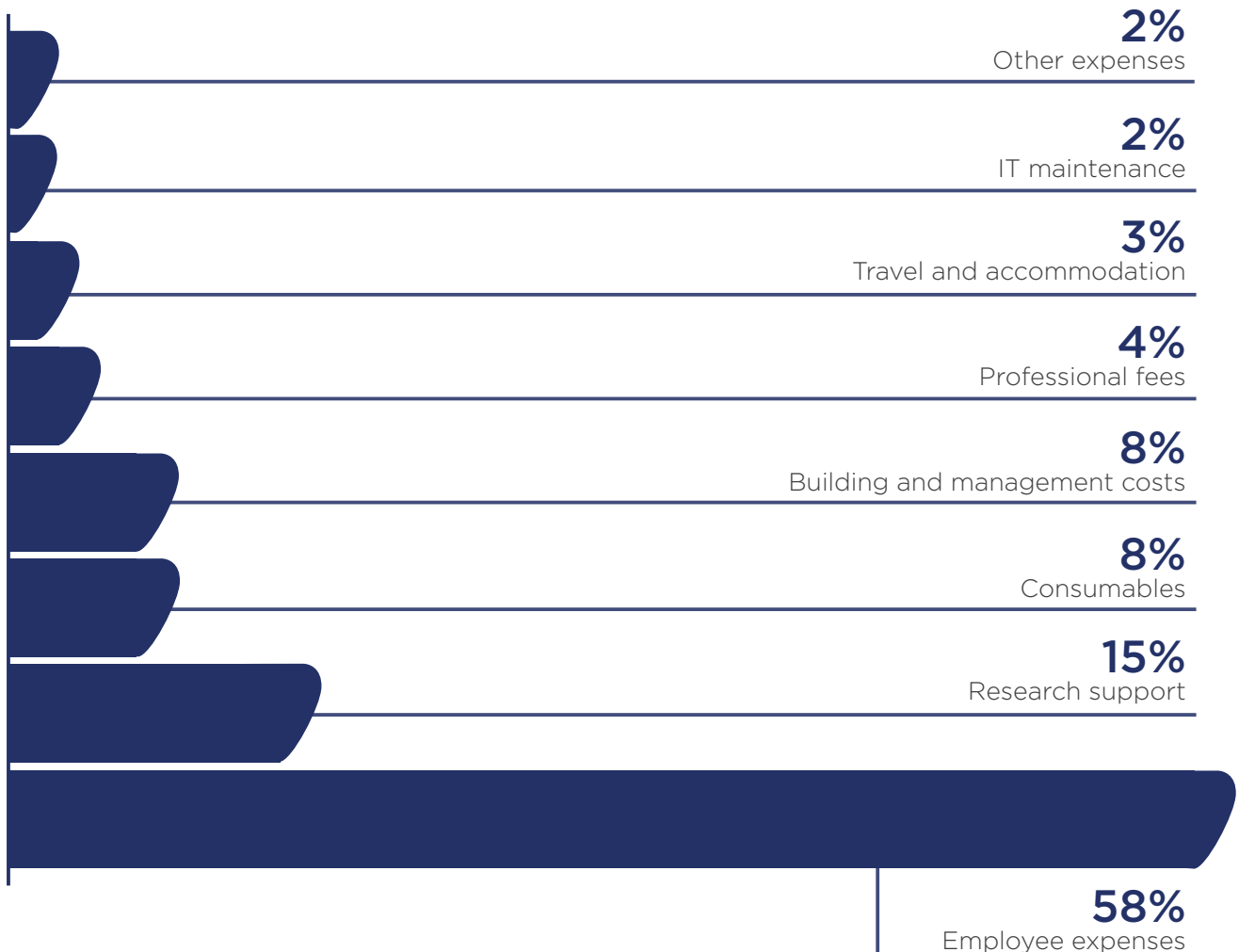


Financial Highlights

Income



Expenses



Consolidated Statement of Profit or Loss and Other Comprehensive Income

For the year ended 31 December 2018

	31 Dec 2018 \$'000	31 Dec 2017 \$'000
Operating revenue and other income		
Research grants	29,089	26,325
Service and clinical income	17,619	19,675
Other income	11,365	9,943
State Government grants	7,670	5,332
Total operating income	65,743	61,275
Operating expenses		
Employee expenses	(38,816)	(35,612)
Research support	(10,296)	(6,163)
Building management costs	(5,177)	(5,102)
Consumables	(5,155)	(5,330)
Professional fees	(2,616)	(2,096)
Travel and accommodation	(2,101)	(1,489)
IT maintenance	(1,512)	(1,378)
Other expenses	(1,755)	(2,752)
Total operating expenses	(67,428)	(59,922)
Finance income	1,447	1,012
Finance cost	(1,510)	(1,067)
Net finance costs	(63)	(55)
Results from operating activities before depreciation and amortisation	(1,748)	1,298
Depreciation and amortisation	(9,830)	(9,742)
Deficit for the period	(11,578)	(8,444)
Other comprehensive income/(loss) for the period	-	-
Total comprehensive loss for the period	(11,578)	(8,444)



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