# The National Health & Medical Research Council of Australia **Centre of Research Excellence in Frailty & Healthy Ageing**



# **Research Report** 2016-2019











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MONASH

**J**niversity

## **Project Lead Foreword**

As a team we sought funding to achieve several aims whilst building research capacity in the research topic of Frailty in Australia. To recap, our aims were to increase awareness about frailty, define the extent of frailty, mapping to inform health service policies, testing and implementing screening pathways for frailty and general practice and aged care and developing and testing interventions to treat frailty. Over the last five years, we have delivered on some of our stated intentions and progressed significantly with some of our other aims.

What we are most proud of however is the achievement of our research students and research fellows. PhD candidates have graduated and been recognized with awards. Research fellows have secured academic roles. We have added to the team over time providing evidence for our increasing ability to attract and retain high quality research candidates and fellows.

The next two years will be about securing additional research or other funding to project leverage on our work thus far for the benefit of older Australians. We look forward to Medic seeing previous PhD candidates move forward in establishing independent research careers.



Professor Renuka Visvanathan is project lead and head of Geriatric Medicine & Gerontology Theme

We are most grateful also to the support provided to our team by the CRE Frailty and Healthy Ageing advisory group and the independent chair of our management group (Emeritus Professor Derek Frewin AO).

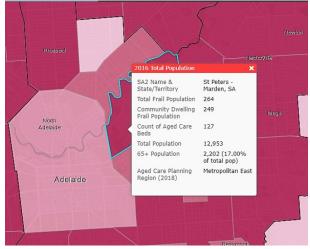
2020 has been a challenging year for everyone. We have however strived to maintain our research momentum and continue of research efforts.

Professor Renuka Visvanathan. September 2020

# **Research Highlights**

### Geriatrics and Gerontology 1/ Frailty Burden & Mapping In Australia

- Thompson M et. al. Frailty prevalence in Australia: Findings from four pooled Australian cohort studies. Aus J Ageing 2018; 37(2): 155-158. Since publication, this paper has been cited 11 times. The paper was also accompanied by an editorial. 18% of participants aged 65 years and older were fraily by the phenotypic method
- The findings contributed to the frailty web map developed by Hospital Research Foundation mid career fellow Dr Danielle Taylor. The frailty web map was a first for Australia and responded to the recommendation in the Commonwealth funded report released in January 2018- Frailty in community dwelling older people using frailty screening as the canary in the coal mine (Benetas). <u>www.spatialonline.com.au/</u> <u>frailtyestimates</u>



Interactive frailty web map developed by Dr Danielle Taylor

• Aged care providers are using the web map for service planning and bids for commonwealth subsidies.

### 2/ Frailty Screening in Aged Care

- Conceptualised as a result of a collaborative meeting in Adelaide, the screening tool is now recommended for use in a New Zealand guideline for aged care services with regards to managing consumers with deteriorating health.
- A Frailty Index for the Aged Care Assessment Program (or ACAT). Published in the Medical Journal of Australia, in collaboration with the Registry of Senior Australians, a frailty index tool for use in aged care has been developed.



The Geriatric Medicine & Gerontology Theme in 2019. Front row L-R: A Halder, B Martins, R Visvanathan, D Taylor, J Dollard, S Hoskins. Back Row L-R: C Falcone, J Smyth, L Baker, S Yu, A Jadczak, M Hossein, S Smith, F Ibrahim. Not Pictured: M Thompson, U Jasper, K Khow, A Gupta, S Ahip,

### Medication Management and Frailty

- Development of international consensus principles for medication management in frail older people: Published in Journal of the American Medical Directors Association, the 17 principles cover the domains of clinical practice, research and education. The principles have been endorsed by the European Geriatric Medicine Society (EuGMS), International Conference on Frailty and Sarcopenia Research (ICFSR), and Australian and New Zealand Society for Sarcopenia and Frailty Research (ANZSSFR). The principles have been mentioned over 187 times on social media since July 2020.
- International study into the pattern of medication use according to frailty status in residential aged care: Study will be conducted in Australia, Hong Kong, Poland, South Korea, Japan, Italy, New Zealand, United States, Canada, Netherlands, Finland. Frailty will be categorised using the FRAIL-NH. Investigators have collected data for ~15,000 residents across 12 countries.
- Systematic review on the predictive validity and cross-cultural adaptations of the FRAIL-NH scale. The systematic review has identified 26 studies that have used the FRAIL-NH scale developed by Frailty CRE members, including translation of the scale into Chinese, Japanese, Spanish and Portuguese.

### Frailty Screening in General Practice

- Our critique on the ethics of frailty screening has been cited 16 times since its publication in 2019, including within international guidelines on frailty, in a Lancet series on frailty, and in multiple systematic reviews. It was also referenced by a NSW Agency for Clinical Innovation paper on over-diagnosis of older people (2019).
- The flagship results from Dr. Rachel Ambagtsheer's PhD thesis on frailty screening were recently published in the world #2 listed journal for Geriatrics and Gerontology, the Journals of Gerontology Series A: Biological Sciences and Medical Sciences. To our knowledge, it is one of the largest and most comprehensive frailty screening studies conducted within general practice worldwide. A



Dr Rachel Ambatsheer at the 2018 Research Showcase

key finding of our research is that the Kihon Checklist and Reported Edmonton Frail Scale is suitable for use in Australian General Practice.

### Health Economics

- This paper reported on the development of the first cost-effectiveness model to estimate costs and health outcomes over the remaining lifetime of pre-frail and frail individuals. This paper has been cited 6 times. Karnon J, Afzali H, et al. *A Cost-Effectiveness Model for Frail Older Persons: Development and Application to a Physiotherapy-Based Intervention.* Appl Health Econ Health Policy. 2017: 15:635–645
- The paper contributed to the development of a comprehensive decision analytic model to evaluate the value of frailty interventions (Afzali H, Karnon J, et al. *Structuring a conceptual model for cost-effectiveness analysis of frailty interventions.* PloS one 14), e0222049)
- Using good practice for modelling to develop model structure and SHARE data to estimate model inputs, this
  model can be used as a condition-specific reference model to estimate costs and quality-adjusted life-years
  associated with a range of alternative interventions for the management of frailty. The model will be used to
  generate economic evidence required to inform public funding decisions.

### Digital Health for Fragility fracture

- A literature review conducted by the team suggested that digital health supported interventions were twice as effective as usual standard care. This review has now been scopus cited 3 times.
   Yadav L, Gill TK, Taylor A, Jasper U, De Young J, Visvanathan R, et al. *Cocreation of a digital patient health hub to enhance education and person-centred integrated care post hip fracture: a mixed-methods study protocol.* Int J Environ Res Public Health. 2019 10 22;16(20):4047. http://dx.doi.org/10.3390/ijerph16204047
- A/Prof Chehade lead a policy and practice paper which was published in the Bulleting of the World Health Organization. This work has been gathering wider interest since its publication among collaborators, globally not only around fragility fractures but also other musculoskeletal conditions and multimorbidities. Chehade MJ, Yadav L, Jayatilaka A, Gill TK, Palmer E. *Personal digital health hubs for multiple conditions*. Bull World Health Organ. 2020;98(8):569-575. http://dx.doi.org/10.2471/BLT.19.249136
- Securing grant funding from AMGEM and led by A/Prof Chehade, the team is developing a digital health hubs platform utilising an existing open-sourced Learning Management System. The team plans to host a virtual fracture liaison service facilitated through a tertiary care setting at the CALHN. In collaboration with the School of Computer Science, machine learning and artificial intelligence methods will be applied with the large dataset that will eventually be collected. The ultimate outcome being to improve the health outcomes of patients with fragility fractures.

### Social Science and Frailty

- Dr Helen Barrie was part of a team led by Prof Alex Brown that was awarded National Health and Medical Research Council Targeted funding of \$741,947 to support the project '*Designing Indigenous aged care with a* 'whole of community' perspective. 2019-2021
- Dr Helen Barrie carried out research on outdoor and indoor environments and their impacts on older people's mobility, independence and quality of life. She used an innovative citizen science approach to audit the neighbourhoods and lived spaces of older South Australians and from the pilot work produced a paper: Barrie, H., Soebarto, V., Lange, J., Corry-Breen, F., & Walker, L. (2019). *Using citizen science to explore neighbourhood influences on ageing well: pilot project.* Healthcare, 7(4), 126-1-126-13.
   For the above publication Dr Barrie and the team were able to secure an SA Health & Wellbeing 'Citizen Science for a Greener Adelaide' 2020 and also secured additional project funding from Office for Ageing Well Co-designing Age Friendly Cities through Citizen Science' 2020
- Dr Barrie also secured an Australian Housing and Urban Research Institute (AHURI) grant to fund Inquiry into housing policies and practices for precariously housed older Australians (20/PRO/32250). This will investigate how to provide a more differentiated and diversified housing system that better caters to the needs of precariously housed, older individuals.

### Frailty Knowledge Translation

- Dr Archibald co-developed a videos series about frailty (recently translated into Mandarin with the support of an AAG Gibson Grant), and a series of artistic works that won first place in 'Perform your Science competition (SA)' and an 'Inspiring SA Regional Science-Arts Collaboration Grant'.
- Dr Lawless has been awarded a Flinders University: Caring Futures Institute Accelerator Grant to investigate Frailty and healthy ageing in online communities, and a RM Gibson Grant from the AAG to produce research and communication resources about frailty.
- Dr Pinero de Plaza has also been awarded a Flinders University: Caring Futures Institute Accelerator Grant for exploring the experiences of frail, homebound and bedridden people, and a Flinders University: Caring Futures Institute Collaborative Grant for investigating the use of digital technologies in the inpatient setting.



Left: Assoc/Prof Mandy Archibald at left with artist John Blines, Choreographer Amber Cronin and Videographer Justin Broughton. Middle and right: artistic pieces from the Beyond Measure Exhibition and guests at the exhibition launch.

# **CRE Frailty & Healthy Ageing Investigators**



Professor Renuka Visvanathan



Professor Jon Karnon



Professor Alison Kitson



Professor Justin Beilby



Professor Ian Cameron

#### **Investigator Name**

<u>Chief Investigators</u> Visvanathan, Renuka Karnon, Jon Kitson, Alison Beilby, Justin Cameron, Ian Bell, Simon Chehade, Mellick Barrie, Helen

Independent Chair

Frewin, Derek



Professor Simon Bell

**Research Stream** 

Geriatric Medicine and Gerontology Health Economics Knowledge Translation General Practice Rehabilitation Medicine Geriatric Pharmacoepidemiology Orthopaedic and Trauma Surgery Social Science and Frailty



A/Professor Mellick Chehade



Dr Helen Barrie

Institution

The University of Adelaide Flinders University Flinders University Torrens University The University of Sydney Monash University The University of Adelaide University of South Australia

Emeritus Professor of The University of Adelaide and Independent Chair Management Committee University of Adelaide

# **CRE Frailty & Healthy Ageing Investigators**

#### **Investigator Name**

International Cesari, Matteo

Morley, John

Theou, Olga

Schultz, Tim

Yu, Solomon

Wilson, David

Baker, Leonie

Tucker, Graeme

Taylor, Danielle

Administrative Support

Domestic

Rockwood, Ken

#### **Research Stream**

#### Associate Investigators

Geriatric Medicine and Gerontology Geriatric Medicine and Gerontology Geriatric Medicine and Gerontology

**Knowledge Translation** Geography and Demography Geriatric Medicine and Gerontology

Geriatric Medicine and Gerontology

Geriatric Medicine and Gerontology Geriatric Medicine and Gerontology Project Manager - CRE Frailty and Healthy Ageing

#### Institution

The University of Milan St Louis University Dalhousie University Dalhousie University

The University of Adelaide The University of Adelaide The University of Adelaide

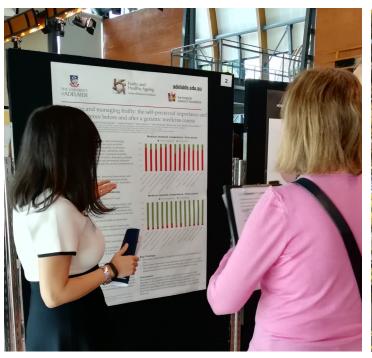
Consultancy
Consultancy
The University of Adelaide

Current Research Fellows					
Ambagtsheer, Rachel	General Practice		Torrens University		
Amare, Azmeraw	Geriatric Medicine and Gerontology		The University of Adelaide		
Dollard, Joanne Jadczak, Agathe Daria	Geriatric Medicine and Gerontology Geriatric Medicine and Gerontology		The University of Adelaide The University of Adelaide		
Thompson, Mark	Geriatric Medicine and Gerontology		The University of Adelaide		
Archibald, Mandy	Knowledge Translation		Flinders University		
Lawless, Michael	Knowledge Translation		Flinders University		
Pinero de Plaza, Maria Alejandra	Knowledge Translation		Flinders University		
Jayatilaka, Asangi	Orthopaedics The		The University of Adelaide		
Previous Research Fellow	<u>s</u>				
Hendrix, Ivanka	Geriatric Medicine and Gerontology	2017	The University of Adelaide		
Hosking, Sarah Korhonen, Maarit	Geriatric Pharmacoepidemiology Geriatric Pharmacoepidemiology	2017 - 2018 2017	Monash University Monash University		
Afzali, Hossein	Health Economics	2016 - 2019	Flinders University		

# **CRE Frailty & Healthy Ageing Students**

### **Current PhD Students**

Student Name	Thesis	Supervisor	Degree and Institution
Ahip, Sally Suriani	The Malaysian Pictorial Fit-Frail Scale (M- PFFS): Development and Testing of Feasibility, Validity and Reliability In Malaysia	Visvanathan R Theou O Shariff S	PhD The University of Adelaide
Gupta, Anupam Data	Lower limb spasticity and dystonia	Visvanathan R Wilson D Cameron I Koblar	PhD The University of Adelaide
Jasper, Unyime	Preventing frailty, immobility and sedentary lifestyle in older people	Visvanathan R Jadczak A Dollard J Yu S	PhD The University of Adelaide
Khow Sok Fun, Kareeann	Frailty, falls, hip fractures and clinical outcomes in older people	Visvanathan R Yu S	PhD The University of Adelaide
Liau, Shin	Patterns and outcomes of medication use according to frailty status in a range of practice settings	Bell S	PhD Monash University
Smyth, James	Utility of frailty and activities of daily living (ADL) assessments in the management of emergency department patients from nursing homes in the context of the growing aged population, associated emergencies and multi-disciplinary care	Visvanathan R Arendts G Grantham H	PhD The University of Adelaide
Yadav, Lalit	Digital patient education platform to facilitate hip fracture recovery: perspectives of patients, family members and residential aged carers in South Australia	Mellick C Gill T	PhD The University of Adelaide



Dr Beatriz Martins (left) explaining her research at the 2019 Florey Post Graduate Conference



Centre Dr Anupam Data Gupta (PhD Candidate) with colleagues Dr Kandiah Umapathysivam and Dr Nigel Quadros

#### **Completed Post Graduate Students**

2020			
Ambagtsheer, Rachel	Assessing the Appropriateness of Frailty Screening in the Australian General Practice Context: Ethics, Accuracy, Feasibility and Ac-	Beilby J Dent E Yu S	PhD Torrens University
Martins, Beatriz	Built Environment and Frailty: Understanding the influence of neighbourhood on older people's health	Visvanathan R Barrie H Kuzuya M	PhD The University of Adelaide
Thompson, Mark	Frailty in Older Adults: Findings from Longitudinal Studies	Visvanathan R Theou O	PhD The University of Adelaide
2019			
Lawless, Michael	'Mind your Mind': Representations of Dementia Risk-prevention in News and Digital Media	Kitson A	PhD Flinders University
McNally, Clare	An Exploratory Investigation of the Oral Health of Hospitalised Older People	Adams R Visvanathan R Liberali S	PhD The University of Adelaide
2018			
Jadczak, Agathe	Exercise and Older People: Strategies to Prevent, Treat and Delay Frailty	Visvanathan R Luscombe-	PhD The University of Adelaide

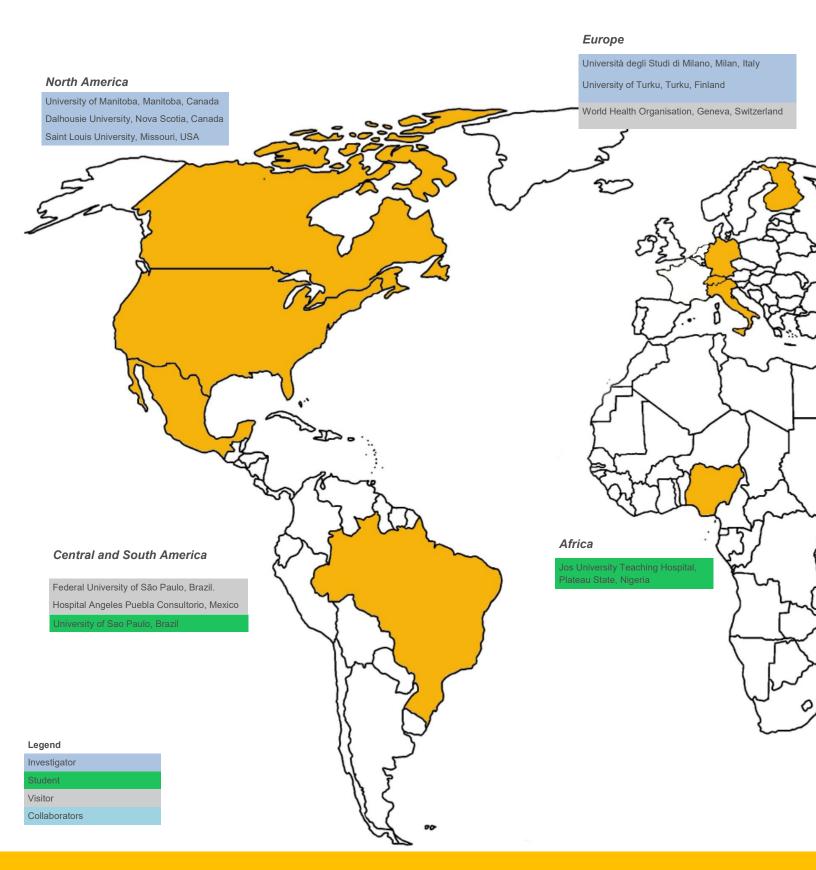
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Top Left: Dr John Beard (4th from right) former director of WHO Ageing mentors post graduate students and early career researchers during a visit in 2019. Right: A/ Prof Solomon Yu and Dr Agathe Jadczak attend the 2019 International Conference on Frailty and Sarcopenia in Miami. Bottom Left: Dr Mark Thompson (right) wins Best Oral Presentation at the 2019 TQEH Research Expo.

# **Global Network of CRE Frailty & Healthy Ageing**

The CRE brings together investigators and research students from all major inhabited continents in the world.





#### Australia

The University of Adelaide, Adelaide, SA

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- Torrens University, Adelaide, SA
- Flinders University, Bedforfd Park, SA
- University of South Australia, Adelaide, SA
- The University of Sydney, Sydney, NSW

Monash University, Melbourne, SA

- South Australian Health and Medical Research Institute (SAHMRI), SA
- The Commonwealth Scientific and Industrial Research Organisation (CSIRO), SA
- Central Adelaide Local Health Network (CALHN), SA Sir Charles Gairdner Hospital, WA
- Royal Brisbane and Women's Hospital, Brisbane, QLD

The University of Queensland, Brisbane, QLD.



The Ministry of Health Malaysia, Kuching, Malaysia Nagoya University, Nagoya, Japan Chinese University of Hong Kong, Hong Kong, China Saurashtra University, India MP Shah Medical College, Jamnagar, India

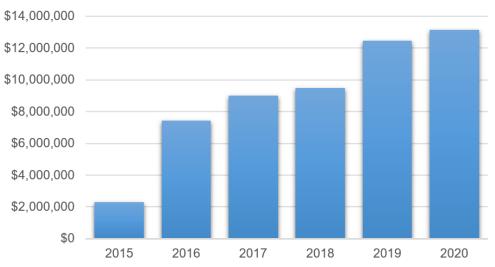
Maharashtra University of Health Sciences, Nasik, India

# Awards and Recognitions

Recipient 2020	Award Type
Thompson M	Dean's Commendation for Doctoral Thesis Excellence
Martins B	Dean's Commendation for Doctoral Thesis Excellence
2019	
Dollard J	2019 Faculty of Health and Medical Sciences Research Travel Award,
Dollard J	SA Health: Minister's Research and Innovation Award: Finalist
Dollard J	2019 THRF Travel Award
Jadczak AD	2019 Faculty of Health and Medical Sciences Research Travel Award,
Jasper U	The Queen Elizabeth Hospital Research Expo 2019 - Best Lay Description
Taylor D	Scholarship to attend Developing Positive Partnership Course
Thompson M	The Queen Elizabeth Hospital Research Expo 2019 - Best Presentation
Thompson M	Rising Star Best Publication Award - Australian and New Zealand Sarcopenia & Frailty
Visvanathan R	Venkoba Rao Oration Medal
Visvanathan R	Fellowship - Australian Association of Gerontology 2019
Yadav L	Adelaide Medical School Research Travel Awards 2019
Yadav L	Adelaide Graduate Centre Research Travel Scholarship 2019
Yadav L	Walter and Dorothy Duncan Trust Conference Travel grant 2019
2018	
Afzali H	Best Presentation Award- 20th International Conference in Applied Health Economics
Jadczak AD	Robert Penhall Research Award Australian Association of Gerontology
Jadczak AD	Travel Grant- University of Adelaide- Faculty Health Science
Jasper U	International Wildcard Scholarship- University of Adelaide
Taylor D	Scholarship - Thinkwell early and mid-career professional development – Year long coaching program funded by Faculty of Health and Medical Sciences
2017	coaching program runded by racting of riealth and medical Sciences
Lawless M	2017 Dean's Commendation for Doctoral Thesis Excellence
Martins B	2017 THRF Travel Award
Dollard J	2017 THRF Travel Award
Ambagtsheer R	2017 Torrens University Travel Award

# **Research Funding**

Utilising the funding awarded by the NHMRC to the Centre of Research Excellence in Trans-Disciplinary Frailty Research to Achieve Healthy Ageing we were able to carry out research, collect knowledge and apply for additional research funding support. The additional funding leveraged by the team is 4.7 times the initial investment to the CRE which will allow us to further expand our research.



# **Cumulative Research Funding**

# **Research Grants**

Team Category 1: Australian Con	Grant title npetitive Grants	Years	Yrs	Amount
Faulkner D, <b>Barrie H,</b> Tually S, Sharam A, James A.	The Australian Housing and Urban Research Institute (AHURI): Inquiry into Housing Older Australians	2020-2021	2	\$594,194
Maddern G, Inacio M, <b>Visvanathan R, Karnon J</b>	The Medical Research Future Fund (MRFF): Mobile X-ray services provided within Residential Aged Care Facilities	2019 -2021	3	\$1,970,000
Brown A, Braunack-Mayer A, <b>Barrie H,</b> Davy C.	NHMRC Targeted Research Call: Designing Indigenous aged care with a 'whole of community' perspective	2019-2021	3	\$720,000
Faulkner D, Tually S <b>, Barrie</b> <b>H</b> , Cornell V, Lui, Judd B, Cook P & Verdouw J.	The Australian Housing and Urban Research Institute: Public housing- an effective and appropriate tenure for ageing well?	2019-2020	1	\$148,006
Soebarto V, Pisaniello D, Zuo J, Williamson T, Hansen A, <b>Visvanathan R,</b> van Hoof J	ARC: Improving thermal conditions in housing to support ageing in place	2018-2020	3	\$ 413,000
Visvanathan R, Karnon J, Beilby J, Kitson A, Barrie H, Bell M, Cameron I.	NHMRC Trans-Disciplinary Frailty Research To Achieve Healthy Ageing	2016 - 2020	5	\$2,301,169
Visvanathan R	Premiers Research and Industry Fund: Consortium. Sub Project: Frailty in Residential Sector over Time (FIRST) Study	2016 - 2020	5	\$4,000,000

Figure 1: Cumulative research funding awarded to the CRE

Team Category 2: Other Public S	Grant title lector Research Income	Start Date	Yr	Amount
Barrie H, Faulkner D.	Co-designing Age Friendly Cities through Citizen Science	2020 - 2021	1	\$30,000
West CH, Rieger K, Kenny A, Dusome D, Schulte F, Pelletier W, Crysdale J, Winsor J, Lobchuk M, <b>Archibald M</b> .	Funding: Children's Hospital Research Institute of Manitoba Operating Grant	2019 - 2020	1	\$60,000
Lawless M	Caring Futures Institute Accelerator Grant (Flinders University): Frailty and healthy ageing in online communities: a knowledge translation approach and mixed-methods netnographic study	2019 -2 020	1	\$3,100
Pinero de Plaza MA	Making the invisible visible: a care agency study about the inclusion of frail and housebound/ bedbound people	2019 - 2020	1	\$4,000
<b>Barrie H,</b> Lange J & Soebarto V	Citizen Science for a Greener Adelaide	2019 - 2020	1	\$30,000
<b>Barrie H,</b> Soebarto V, Lange J	Green Spaces, public spaces and ageing well	2018 - 2019	1	\$30,000
<b>Barrie H</b> , Burgess T, Braunack-Mayer A &	Social, ethical and economic considerations of smart technologies for ageing well	2018 - 2019	1	\$30,000
Brown A, Braunack-Mayer A, <b>Barrie H,</b> Davy C.	Culturally Safe Workforce Models for Rural and Remote Indigenous Organisations	2017 - 2019	2	\$1,100,000
Barrie H, McDougall K.	Retired not Expired: an examination of ageism in SA	2017 - 2018	1	\$30,000
Category 3: Industry and C	Wher Research Income			
Archibald M, Sellers E.	University Collaborative Research Program	2020 - 2023	3	\$25,000
Jasper U, Dollard J, Chehade M	AAG Research Trust - 2020 RM Gibson Research Fund: Evaluating the impact of a co-created video	2020 - 2021	1	\$7,000
Lawless M	AAG Research Trust - 2020 RM Gibson Research	2020 - 2021	1	\$7,000
Afzali H, Karnon J, Visvanathan R.	Economic burden of frailty in Australia	2020 - 2021	1	\$24,800
Jasper U, Dollard J.	Evaluating the impact of a co-created video	2020 -2021	1	\$7,000
Archibald M, Feo R, Conroy T, Kitson A.	Establishment Grant, CNHS, Flinders University	2019 - 2020	1	\$8,000
<b>Pinero De Plaza, M, Archibald M, Lawless M,</b> McMillan P, Hallmann G, Pagano J, <b>Kitson A.</b>	Caring Futures Institute Accelerator Grant (Flinders University): Making the invisible visible: A care agency study about the inclusion of frail and homebound/bedbound people.	2019 - 2021	2	\$4,000
Archibald M, Ambagtsheer RC.	Australian Association of Gerontology 2019 RM Gibson Research Fund: Mobilising Research	2019 - 2020	1 ye	\$7,000
Murray J, Lewis A, Conroy T, Hunter S, <b>Kitson A</b> .	SA Dental Service REDUCE (tRanslating knowlEDge for fUndamental CarE) missed oral healthcare: it takes a team	2019 - 2021	2	\$19,646

Team Continued	Grant tille	Start Date	Yr	Amount
Taylor D	Hospital Research Foundation Mid-Career Fellowship: Inequalities in Neighbourhood	2017-2020	3	\$420,000
Taylor D, Barrie H	Resthaven Inc - Adelaide Geriatrics Training & Research with Aged Care Centre	2017- 2018	1	\$10,000
Archibald M	Resthaven Inc - Adelaide Geriatrics Training & Research with Aged Care Centre	2017- 2018	1	\$10,000
Ambagtsheer R	Resthaven Inc - Adelaide Geriatrics Training & Research with Aged Care Centre	2017- 2018	1	\$10,000
Taylor D, and Lange J	Central Adelaide Local Health Network, SA Health –Spatial analysis of emergency department use by	2017- 2018	1	\$10,000
Visvanathan R	The Hospital Research Foundation Challenge Grant: Trans-Disciplinary Frailty Research To	2016 - 2020	5	\$625,000

#### Other Research Support Funding

Visvanathan R, Karnon J,<br/>Beilby J, Kitson A, Barrie<br/>H, Bell M, Cameron I.University of Adelaide Trans-Disciplinary Frailty<br/>Research To Achieve Healthy Ageing2016 - 20205\$500,000



Pictured - Prof Jean Woo (CUHK) at right speaking at the official launch of CRE in Frailty and Healthy Ageing, Fri 30th Sep, 2016.

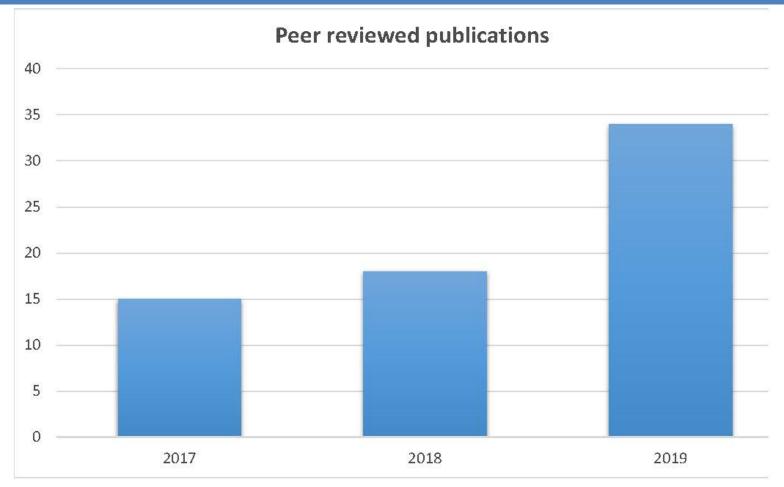


Figure 2: No of peer reviewed publications per year.

# **Peer Reviewed Publications 2019**

1. Afzali H, Karnon J, Theou O, Beilby J, Cesari M, Visvanathan R. Structuring a conceptual model for cost effectiveness analysis of frailty interventions. PLoS ONE. 2019;14(9), e0222049.

2. **Ambagtsheer R, Beilby J, Visvanathan R**, Dent E, **Yu S**, Braunack Mayer A. Should we screen for frailty in primary care settings? A fresh perspective on the frailty evidence base: A narrative review. Preventive Medicine. 2019;119,63-69. doi:10.1016/j.ypmed.2018.12.020.

3. **Ambagtsheer R, Visvanathan R**, Dent E, **Yu S**, Schultz T, Beilby J. Commonly used screening instruments to identify frailty among community-dwelling older people in a general practice (primary care) setting: a study of diagnostic test accuracy. The journals of gerontology. Series A, Biological Sciences and Medical Sciences. 2019. doi:10.1093/gerona/glz260.

4. **Ambagtsheer R, Archibald M, Lawless M**, Mills D, **Yu S**, **Beilby J**. General practitioners' perceptions, attitudes and experiences of frailty and frailty screening Australian Journal of General Practice Jun-2019. 48, 426-433

5. **Ambagtsheer R**, Casey M, **Schultz T, Thompson M, Archibald M**. Diagnostic Test Accuracy of Self-Reported Screening Instruments in Identifying Community-Dwelling Older People at Risk of Frailty: A Systematic Review Geriatrics and Gerontology International 14 Nov 2019. 20,14-24

6. **Ambagtsheer R, Beilby J**, Seiboth C, Dent E. Prevalence and associations of frailty in residents of Australian aged care facilities: findings from a retrospective cohort study Aging Clinical and Experimental Research 2019 Nov 4:1-8

7. Ankeny R, **Barrie H**. Learning not just from but with citizens: The importance of co-design in health-related social research. The American Journal of Bioethics. Volume 19, 2019 - Issue 8 Pages 54-56 |

8. **Archibald M, Ambagtsheer R**, Casey M, **Lawless M.** Using ZOOM video conferencing for qualitative data collection: Perceptions and experiences of researchers and participants. International Journal of Qualitative Methods Feb 2019. 18, 1-8

9. **Archibald M, Kitson A.** Using the Arts for Awareness, Communication and Knowledge Translation in Older Adulthood: A Scoping Review. Arts and Health: An International Journal for Research Policy and Practice. May 2019. 1-17

10. **Archibald M**, Scott S. Learning from Usability Testing of an Arts-Based Knowledge Translation Tool for Parents of a Child with Asthma Nursing Open. Sep 2019. 6, 1615-1625

11. **Barrie H**, Soebarto V, Lange J, McCorry-Breen F. Walker L. Using Citizen Science to Explore Neighbourhood Influences on Ageing Well: Pilot Project MDPI Healthcare 7 (4) Special Issue: Creating age-friendly communities: Housing and technology Healthcare (Basel). 2019 Nov 1;7(4):126.

12. **Datta Gupta A**, **Visvanathan R**, **Cameron ID**, Koblar S, Howell S, Wilson D. Efficacy of Botulinum Toxin A in Modifying Spasticity to Improve Walking and Quality of Life in Post-Stroke Lower Limb Spasticity - a Randomized Double-blind Placebo Controlled Study. BMC Neurology. 2019 May 11;19(1):96.

13. Dent E, **Morley JE**, Cruz-Jentoft AJ, Waters DL, Vellas B. Physical Frailty: ICFSR International Clinical Practice Guidelines for Identification and Management. Journal of Nutrition, Health and Aging 2019, 23(9); 771-787

14. **Hendrix I**, Page A, **Korhonen M**, **Bell J**, Tan E, **Visvanathan R**, Cooper T, Robson L, Sluggett J. Patterns of high-dose and longterm proton pump inhibitor use: A cross-sectional study in six South Australian residential aged care services. Drugs Real World Outcomes. 2019 Sep;6(3):105-113.

 Inacio MC, Visvanathan R, Lang CE, Amare A, Harrison SL, Wesselingh S. Pain in Older Australians Seeking Aged Care Services: Findings From the Registry of Older South Australians (ROSA). J Am Med Dir Assoc. 2019 Mar 6. pii: S1525-8610(19)30154-9. doi:10.1016/j.jamda.2019.01.127 [Epub ahead of print].

16. Inacio M, Bray S, Whitehead C, Corlis M, **Visvanathan R**, Evans K, Griffith E, Wesselingh S. Registry of Older South Australians (ROSA): framework and plan. BMJ Open. 2019 Jun;9(6):e026319.

17. **Jadczak AD**, **Visvanathan R.** Anorexia of Aging - An Updated Short Review. J Nutr Health Aging. 2019;23 (3):306-309.

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Below- Dr Joanne Dollard with a patient at TQEH.



# **Research Communication Events**

### **Research Showcase**

Title

Healthy Ageing: Every Step Matters The Science of Healthy Ageing Research Showcase Frailty & Healthy Ageing Research Showcase

Date	Attendees
Thu 12th Sep 2019	110
Wed 1st Aug 2018	107
Fri 8th Sep 2017	95



Right: Crowds attending the 2018 Research Showcase.

*Right (lower): Dr Mark Thompson, Dr Beatriz Martins and Dr Danielle Taylor at the research showcase event in 2019. Prof* 

Below: Renuka Visvanathan presents her research to a table of guests at the 2019 event.





#### Aged & Extended Care Services/GTRAC/CRE Seminars

Speaker	Title	Date
Dr Joanne Dollard	Acceptability of the Ambient Intelligent Geriatric Management (AmbIGeM) system: a technological solution to prevent in-patient fall.	15 Nov 2019
Dr Bavand Bikdeli	Clinical Characteristics and Outcomes of Venous Thromboembolic Events after Hallux Valgus Surgery: Insights from the RIETE Registry.	15 Nov 2019
Dr James Smyth	Perspectives of emergency physicians on frailty.	16 Aug 2019
Dr Shasti Smith	Frailty, Hip fractures and Outcomes.	19 Jul 2019
Dr Danielle Taylor	Geography of Frailty.	19 Jul 2019
Dr Lalit Yadav	E- health Management and Personalised health systems to support Or- thogeriatric services and promote patient Well-being, Engagement and	17 May 2019
	Rehabilitation (EMPOWER): a mixed methods study.	

Organiser	Event	Date
Dr Mandy Archi- bald	Consumer Perspectives as the Basis for Knowledge Translation in Frailty and Healthy Ageing.	15 Mar 2019
Dr Beatriz Martins	Nagoya Longitudinal Study – Updates from Japan.	15 Mar 2019
Dr Sally Ahip	The Malaysian Pictorial Fit-Frail Scale (M-PFFS): Development and Testing of Feasibility, Validity and Reliability In Malaysia. BHI, Wood-	15 Feb 2019
Mr Unyime Jasper	The hip fracture SMART-MOVE study	15 Feb 2019
Dr Anupam Datta Gupta	Healing Hands- management of hand ulcers caused by focal spasticity- a case series.	21 Sep 2018
Dr James Smyth	The utility of assessments of frailty and activities of daily living of emer- gency department patients from nursing homes	21 Sep 2018
Mr Mark Thomp- son	The dynamic nature of frailty, and the importance of regular review. Findings from NWAHS.	17 Aug 2018
Dr Kareeann Khow	Updates on blood transfusion and outcomes after hip fracture surgery in older adults.	17 Aug 2018
Dr James Smyth	Roles of frailty and ADL assessments vis a vis transfer of nursing home residents to the emergency department.	16 Feb 2018
Dr Bavand Bikdeli	Use of Prophylaxis for Prevention of Venous Thromboembolism in Pa- tients with Isolated Foot or Ankle Surgery. A systematic review and me-	16 Feb 2018
Dr Danielle Taylor	Towards Mapping Frailty Risk	19 Jan 2018
Dr Beatriz Martins	Built Environment and Frailty: Understanding the influence of neigh- bourhoods on older people's health	19 Jan 2018
Dr. Catalin Tu- fanaru	Statistical Misconceptions in Evidence-Based Medicine	21 Apr 2017
Dr Sally Suriani Ahip	The Development and Testing of Feasibility, Validity and Reliability of a novel frailty screening tool: The Malaysian Pictorial Fit Frail Scale (M-PFFS) and future implementation plans in the Malaysian Primary Health Care System	21 Apr 2017
Dr Ashleigh Smith	Cognitive Training	17 Feb 2017
Dr James Smyth	Transfers of fully dependent nursing home residents to the emergency department.	20 May 2016

#### Newsletters Edition

Edition	Dale
Newsletter	Apr 2020
Newsletter	Nov 2018
Newsletter	Jun 2018
Newsletter	Nov 2017
Newsletter– Launch edition	Mar 2017
Special Edition– General Practice	Aug 2020
Special Edition– Gerontology Research	June 2019
Special Edition– Pharmacy Research	Dec 2017

Right: TQEH Research Expo 2019 PhD student Unyime Jasper (pictured far right) won the Best Lay Description award.

Below Left: Prof Renuka Visvanathan, Dr Beatriz Martins with visiting Prof Mazafumi Kuzuya (Institute of Innovation for Future Society, Nagoya University) 2018.

Below Right: 2018 student and Early Career Researcher Mentoring Session: hosted by Prof Justin Beilby pictured far right back row.



Date

Right: TQEH 2017 Research Day Hon Mark Butler MP meets with Dr Agathe Jadczak, Dr Danielle Taylor, Dr Kandiah Umapathysivam, Prof Renuka Visvanathan, Dr Beatriz Martins, Dr Clare McNally, Dr Joanne Taylor and Dr James Smythe.

Below Left: From left Dr Rachel Ambagtsheer, Dr Ruby Ho-Yan Yu (Chinese University of Hong Kong), Dr Helen Barrie and Dr Joanne Dollard

Below right: Women of Impact and Influence Breakfast with the University of Adelaide. Ffrom left Kate Freebairn, Prof Renuka Visvanathan, Prof Helen Marshall &Dr Kate Vandyke



**ofADELAIDE** 

FACULTY OF Health and Medical

Right: Dr Mandy Archibald (right) wins the 2018 Perform Your Science Award for 'At my age: Exploring experiences and understandings of frailty through performance arts'.

Below Left: 2020 Dr Danielle Taylor shared her research on Coast FM radio. Pictured L to R: Radio host Dave Hearn, Dr Danielle Taylor, Antonia Costa (THRF), radio host Barry Gower

Below Right: 2019 the Minister for Health and Wellbeing visited the CRE Frailty & Health Ageing to hear the research taking place. Pictured L to R: Prof Justin Beilby, The Hon Stephen Wade MLC Emeritus Professor Derek Frewin OA, Prof Renuka Visvanathan, Mr Matthew McInnes (SA Health) and A/Prof Solomon Yu.





### **Contact Us**

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