

BASIL HETZEL INSTITUTE **RESEARCH REPORT 2017**

Translational health research at The Queen Elizabeth Hospital



The Institute

basil hetzel institute for translational health research





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2017 has been
a year of dramatic
change within
the Central
Adelaide Local
Health Network.

Guy Madden

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**Innovative gel to
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\$20M+ REVENUE

- ▶ Grants, clinical academic salaries, scholarships and infrastructure support

400+

- ▶ Publications

100+

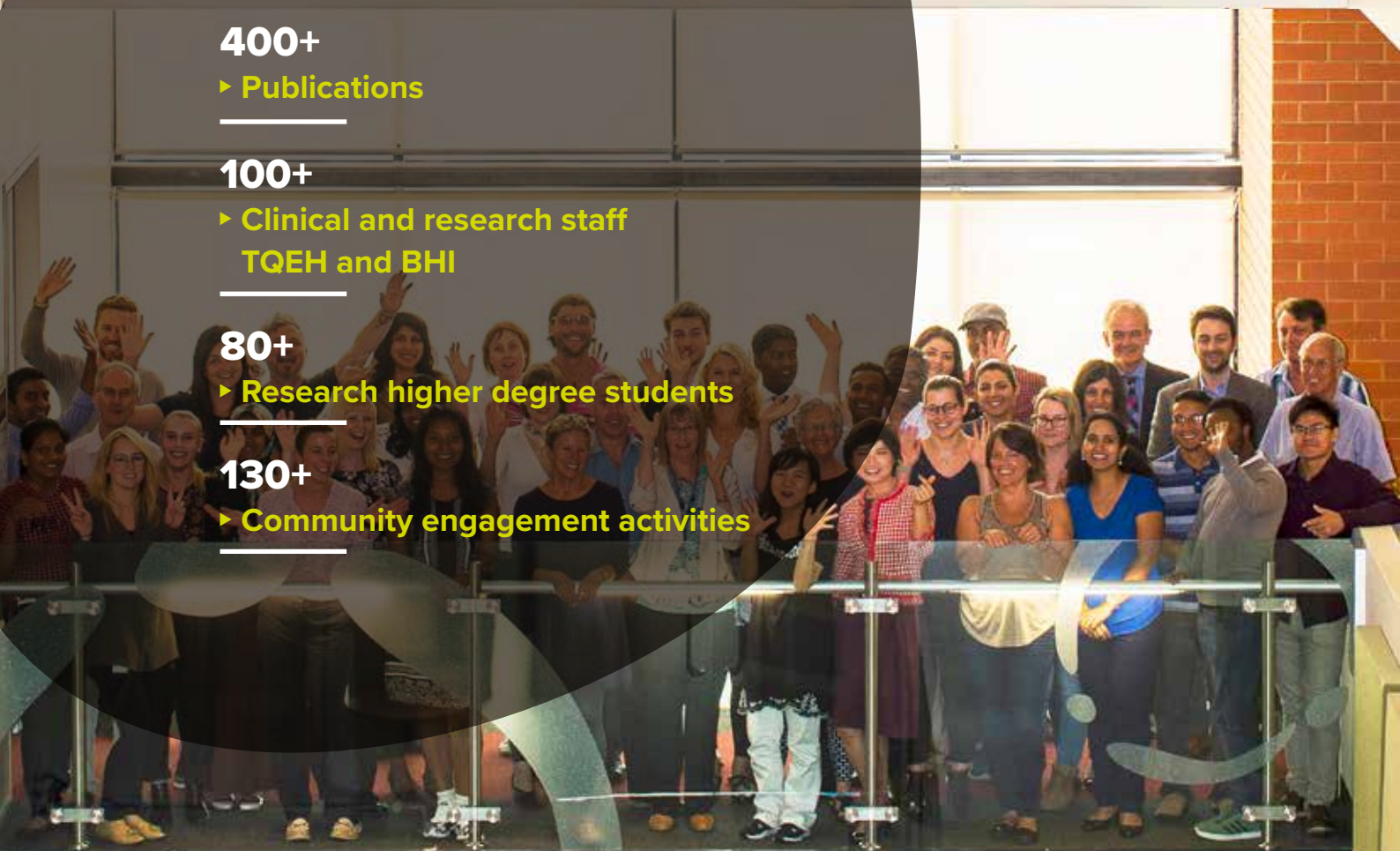
- ▶ Clinical and research staff
TQEH and BHI

80+

- ▶ Research higher degree students

130+

- ▶ Community engagement activities



DIRECTOR'S REPORT

“ ... the potential for South Australia and CALHN to make a significant contribution to biomedical research in the next decade is considerable.”



2017 has been a year of dramatic change within the Central Adelaide Local Health Network (CALHN). During this time, the move was finally made from the old Royal Adelaide Hospital to the new Royal Adelaide Hospital. This has been an enormous logistic challenge, not only at the time of the move but in settling into the new work environment at the nRAH.

The implications for a number of researchers leaving the old RAH was a loss of research space. Some of this has been accommodated at the new biomedical precinct on North Terrace which has incorporated the new Medical School of The University of Adelaide, expansion of SAHMRI with a foreshadowed SAHMRI 2 being commenced, and the almost complete University of South Australia research facilities within short walking distance of the Royal Adelaide Hospital. Nonetheless, the Royal Adelaide Hospital itself, and CALHN in particular, has no wet lab facilities, making the Basil Hetzel Institute an important resource for hospital and university research.

The BHI itself over 2017 has had a very strong performance, with in excess of \$20 million in research money being expended, over 400 publications being published, 18 higher degrees being completed, and 92 refereed grants being managed through the facility. The NHMRC success has seen improvement on previous years and hopefully this will foreshadow ongoing success in 2018.

The 2017 TQEH Research Day took on an expanded format with a showcasing of new initiatives funded by The Hospital Research Foundation being presented on the Thursday prior to the usual Friday activities showcasing research from BHI groups.

With all this increased research resource being made available for the Central Adelaide Local Health Network, a decision has been made to appoint a Director of Research across CALHN. Professor John Beltrame has taken on this role and hopes to be able to bring better co-ordination

between all the biomedical precinct participants and CALHN over the next few years. This cross-campus collaboration is absolutely vital. If we continue to operate in silos, unaware of what other activities are being conducted and what resources are available within the biomedical precinct, there is no value in being co-located. If, on the other hand, projects can be collaboratively staged and the results tap into the translational opportunities provided by both the Royal Adelaide Hospital and The Queen Elizabeth Hospital, then the potential for South Australia and CALHN to make a significant contribution to biomedical research in the next decade is considerable.

For this to work, there needs to be considerable trust and goodwill generated and demonstrated achievements need to take place. The relationship between the universities and the teaching hospitals needs to be more clearly defined, there needs to be more tangible collaboration between the universities, and in particular the University of South Australia and The University of Adelaide. Finally, SAHMRI needs to be seen not as a competitor but as a collaborator with all groups operating within South Australia and, in particular, the Central Adelaide Local Health Network.

These changes cannot be allowed to stagnate and rapid uptake and collaboration needs to be occurring from the beginning of 2018. This could perhaps be best shown by joint NHMRC research grants being submitted from many of the players now based in this area and would certainly provide tangible proof that we have more than just architectural monuments located along the North Terrace precinct.

GUY MADDERN

Director of Research

Basil Hetzel Institute for Translational Health Research
THE QUEEN ELIZABETH HOSPITAL

SIGNIFICANT IMPACT PUBLICATIONS 2017

AGEING

► Adelaide G-TRAC Centre

Impact factor: 1.482

Visvanathan R, Damith C, Wilson A, Lange K, Dollard J, Boyle E, Karnon J, Raygan E, Maher S, Ingram K, Shibu P, Hoskins S, Hill K. *Inj Prev*. 2017 Aug 19. doi: 10.1136/injuryprev-2017-042507. Effectiveness of an Ambient Intelligent Geriatric Management system (AmbiGeM) to prevent falls in older people in hospitals: Protocol for the AmbiGeM stepped wedge pragmatic trial.

This is a protocol paper for a hospital based intervention trial to prevent falls. The paper describes the technology to be used in the trial. The technology was co-produced between researchers and staff of both SA Health (The Queen Elizabeth Hospital/Central Adelaide Local Health Network) and WA Health (Sir Charles Gairdner Hospital).

► <https://www.ncbi.nlm.nih.gov/pubmed/28823995>

CANCER

► Breast Biology and Cancer Unit

Impact factor: 6.345

Sun X, Glynn DJ, Hodson LJ, Huo C, Britt K, Thompson E, Woolford L, Evdokiou A, Pollard JW, Robertson SA, Ingman WJ. *Breast Cancer Research*. 2017 19(1):4. CCL2-driven inflammation increases mammary gland stromal density and cancer susceptibility in a transgenic mouse model.

We discovered that chronic low level inflammation can drive increased breast density and the associated increased risk of cancer in a mouse model. This discovery opens the door for new approaches to reduce breast cancer risk with the use of anti-inflammatory drugs targeted to women with high breast density.

► <https://www.ncbi.nlm.nih.gov/pubmed/28077158>

► Colorectal Cancer Research Group

Impact factor: 33.9

Price TJ. *Lancet Oncol*. 2017 Feb;18(2):157-159. Advanced colorectal cancer treatment options beyond standard systemic therapy.

Professor Price was invited to comment on a paper in *Lancet Oncology* that reported a trial of an antibody treatment, MABp1, that targets interleukin 1α and is derived from human neutralising antibodies aimed at blocking the inflammatory process in cancer (Hickish et al., 2017). More patients achieved the primary endpoint (quality of life measures) with a significantly better overall survival in the

MABp1 group than in the placebo group. Professor Price said combining agents that target inflammation with first-line or second-line standard therapy, especially in patients with markers of inflammation present, might improve outcomes and potentially, therefore, survival.

► <https://www.ncbi.nlm.nih.gov/pubmed/28094195>

► Liver Metastasis Research Group

Impact factor: 6.513

Kirana C, Ruszkiewicz A, Stubbs RS, Hardingham JE, Hewett PJ, Maddern GJ, Hauben E. *Int J Cancer*. 2017 Jun 1;140(11):2577-2586. Soluble HLA-G is a differential prognostic marker in sequential colorectal cancer disease stages.

The majority of colorectal cancer (CRC) related deaths are attributable to liver metastasis. However, there is no prognostic biomarker that predicts metastatic risk and allows informed selection of preventive treatment. The translational challenge therefore, is to develop surrogate markers of metastatic progression. HLA-G expression by tumours is an established immune escape mechanism. In this study we demonstrate that soluble HLA-G is a prognostic marker in CRC and its levels are predictive of particular prognostic patterns in sequential disease stages.

► <https://www.ncbi.nlm.nih.gov/pubmed/28233298>

► Northern Network Colorectal Surgical Service

Impact factor: not available, new journal.

Finlay B, Price T, Hewett P. *Pleura and Peritoneum*. 2017;2(3): 137-141. Neutropenia and thrombocytopenia after cytoreductive surgery and heated intraperitoneal chemotherapy.

Neutropenia and thrombocytopenia are well recognised complications of systemic chemotherapy. In cytoreductive surgery (CRS) and heated intraperitoneal chemotherapy (HIPEC) the interplay between surgical factors and systemic toxicity of chemotherapeutics must be considered when considering postoperative haematological outcomes

This retrospective review quantified the incidence of these events at The Queen Elizabeth Hospital. We found that intraperitoneal delivery of chemotherapy as HIPEC can cause haematological toxicity with potentially fatal outcomes, however overall the incidence of neutropenia and thrombocytopenia after CRS and HIPEC was low. These results serve to set a benchmark for haematological outcomes from CRS and HIPEC and support further work in this area to assess factors that may help predict which patients are at risk of complications from this surgery.

► <https://www.degruyter.com/view/j/pp>

SIGNIFICANT IMPACT PUBLICATIONS 2017 cont.

► Solid Cancer Regulation Group

Impact factor: 4.259

Smith E, Palethorpe HM, Hayden AL, Young JP, Underwood TJ, Drew PA. *Sci Rep*. 2017 Jun 13;7(1):3368. Fibroblasts derived from oesophageal adenocarcinoma differ in DNA methylation profile from normal oesophageal fibroblasts.

Fibroblasts in cancer tissue differ from normal fibroblasts and drive cancer progression and cause resistance to therapy. This study elucidated a mechanism for the change in the fibroblasts, and suggested a possible novel treatment based on reversing the changes.

► <https://www.ncbi.nlm.nih.gov/pubmed/28611465>

CARDIOVASCULAR DISEASE

► Cardiovascular Pathophysiology and Therapeutics Group

Impact factor: 20.212

Scuffham PA, Ball J, Horowitz JD, Wong C, Newton PJ, Macdonald P, McVeigh J, Rischbieth A, Emanuele N, Carrington MJ, Reid CM, Chan YK, Stewart S, WHICH? II Trial Investigators. *Eur Heart J*. 2017;38(30):2340-2348. Standard vs intensified management of heart failure to reduce healthcare costs: results of a multicentre randomized controlled trial.

Heart failure represents the greatest impost on health care costs in western society, both by way of hospital admissions and via poor exercise capacity/impaired independence in the general community. This study dissected out the implications of intensive individual follow-up of patients with heart failure in cost-benefit terms. In the 12 months after patients with chronic heart failure were discharged, intensified management did not reduce healthcare costs or improve health care outcomes relative to standard management.

► <https://www.ncbi.nlm.nih.gov/pubmed/28531281>

► Translational Vascular Function Research Collaborative

Impact factor: 19.309

Pasupathy S, Tavella R, Grover S, Raman B, Procter NEK, Du YT, Mahadavan G, Stafford I, Heresztyn T, Holmes A, Zeitz C, Arstall M, Selvanayagam J, Horowitz JD, Beltrame JF. *Circulation*. 2017 Sep 5;136(10):894-903. Early Use of N-acetylcysteine With Nitrate Therapy in Patients Undergoing Primary Percutaneous Coronary Intervention for ST-Segment-Elevation Myocardial Infarction Reduces Myocardial Infarct Size the NACIAM Trial [N-acetylcysteine in Acute Myocardial Infarction].

The NACIAM trial demonstrated that high-dose intravenous N-acetylcysteine (NAC, a drug used to treat misuse of panadol) administered with low-dose intravenous nitroglycerin (a drug used to relieve severe chest pain) is associated with reduced infarct size in patients with ST-segment-elevation myocardial infarction undergoing percutaneous coronary intervention. A larger study is required to assess the impact of this therapy on clinical cardiac outcomes.

► <https://www.ncbi.nlm.nih.gov/pubmed/28634219>

► Vascular Surgery Research Group

Impact factor: 3.536

Thurston B, Pena GN, Howell S, Cowled P, Fitridge R. *J Vasc Surg*. 2017;pii: S0741-5214(17)31773-1 [Epub ahead of print]. Low total psoas area as scored in the clinic setting independently predicts midterm mortality after endovascular aneurysm repair in male patients.

This study tested a novel method of assessing sarcopenia in patients undergoing endovascular aneurysm repair (EVAR). All patients undergo a preoperative computed tomography (CT) angiogram and these images can be used to measure the area of the psoas muscle at the level of the L3 vertebra. We found a significant association between preoperative low psoas muscle area (sarcopenia) and poorer survival and of longer length of stay in hospital. As all patients being worked up for an endovascular aortic aneurysm repair will undergo a CT scan, this method is a rapid and effective way to highlight patients in the clinic setting who have an increased risk of morbidity and mortality after EVAR. This paper was published in the *Journal of Vascular Surgery*, the highest ranked vascular surgical journal.

► <https://www.ncbi.nlm.nih.gov/pubmed/28843791>

► Zinc and Cardiovascular Disease Research Group

Impact factor: 4.281

Roscioli E, Tran HB, Jersmann H, Nguyen PT, Hopkins E, Lester SE, Farrow N, Zalewski PD, Reynolds PN, Hodge S. *Am J Physiol Lung Cell Mol Physiol*. 2017. 313(3):L453-465. The Uncoupling of Autophagy and Zinc Homeostasis in Airway Epithelial Cells as a Fundamental Contributor to COPD.

Although primarily a study of altered zinc homeostasis in the airways of cigarette smoke-exposed mice, one very important finding that also emerged from this study was that cigarette smoke exposure caused a loss of zinc in the lining of the blood vessels. The mechanism appears to be due to down-regulation of a zinc uptake transporter ZIP2. The publication is in the highly regarded *American Journal of Physiology*.

► <https://www.ncbi.nlm.nih.gov/pubmed/28596293>

CHRONIC DISEASE

► Stroke Research Programme

Impact Factor: 6.032

Bivard A, Levi C, Lin L, ... Jannes J... *Stroke*. 2017 Mar;48(3):645-650. Validating a Predictive Model of Acute Advanced Imaging Biomarkers in Ischemic Stroke.

Reliably predicting a stroke patient's functional outcome in response to therapy is a critically important requirement of patient management. Predicting outcomes in ischemic stroke patients poses many challenges because of the huge variation in both patients and their stroke. Effective treatment with reperfusion therapy can also dramatically change patient outcomes. This study has derived and validated a highly accurate model that can predict patient outcome after ischemic stroke, based on acute clinical and advanced imaging measures.

► <https://www.ncbi.nlm.nih.gov/pubmed/28104836>

► The Health Observatory

Impact factor: 3.256

Lang CJ, Appleton SL, Vakulin A, McEvoy RD, Wittert GA, Martin SA, Catcheside PG, Antic NA, Lack L, Adams RJ. *Respirology*. 2017 Oct;22(7):1407-1415. doi: 10.1111/resp.13064. Co-morbid OSA and insomnia increases depression prevalence and severity in men.

This study showed that men with insomnia in addition to obstructive sleep apnea (OSA) have a higher frequency and severity of depressive symptoms than men with sleep apnea only, which was unrelated to the severity of sleep apnea. The identification and treatment of co-morbid sleep apnea and insomnia is important in order to avoid potentially harmful prescription of sedative medication in this patient group.

This publication has an Altmetric Attention Score of 116. This is a measure of the quality and quantity of online attention that it has received and is in the top one percentile of all research outputs and 7th highest of over 1300 papers published by *Respirology*. An accompanying editorial stated "this study makes an important contribution to the literature in that it extends the existing evidence linking insomnia to depression".

► <https://www.ncbi.nlm.nih.gov/pubmed/28589663>

CLINICAL SCIENCES, HEALTH SERVICES AND POPULATION HEALTH

► Anaesthesia Research Group

Impact Factor: 2.581

Rao Kadam V, Van Wijk RM, Moran JL, Ganesh S, Kumar A, Sethi R, Williams P. *J Pain Res*. 2017 Jul 18;10:1705-1712. Continuous transversus abdominis plane block vs intermittent bolus for analgesia after abdominal surgery: a randomized trial.

This paper continues the work on a specific blocking technique to numb the abdominal wall called TAP-Block. We have compared continuous and intermittent injection techniques of these transversus abdominis plane (TAP) blocks, looking at effectiveness and costs. We concluded that both are effective techniques, but that the intermittent injection technique is more economical.

► <https://www.ncbi.nlm.nih.gov/pubmed/28761375>

► Intensive Care Medicine Research Group

Impact factor: 72.406

PRISM Investigators, Rowan KM, Angus DC, Bailey M, Barnato AE, Bellomo R, Canter RR, Coats TJ, Delaney A, Gimbel E, Grieve RD, Harrison DA, Higgins AM, Howe B, Huang DT, Kellum JA, Mouncey PR, Music E, Peake SL, Pike F, Reade MC, Sadique MZ, Singer M, Yealy DM. *N Engl J Med*. 2017 Jun 8;376(23):2223-2234. Early, Goal-Directed Therapy for Septic Shock – A Patient-Level Meta-Analysis.

A single-centre trial and observational studies have suggested Early, Goal-Directed Therapy (EGDT) reduced mortality from septic shock, however, three multi-centre trials of EGDT (ProCESS, ARISE, and ProMiSe) showed no benefit. This is the first prospectively planned individual patient meta-analysis ever conducted in the critically ill, utilising data from the three trials. This meta-analysis found EGDT did not result in better outcomes than usual care and was associated with higher hospitalisation costs.

► <https://www.ncbi.nlm.nih.gov/pubmed/28320242>

► Psychiatry Research Group

Impact Factor: 15.307

Azmeraw TA, Schubert KO, Hou L, Clark SR... Baune BT. *Jama Psychiatry*. 2017 Nov 9. doi: 10.1001/jamapsychiatry.2017.3433. A polygenic score for Schizophrenia and HLA and inflammation genes predict response to lithium in Bipolar Affective Disorder.

This study provides evidence for a negative association between high genetic loading for SCZ, HLA Antigen and Inflammation Genes and poor response to lithium in

SIGNIFICANT IMPACT PUBLICATIONS 2017 cont.

patients with bipolar disorder. These results suggest that DNA, RNA and protein markers in the blood could be used to determine if a patient with bipolar disorder is likely to respond to lithium.

► <https://www.ncbi.nlm.nih.gov/pubmed/29121268>

► Respiratory Medicine Unit & Clinical Practice Unit

Impact factor: 6.264

Usmani ZA, Carson KV, Heslop K, Esterman AJ, De Soyza A, Smith BJ. *Cochrane Database Syst Rev*. 2017 Mar 21;3:CD010673. doi: 10.1002/14651858.CD010673.pub2. Psychological therapies for the treatment of anxiety disorders in chronic obstructive pulmonary disease.

This systematic review found three studies with a total of 319 participants with chronic obstructive pulmonary disease and coexisting anxiety. All three studies assessed psychotherapy (CBT) with a co-intervention, versus the co-intervention alone. There was limited evidence showing some improvements in reduced levels of anxiety and improved quality of life in the psychotherapy group. It is important to note that the overall quality of the evidence was low and hence further research is needed to increase our confidence in this effect. A limitation of this review is that all three of the included studies recruited participants with both anxiety and depression, not just anxiety, which may confound the results.

► <https://www.ncbi.nlm.nih.gov/pubmed/28322440>

► Rheumatology Research Group

Impact Factor: 12.811

Brito-Zerón P, ..., Rischmueller M, ..., Ramos-Casals M. *Ann Rheum Dis*. 2017 Jun;76(6):1042-1050. EULAR-SS Task Force Big Data Consortium. Influence of geolocation and ethnicity on the phenotypic expression of primary Sjögren's syndrome at diagnosis in 8310 patients: a cross-sectional study from the Big Data Sjögren Project Consortium.

This paper from the EULAR-SS task force, of which Associate Professor Maureen Rischmueller is a member, was published in the highest impact factor Rheumatology journal and describes how Sjögren's syndrome manifestations vary with geolocation and ethnicity. It also demonstrates the power of large international collaborations and "big data" to provide new insights into disease. The task force will now continue working on the characterisation of this disease around the world.

► <https://www.ncbi.nlm.nih.gov/pubmed/27899373>

► Surgical Science Research Group

Impact factor: 8.980

Gostlow H, Vega CV, Marlow N, Babidge W, Maddern G. *Ann Surg*. 2017. Jul 24. doi: 10.1097/SLA.0000000000002434. [Epub ahead of print]. Do Surgeons React? A Retrospective Analysis of Surgeons' Response to Harassment of a Colleague During Simulated Operating Theatre Scenarios.

Harassment in the workplace has been thrown into the limelight in 2017. It is essential that discrimination, bullying, harassment and sexual harassment is driven out from surgical training and practice, through changing the culture of the workplace. The objective of this study was to assess and report on surgeons' ability to identify and manage incidences of harassment. This study found that trainees were more aware of instances of harassment and were more likely to intervene during the simulated scenario. However, a large proportion of harassment went unchallenged. The hierarchical nature of surgical education and the surgical workforce in general needs to change to enable a culture in which the responsibility to intervene is allowed and respected.

► <https://www.ncbi.nlm.nih.gov/pubmed/28742690>

DRUG AND VACCINE DEVELOPMENT

► Therapeutics Research Centre

Impact factor: 3.67

Chiew AL, Page CB, Clancy D, Mostafa A, Roberts MS, Isbister GK. *Clin Toxicol (Phila)*. 2017 Oct 9:1-4. doi: 10.1080/15563650.2017.1385790 [Epub ahead of print]. 2-Methyl-4-chlorophenoxyacetic acid (MCPA) and bromoxynil herbicide ingestion.

This paper provides clinical evidence regarding the current procedure using dialysis in the treatment of acute poisoning with herbicides and will help streamline future treatments. Ingestion of bromoxynil and 2-methyl-4-chlorophenoxyacetic acid (MCPA) in combination is associated with high mortality with toxicity characterised by hyperthermia and metabolic acidosis. Dialysis is a proposed treatment, but little data exist regarding its effectiveness.

► <https://www.ncbi.nlm.nih.gov/pubmed/28988498>

► Virology Group

Impact factor: 4.259

Wijesundara DK, Yu W, Qhah B, Eldi P, Hayball JD, Diener KR, Voskboinik I, Gowans EJ, Grubor-Bauk B. *Scientific Reports*. 2017 Aug 17;7(1):8530. Cytolytic DNA vaccine encoding lytic perforin augments the maturation of- and antigen presentation by- dendritic cells in a time-dependent manner.

Hepatitis C virus (HCV) is a significant contributor to the global burden of disease and 71-180 million people are persistently infected with the virus worldwide. Although effective direct acting anti-viral (DAA) therapies are available to cure patients, there is an urgent need for an effective vaccine as DAA therapy does not prevent re-infection and only 20% of infected individuals are diagnosed for HCV. The Gowans Laboratory has developed an innovative cytolytic DNA vaccine platform encoding perforin (rDNA-PRF) to target HCV. The vaccine is more effective than typical DNA vaccines in evoking HCV-specific T cell responses in mice and pigs which highlights exciting translational prospects for rDNA-PRF. Despite the promise of this vaccine, the mechanism of the adjuvant activity of rDNA-PRF was unknown and in this paper we show evidence to suggest that rDNA-PRF vaccination safely mimics a lytic virus infection and activates cross-presenting dendritic cells (the sentinels of the immune system) to prime T cell responses more effectively than typical DNA vaccinations. Anti-viral T cell responses correlate with natural recovery from HCV infections and consequently these findings are significant for the development of effective HCV vaccines in the future.

► <https://www.ncbi.nlm.nih.gov/pubmed/28819257>

INFLAMMATORY DISEASE

► ENT Surgery

Impact factor: 13.081

Que S, Ramezanzpour M, Paramasivan S, Miljkovic D, Cooksley CM, Bassiouni A, Ou J, Psaltis AJ, Wormald PJ, Vreugde S. *Journal of Allergy and Clinical Immunology*. 2017 Nov;140(5):1444-1448. Increased IL-13 expression is independently associated with neo-osteogenesis in patients with chronic rhinosinusitis.

Neo-osteogenesis in chronic rhinosinusitis patients is a significant clinical problem often requiring surgical re-intervention. This manuscript provides for the first time a pathophysiological link between increased IL-13 expression and neo-osteogenesis observed in these patients. This finding may have significant therapeutic implications. Namely, IL-13 targeted biological agents are already in different stages of clinical development and may have beneficial effects on halting or reversing new bone formation in these patients.

► <https://www.ncbi.nlm.nih.gov/pubmed/28601687>

► Inflammatory Bowel Disease Research Group

Impact factor: 7.478

Schwerd T, Bryant RV, Pandey S, Capitani M, Meran L, Cazier JB, Jung J, Mondal K, Parkes M, Mathew CG, Fiedler K, McCarthy DJ; WGS500 Consortium; Oxford IBD cohort study investigators; COLORS in IBD group investigators; UK IBD Genetics Consortium, Sullivan PB, Rodrigues A, Travis SPL, Moore C, Sambrook J, Ouwehand WH, Roberts DJ, Danesh J; INTERVAL Study, Russell RK, Wilson DC, Kelsen JR, Cornall R, Denson LA, Kugathasan S, Knaus UG, Serra EG, Anderson CA, Duerr RH, McGovern DP, Cho J, Powrie F, Li VS, Muise AM, Uhlig HH. *Mucosal Immunol*. 2017 Nov 1. doi: 10.1038/mi.2017.74. [Epub ahead of print]. NOX1 loss-of-function genetic variants in patients with inflammatory bowel disease.

NOX1 is expressed in the gastrointestinal mucosal epithelium and encodes NADPH oxidase 1, which produces reactive oxygen species (ROS). NOX1 expression is purported to play a key role in mucosal barrier function. NOX1 derived ROS is secreted into crypts to maintain mucous sterility and is involved in autophagy and regulation of epithelial proliferation. In this study, a novel mutation in NOX1 was identified in a patient with very early onset inflammatory bowel disease. Culture of colonic epithelial organoids from this patient confirmed diminished NOX1 expression and a reduction in ROS generation. The discovery of this novel mutation led to exome screening within 1878 paediatric patients. The discovery of this rare mutation in NOX1 in patients with early onset inflammatory bowel disease illustrates the importance of ROS in intestinal mucosal barrier function.

► <https://www.ncbi.nlm.nih.gov/pubmed/29091079>

► Zinc and Inflammatory Disease Research Group

Impact factor: 4.281

Roscioli E, Tran HB, Jersmann H, Nguyen PT, Hopkins E, Lester SE, Farrow N, Zalewski PD, Reynolds PN, Hodge S. *Am J Physiol Lung Cell Mol Physiol*. 2017 Sep 1;313(3):L453-L465. The Uncoupling of Autophagy and Zinc Homeostasis in Airway Epithelial Cells as a Fundamental Contributor to COPD.

This paper shows that the uncoupling of zinc trafficking and autophagy in airway epithelium constitutes a fundamental disease-related mechanism for Chronic Obstructive Pulmonary Disease (COPD) pathogenesis and could provide a new therapeutic target. The publication is in the high impact *American Journal of Physiology*.

► <https://www.ncbi.nlm.nih.gov/pubmed/28596293>

Adelaide Geriatrics Training and Research with Aged Care (G-TRAC) Centre



Photo provided by Adelaide G-TRAC Centre

ADELAIDE GERIATRICS TRAINING AND RESEARCH WITH AGED CARE (G-TRAC) CENTRE

AGEING

TQEH DEPARTMENT
AGED AND EXTENDED CARE SERVICES



The Adelaide G-TRAC centre aims to improve health outcomes and well-being of older people through high-quality clinical geriatrics and gerontology training and innovative translational research thus helping older people better achieve Healthy Ageing. The G-TRAC centre includes The Queen Elizabeth Hospital - Aged & Extended Care Services, a community campus located at Resthaven (an aged care organisation) in Paradise, and leads the NHMRC Centre of Research Excellence (CRE) in Frailty & Healthy Ageing which is a global transdisciplinary research network.

Key findings in 2017

In the community, using the phenotypic method, 21% of community dwelling participants of cohort studies were frail whilst 48% were pre-frail. With the North West Adelaide Health Study (NWAHS), the frailty index (FI) classified 48% of subjects as frail. In the NWAHS study, being older, a current smoker, and having multimorbidity and polypharmacy were associated with higher frailty levels with both the phenotypic as well as the FI methods. With the FI, being female, having low income, obesity and living alone were also associated with frailty.

Exercise is one suggested intervention for the treatment and prevention of frailty. Fortunately, older people have a positive attitude towards exercise. Many older people prefer to be advised about exercise firstly by their general practitioners and then by other healthcare professionals. Those living in the community and not in retirement villages reported difficulties accessing information on exercise and indicated that local governments and general practices could do more to encourage older people to be more active and exercise.

Our research has confirmed that a geriatric medicine course for 5th year medical students improved students' perceptions of the importance of and their competence in prescribing exercise to older people. Such educational strategies would better equip our future medical workforce in encouraging older people to be more active and exercise.

Outcomes for the community

We are raising awareness in the community that although geriatric syndromes are common (e.g. under-nutrition, sarcopenia, frailty, falls and dementia) and result in poor health outcomes, there are interventions that can help prevent or treat them. Our research focuses on the development of screening strategies and the development of cost-effective interventions.

► Publications for Adelaide Geriatrics Training and Research with Aged Care (G-TRAC) Centre

Professor Renuka Visvanathan (holding document) and members of her Adelaide G-TRAC group with TQEH Research Day Plenary Lecturer, The Honourable Mark Butler MP (far left), who also chairs the Advisory Group for the CRE in Frailty and Healthy Ageing.



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“The research will also inform where current services might be deficient, or where projected population growth will change the number or type of services an area requires in the future”

Helping your community age healthily

DR DANIELLE TAYLOR
ADELAIDE G-TRAC CENTRE



The proud recipient of The Hospital Research Foundation's Mid-Career Fellowship for 2017, geographer and researcher Dr Danielle Taylor has begun a three-year project aimed at ensuring our community can live longer, healthier and more fulfilling lives in the comfort of their own homes.

Joining Professor Renuka Visvanathan's research group at the Basil Hetzel Institute for Translational Health Research (BHI), Dr Taylor is building on current research undertaken as part of the NHMRC Centre of Research Excellence in Frailty and Healthy Ageing (CRE) aimed at combatting the global issue of frailty to facilitate healthy ageing in our community.

The need for healthy ageing research could not be more crucial, with the number of South Australians aged over 60 years old set to increase by 48 per cent between 2011 and 2031, resulting in more than one in four people over the age of 60. If current rates of frailty persist, it is estimated that by 2031 over 16,000 people in South Australia will be frail. It is the aim of Dr Taylor's research and the CRE more broadly to reduce this figure.

“There is growing recognition that healthy ageing is dependent on a person's ‘functional ability’ which is influenced by individual characteristics, including health status, mobility and

cognition as well as the influences of their environment,” Dr Taylor said.

The creation of ‘age-friendly environments’ has been identified by the World Health Organisation (WHO) as an important contributor to healthy ageing. Dr Taylor's research will be focused on using geographic population, health and environmental data to map and identify environmental factors, particularly those that relate to the accessibility of the local neighbourhood that may act as enablers or barriers to healthy ageing.

“The environment can refer to a range of factors including access to parks, transport, housing and health care to name a few. The influence of these factors, such as how far away someone's local doctor is from their home, or the distance to the local park for exercise, on a person's health and frailty will be investigated through my project.”

Dr Taylor's research will aim to produce a national frailty risk index, which can highlight areas where populations are most at risk of becoming frail. By identifying areas in this way, interventions can be targeted to prevent at risk populations from progressing into frailty.

“I will also be working with other researchers on the CRE; their research will inform some of the work I will be doing and assist to build a body of knowledge about those environmental

factors that are most important and which ones are modifiable and can be improved.”

Taking into account people's changing needs as they age, Dr Taylor is hopeful this frailty risk index will inform policy makers and service providers and help them understand which environmental factors are most important and where the populations who most need assistance are located. This will ultimately result in the development of more age friendly neighbourhoods.

“The research will also inform where current services might be deficient, or where projected population growth will change the number or type of services an area requires in the future.”

Fellowship

The Hospital Research Foundation
Mid-Career Fellow

CANCER

Research Groups

Breast Biology and Cancer Unit

Breast Cancer Research Unit

Colorectal Cancer Research Group

Liver Metastasis Research Group

Northern Network Colorectal
Surgical Service

Solid Cancer Regulation Group

South Australian Prostate Cancer Clinical
Outcomes Collaborative (SA-PCCOC)



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Peter MacCallum Cancer Centre

The Breast Biology and Cancer Unit was established at the Basil Hetzel Institute (BHI) in 2011. The goal of our research is to better understand the biological mechanisms that underpin breast cancer risk factors including menstrual cycling, pregnancy and breast density to aid in the prevention and early detection of breast cancer.

Key findings in 2017

In 2017 we discovered that chronic low level inflammation can drive increased breast density and the associated increased risk of cancer in a mouse model. This discovery opens the door for new approaches to reduce breast cancer risk with the use of anti-inflammatory drugs targeted to women with high breast density.

Outcomes for the community

There has been much interest in breast density as a major risk factor for breast cancer, and for its role in masking breast cancers. We may in the future be able to identify young women with extremely high density at an increased lifetime risk of breast cancer, take steps to reduce that risk, and provide altered screening protocols to detect early breast cancers.

In order to reduce breast cancer risk associated with high breast density, we must better understand the underlying biology of highly dense breast tissue, and how the increased cancer risk is conferred at the cellular and molecular level.

Our research suggests that chronic low level inflammation is a driver of both high breast density and the associated increased risk of cancer. This research opens new doors for treatments of breast density that could reduce a woman's breast cancer risk.

► Publications for Breast Biology and Cancer Unit

“The more we can understand the risks associated with breast cancer, the greater chance we have at treating each risk and preventing breast cancer from developing in women.”

Breast density research edges closer to cancer prevention

NICKY ROBERTS



Adelaide researchers are one step closer to breast cancer prevention after finding a new driver for breast density, an identified risk factor for cancer.

For the first time, researchers have shown that chronic low-level inflammation drives increased breast density and is associated with a woman's risk of developing breast cancer. This finding opens the door for new approaches to treating density and preventing breast cancer through reducing inflammation.

Published in the international journal *Breast Cancer Research*, the research is led by Associate Professor Wendy Ingman, The Hospital Research Foundation (THRF) and affiliate Australian Breast Cancer Research's (ABCR) Breast Cancer Research Fellow.

“We induced a low level of chronic inflammation in our lab models and found it was a particular protein called CCL2 that caused the increase in inflammation. This led to an increase in the density in the tissue and also an increased risk of breast cancer,” A/Prof Ingman said.

“While it is already known that certain types of anti-inflammatories can reduce breast cancer risk, they are associated with longer term side effects and not recommended for women to help reduce their breast cancer risk.

“With this research we believe we may be able to identify the women most at risk of inflammation-associated breast cancer through measuring their breast

density and therefore identify those who will most benefit from anti-inflammatory treatment.”

Almost 8 per cent of women have extremely high breast density and are more likely to develop breast cancer in the future.

Unfortunately, loving mother Nicky Roberts is part of that 8 per cent and is fighting stage three breast cancer for the second time.

Diagnosed with invasive breast cancer in her left breast in December 2014, Nicky underwent successful radiation and got the all clear.

“Thereafter I became good at checking myself for lumps and as I also have a family history of breast cancer I was having regular mammograms and ultrasounds. In June 2016 I was told there was an area of concern right where my last breast cancer was,” Nicky said.

“Within a week I had an appointment with the radiographer who explained I had dense breasts and she decided to also check my right breast. I didn't think anything of it because I had just had my scans. To my surprise, she found something.”

Nicky was diagnosed with invasive breast cancer, this time in her right breast and she underwent a mastectomy.

“I'm now stage 3C breast cancer. Because of having high breast density, my cancer had been completely missed. Goodness knows how long it had been there, we'll never know,” Nicky said.

“I was never told what it meant to have dense breasts. That I not only had a greater risk of developing breast cancer but there was a significantly reduced chance of seeing any tumours through a mammogram and ultrasound.”

Nicky's story proves how vital research is into breast density and A/Prof Ingman's promising research will help inform preventative treatments.

“Our ultimate aim is to save women's lives and our breast density research is helping us learn more about what drives this area of breast cancer risk and helps inform preventative treatments,” A/Prof Ingman said.

“The more we can understand the risks associated with breast cancer, the greater chance we have at treating each risk and preventing breast cancer from developing in women.”

Associate Professor Wendy Ingman,
Research Leader of the Breast Biology and Cancer Unit.

BREAST CANCER RESEARCH UNIT

CANCER

THE UNIVERSITY OF ADELAIDE
DISCIPLINE OF SURGERY / TQEH



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The Breast Cancer Research Unit's (BCRU) primary research interest is in breast cancer and bone metastasis. Breast cancer is the most common cancer in women that metastasises to bone. Despite recent advances, our knowledge of why bone is such a fertile "soil" for tumour cells to home to the bone remains poor. Our research aims to provide vigorous preclinical data that will facilitate the translation of novel therapeutics to clinical trials for bone metastases.

Key findings in 2017

Our laboratory has shown that peroxidases are causatively involved in modulating the cancer microenvironment to promote blood vessel development and extracellular matrix biosynthesis. These processes are major hallmarks in cancer progression and as such identify peroxidases as drugable targets for cancer therapy. Indeed, we have used a commercially available peroxidase inhibitor to investigate its potential anticancer efficacy with promising results.

In another study we have harnessed the body's natural defense system to prevent cancer from coming back after it has been surgically removed. The BCRU has developed for the first time a new and innovative therapeutic approach of delivering cancer fighting T cells known as gamma delta T cells ($\gamma\delta$ T cells), normally found in our blood but in small numbers, for the treatment of

incompletely resected or inoperable tumours. We have generated large numbers of these cancer fighting cells in the lab, inserted these into hydrogel reservoirs and demonstrated that they can be released locally to promote cancer cell killing in the dish.

Using a preclinical model of breast cancer we transplanted gamma delta T cell containing hydrogel reservoirs directly in the vicinity of breast lesions. The aim is that gamma delta T cells are released locally in large numbers where they seek out and kill cancer cells while leaving normal cells unharmed. This approach has demonstrated significant efficacy, and our future preclinical studies are based on these findings. The results of these studies will provide support and justification to move relatively quickly towards clinical application.

Outcomes for the community

Our research provides vigorous preclinical data that will facilitate the translation of novel therapeutics to clinical trials for cancer and its spread to various organs. Our goal is to develop new and cutting-edge therapies to improve the quality of life and longevity of patients with primary and metastatic cancer.

► Publications for Breast Cancer Research Unit

“We are confident that this particular enzyme has the ability to generate new bone.”

Bone regeneration could bring hope to breast cancer

ALEXANDRA SHOUBRIDGE
BREAST CANCER RESEARCH UNIT



A potential breakthrough between breast cancer and bone regeneration could significantly help manage the spread of cancer-related bone destruction and improve quality of life.

This exciting research is being led by Alex Shoubridge, currently undertaking her PhD at the Basil Hetzel Institute for Translational Health Research (BHI). Alex is focusing on the role a particular enzyme plays in the repair of healthy and diseased bones, one day leading to new treatments for breast cancer related bone loss.

“In adults, old bone is constantly being degraded and replaced with new bone. However, breast cancer, which is notorious for spreading to the bone, can cause an imbalance to this normal cycle. This is because when cancer spreads to the bone it can cause an increase in the activity of cells that cause bone loss. The bone forming cells are unable to keep up and this results in significant bone degradation, leading to a significantly impaired quality of life for the patient,” Alex said.

“I’m looking at the bone forming cells called osteoblasts to see whether a group of enzymes, called peroxidases, could stimulate these cells to promote bone regeneration. This could be used to manage the significant bone loss suffered in breast cancer patients and promote the cells needed to generate new bone.”

Alex is testing her theory by using

bone cells derived from patients, either from a hip or knee replacement. Through her research Alex has discovered these enzymes can promote collagen deposition, an exciting discovery since collagen and minerals play a key role in the formation of new bones.

“When treating these human bone cells with peroxidase enzymes I have seen an increase in collagen production by these cells, which acts as a scaffold for the cells to sit on. The strands of collagen then become mineralised, which we have found is also being increased with the addition of this enzyme. Since bone is mostly composed of collagen and minerals we are confident that this particular enzyme has the ability to generate new bone,” she explained.

Currently validating one of her studies, Alex believes this will be a significant step towards determining the potential these enzymes may have clinically.

This work has been an eye opener for me in realising the millions of people who require bone repair treatment and thus the need for better treatment strategies.”

Alex’s work will not only improve the quality of life for breast cancer patients and those suffering from bone-related injury, but a wide range of patients with various illnesses, like osteoporosis.

“What drives me is knowing that one day these enzymes could be a more effective treatment strategy for any

patient requiring bone repair treatment, including those suffering from cancer related bone loss,” she said.

“This to me is extremely important as cancer patients have already been through so much and the last thing they want is to have further surgery to harvest some bone tissue to repair the damaged bone – or require someone else to donate some of their own bone.”

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TQEH DEPARTMENT HAEMATOLOGY AND MEDICAL ONCOLOGY



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The Colorectal Cancer Research Group headed by Professor Tim Price incorporates the SAHMRI Colorectal Cancer Node, and now works on a comprehensive program in colorectal cancer spanning prevention, development and novel therapies.

Key findings in 2017

Using a next generation genotyping platform we identified 2 profiles of single nucleotide polymorphisms (SNPs) significantly associated with longer progression-free survival or the presence of cetuximab-induced rash in DNA from 585 patients with metastatic colorectal cancer (mCRC) in the CO20 clinical trial. The SNP profiles will be validated in the CO17 mCRC trial cohort of 299 patients. This work is being done by the Molecular Oncology group at the BHI in collaboration with the Australasian Gastro-Intestinal Trials Group (chaired by Professor Tim Price) and the Canadian Cancer Trials Group (Drs C O'Callaghan and G Liu) and was part-funded by a grant from the Cancer Council SA/ SAHMRI Beat Cancer 2016.

We have found that a new type of drug derived from a plant used in herbal medicine has been shown to significantly inhibit the formation of new blood vessel networks *in vitro*. This process (angiogenesis) is necessary for the growth and metastasis of solid tumours such as colorectal or breast. We will be testing the efficacy of this new type of drug in animal models of cancer. This work is being done by the Molecular Oncology Group in collaboration with Professor Andrea Yool, Adelaide Medical School.

One in five young adults who develop colorectal cancer carries an inherited gene mutation which has predisposed them to this condition. Most of the young adults who carry the mutation have no characteristics which would have triggered genetic testing to be carried out. This suggests that all young patients with colorectal cancer should undergo genetic testing to identify such gene mutations as these may also be carried by other family members. Prevention strategies for colorectal cancer can then be put into place by enrolling family members into surveillance colonoscopy programs.

Outcomes for the community

- Identification, development and clinical trials of new therapeutic agents for the treatment of colorectal cancer
- Development of new cancer biomarkers of drug resistance and therapeutic targets to optimise personalised medicine approaches
- Further understanding of the molecular mechanisms underlying colorectal cancer so that pre-cancerous polyps can be used as markers of risk for both patients and their relatives
- Identification of risk factors in groups of under-recognised colorectal cancer patients, including young adults, to improve early detection in primary healthcare settings

► Publications for Colorectal Cancer Group



THE UNIVERSITY OF ADELAIDE
DISCIPLINE OF SURGERY / TQEH



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The Liver Metastasis Research Group investigates the molecular and cellular immune mechanisms that determine the capacity of liver tissue to resist metastatic invasion. Our goal is to address the urgent medical needs of risk prediction, prevention, early detection, and treatment of liver metastases.

Key findings in 2017

In 2017, the main research interest of our group remained identification and development of protein biomarkers of liver metastasis in colorectal cancer (CRC) patients. We have found novel prognostic markers of metastatic progression in samples from colorectal cancer patients. In addition, we made a big step towards acquiring good expertise in the field of cancer immunology and immunotherapy. We identified specific lymphocyte subsets that are enriched in colorectal tumours and hepatic metastases, and characterised their phenotype and function. Moreover, in collaboration with the Cardiovascular Pathophysiology and Therapeutics Group at the BHI we found differences in platelet aggregation between CRC patients and healthy subjects.

Outcomes for the community

Our research provides vigorous preclinical data that will facilitate the translation of novel therapeutics to clinical trials for cancer and its spread to various organs. Our goal is to continue towards developing new and cutting-edge therapies to improve the quality of life and longevity of patients with primary and metastatic cancer.

As the third most commonly diagnosed cancer worldwide, CRC is an important medical health priority. The majority of CRC related deaths are attributable to liver metastasis. However, there is no prognostic biomarker that predicts metastatic risk and allows informed selection of preventive treatment. The translational challenge is to develop surrogate markers of metastatic progression. About 25% of patients with CRC develop secondary hepatic malignancy after resection of the primary tumour and the majority of metastatic CRC patients are not amenable to surgical resection. Notably, early detection of recurrent CRC can increase patient eligibility for a range of effective treatments, reduce morbidity, and improve overall survival.

► Publications for Liver Metastasis Research Group

Commercialisation: Provisional patent number #2017900421.

Title: HLA-G as predictive biomarker of response to chemotherapy and uses thereof.

THE UNIVERSITY OF ADELAIDE
DISCIPLINE OF SURGERY / TQEH

In 2000, the surgeons working with the Colorectal Units at the Royal Adelaide, Lyell McEwin and The Queen Elizabeth Hospitals formed a collaborative partnership - the Northern Network Colorectal Surgical Service. This partnership has successfully facilitated the production of high quality, internationally published research and a multidisciplinary approach to ongoing clinical education and development. Group members have been involved in clinical and laboratory based research and have been based at the BHI, SAHMRI, Hospital Clinical Colorectal Units and The University of Adelaide.

Key findings in 2017

The focus of the Northern Network Colorectal Surgical Service in 2017 continued to be improvements and developments in diagnosis, treatment and care for patients with colorectal cancer.

A key finding from a clinical trial involving this group and collaborators across The Queen Elizabeth, Royal Adelaide and Lyell McEwin Hospitals, was published this year. We found that the addition of three cycles of preoperative single agent neoadjuvant Fluoropyrimidine chemotherapy during the wait period after chemoradiotherapy for locally advanced rectal cancer is not associated with the large improvements in pathological complete response rate that are reported by some authors and centres.

Outcomes for the community

The key findings from this research may influence the treatment pathway for patients with locally advanced rectal cancer. We demonstrated that the addition of three cycles of preoperative single agent neoadjuvant Fluoropyrimidine chemotherapy in a 10 week wait period after conventional chemoradiotherapy results in similar pathological response rates compared to those patients who did not receive the additional cycles of chemotherapy. Due to these results, clinicians may be more cautious in extending chemotherapy regimes, thus potentially reducing a patient's side effects from treatment and improving quality of life whilst awaiting surgery.

► Publications for Northern Network Colorectal Surgical Service



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DISCIPLINE OF SURGERY / TQEH**

We study the mechanisms regulating cancer growth, particularly prostate, oesophageal and young onset colorectal cancers. Specific interests include the role of androgen signalling within fibroblasts and cancer cells, the cross-talk between fibroblasts and adjoining cancer cells, and the role of DNA methylation. We aim to increase understanding of the biology of these cancers, to discover more useful biomarkers for diagnosis, prognosis, or response to therapy to assist in clinical management, and to uncover potential new therapies.

Key findings in 2017

In prostate cancer we have shown a significant association between increased prostate cancer-related death and low levels of androgen receptor (the male sex hormone receptor) in the stroma (the tissue which surrounds the cancer cells). We have shown that normal androgen signaling in prostate cancer stroma appears to change the tissue around the cancer so that it inhibits cancer cell invasion, and also leads to destruction of cancer cells. Loss of the androgen receptor in the stroma therefore results in increased cancer cell survival and invasion.

In oesophageal adenocarcinoma (OAC) we have shown that the presence of the androgen

receptor and genes which are regulated by this receptor in the cancer cells are related to a significantly shorter survival time. We have shown for the first time that androgen signaling can regulate growth and gene expression in oesophageal cancer cell lines *in vitro*. The response to androgens can be modified by fibroblasts, cells which are present in the cancer stroma. These findings are consistent for a role of androgen signalling in OAC *in vivo*, with androgen concentration and fibroblasts important determinants of the response.

Outcomes for the community

Prostate cancer is the fourth leading cause of mortality amongst Australian males. Oesophageal adenocarcinoma is a lethal cancer and its incidence is rapidly increasing. Our investigations have increased our understanding of the biology of these relatively common cancers. We expect this will lead to better prevention strategies, improved biomarkers for diagnosis and patient management, and new therapies based on targeting androgen signalling and the cross talk between the different cell types within a tumour.

► Publications for Solid Cancer Regulation Group
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DISCIPLINE OF SURGERY / TQEH**

The South Australian Prostate Cancer Clinical Outcomes Collaborative (SA-PCCOC) brings together clinicians treating prostate cancer, patients and researchers from across South Australia. The collaborative manages the state prostate cancer registry and supports research projects utilising data from the registry. The collaborative also provides a consumer website for men with prostate cancer and hosts research and community events relating to prostate cancer in South Australia.

Key findings in 2017

In 2017 the SA-PCCOC published and presented a series of papers relating to

the prediction of prostate cancer outcomes following treatment. This included examining all major treatment groups (surgery, radiation and hormonal therapy) and the outcomes of these treatments which are most important to patients and treating clinicians – patient symptoms, survival and the likelihood of recurrence. This series of papers provides a concise summary of the predictive tools which are available, and makes recommendations for clinical practice, based on tool accuracy and validity.

► Publications for SA-PCCOC (South Australian Prostate Cancer Clinical Outcomes Collaborative)

CARDIOVASCULAR DISEASE

Research Groups

Cardiovascular Pathophysiology
and Therapeutics Group

Clinical Pharmacology
Research Group

Translational Vascular
Function Research Collaborative

Vascular Surgery Research Group

Zinc and Cardiovascular Disease
Research Group



CARDIOVASCULAR PATHOPHYSIOLOGY AND THERAPEUTICS GROUP

CARDIOVASCULAR DISEASE

TQEH DEPARTMENT CARDIOLOGY UNIT



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The Cardiovascular Pathophysiology and Therapeutic Group's main interests concern the delineation of pathogenesis in common, but poorly understood, causes of heart disease and the development of new therapeutic options to improve outcomes in both acute and chronic heart disease.

We investigate:

- **Pathophysiology/therapeutic evaluations:** Takotsubo syndrome, coronary artery spasm, aortic valve stenosis.
- **Agents with potentially novel utility:** Nitroxyl donors, perhexiline, N-acetylcysteine, clopidogrel.

Key findings in 2017

- We have reported for the first time that in patients with Takotsubo syndrome, the size of the initial attack is a determinant of long-term mortality risk. This data provides a strong rationale for developing methodology to reduce heart damage as a result of acute attacks. We have also shown that after attacks of Takotsubo syndrome, patients often have prolonged lethargy, reflecting impairment of myocardial energetics. Finally, using a rat model of the disease, we have characterised the molecular pathways leading to associated inflammation within the heart and impairment of its contraction.
- We have evaluated some of the implications of impaired cyclic nucleotide signaling on cardiac disorders, and have shown that:

- 1) Variability in patient responses to the anti-aggregatory agents clopidogrel and ticagrelor are determined primarily by function of platelet adenylate cyclase.
 - 2) Patients with coronary artery spasm have severe impairment of both platelet adenylate cyclase and soluble guanylate cyclase signaling.
- We have demonstrated that the combined use of N-acetylcysteine with nitroglycerine decreases myocardial infarct size, implicating the effects of N-acetylcysteine in "scavenging" hypochlorous acid as a potential component mechanism of this beneficial effect.

Outcomes for the community

There are two important implications of our recent findings for health care delivery to the general community.

- 1) Takotsubo syndrome is a major cause of long-term morbidity and mortality, especially in ageing women. Our recent findings will expedite diagnosis and our pathogenetic findings will help to improve treatment.
- 2) Our findings regarding coronary artery spasm will improve prospects of restoring a more normal quality of life to these patients, via suppression of symptoms.

► Publications for Cardiovascular Pathophysiology and Therapeutics Group

“Through our research we’ve discovered the release of these adrenaline-like chemicals results in inflammation of the heart.”

Research to fix a broken heart

SVEN SURIKOW

CARDIOVASCULAR PATHOPHYSIOLOGY
AND THERAPEUTICS GROUP



Research continues at the Basil Hetzel Institute (BHI) in understanding the heartbreaking condition of Takotsubo Syndrome (TS), commonly known as ‘broken heart syndrome’ and ‘Stress Cardiomyopathy’.

Discovered over 20 years ago in Japan and often misdiagnosed as a form of heart attack, there is no current treatment available for this heartbreaking condition.

Fortunately, BHI PhD student Sven Surikow is determined to change this and he’s been hard at work investigating what causes TS, with the potential to develop therapies to speed up recovery, which if successful will be the first of its kind internationally.

“Up until five years ago the general consensus was that TS resolved itself in about a week and was not that serious. We have learned it only appeared that way, ostensibly heart function was returning to normal but the energetics within the heart could actually take from three months to a year or more to recover. This meant patients were still experiencing symptoms for up to a year,” Sven explained. “Indeed, there is an increased risk of death among patients who have had an episode of TS”

“The aim of my research is to guide developing effective treatment by investigating the pathogenesis of TS, with hopes to accelerate recovery without causing the patient any other side effects.”

In order to develop potential therapies, Sven first had to understand what is happening to the heart when a person undergoes an emotional or physical stress and is diagnosed with TS. To do this he is using an animal model of TS which was developed at the BHI, which accurately mimics the human condition, providing invaluable data on how TS affects the heart.

“Based on past research we know when people experience physical or emotional stress they release huge amounts of adrenaline-like chemicals called catecholamines into the heart. This in turn stuns the heart’s muscles in some people, causing TS,” Sven said.

“Through our research we’ve discovered the release of these adrenaline-like chemicals results in inflammation of the heart.”

“What we don’t know is what is causing this inflammation and how we can reduce it to not only help patients heal faster but also reduce the number of deaths as a result of TS.”

TS was historically thought to be a relatively rare and benign condition; however, this is not the case, with incidence seeming to increase as clinicians become better at diagnosing the condition. Approximately 10% of cases of suspected heart attack in women >50 years of age are actually TS, and critically, the mortality rate is similar to that seen with heart attacks.

This promising research will help

people like Vicki Khor, who was diagnosed with TS after her loving husband of almost 40 years Ron, passed away suddenly of a heart attack. He was only 76-years-old.

“Ron’s passing was a complete shock and left me extremely fragile. The fact that he passed away at home made it even harder for me,” Vicki said.

“I didn’t know what was happening to me when I started suffering from heart palpitations and felt like I wanted to pass out. When the doctor diagnosed me with TS, I was both relieved and grateful they could diagnose me and help me understand what was happening”. It is research like Sven’s that will improve the lives of people like Vicki with TS, and provide hope that one day there will be a cure for TS.

PhD Student

The University of Adelaide

Supervisors

Professor John Horowitz and Dr Thanh Ha Nguyen

Scholarship

The University of Adelaide Research Training Program Stipend

TQEH DEPARTMENT
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The Clinical Pharmacology Research Group has had a long-term interest in developing better therapies for the treatment of heart disease. We have focussed on refractory angina, where patients have failed, or are contraindicated for, conventional therapy and continue to experience severe symptoms. We are also moving into the area of cancer chemotherapy, for which the development of heart failure is often an adverse effect that limits the duration and efficacy of therapy. This places patients at greater risk of treatment failure or relapse, and concomitant heart disease.

Key findings in 2017

In 2017 we completed a pilot study investigating bone cancer using whole-body imaging of cancer growth, and compared cancer growth and a plasma marker of heart function when chemotherapy was given alone or combined with a test cardioprotective agent. In the presence of the cardioprotective agent, heart damage was completely prevented and cancer growth was also reduced compared to chemotherapy alone. Therefore, it may be possible to both prevent heart damage by cancer chemotherapy and at the same time increase the cancer killing effects of the chemotherapy. We have now secured NHMRC funding to continue this research for a further 3 years.

We are also collaborating with researchers in the United Kingdom who are developing new medicines for heart failure. This includes working with Dr Cher-Rin Chong, who recently completed her PhD studies in our laboratory, and is now an Oxford Nuffield Medical Fellow. At the BHI our laboratory is working to determine how potential new medicines are taken up into the heart, and other tissues, and how tissue exposures may be related to both beneficial and undesired effects.

Outcomes for the community

Our research will help improve the treatment and prevention of heart disease in general, particularly heart disease caused by cancer chemotherapy. Importantly, we aim to develop cardio-protective medicines that not only protect the heart, but also increase the cancer killing effects of the chemotherapy.

We are focussing on cancers that are common in children and young adults and aim to develop new treatment combinations that will offer a better chance of cancer cure and a better quality of life (free from heart disease) for these cancer survivors.

► See also Clinical Pharmacology
Research Group - Chronic Disease

“What we are moving towards in healthcare globally is patient related outcomes.”

An Australian first for coronary heart disease

DR ROSANNA TAVELLA

TRANSLATIONAL VASCULAR FUNCTION
RESEARCH COLLABORATIVE



One Australian dies from heart disease every 12 minutes, making it the largest single cause of death in our country. Clinical Data Manager and researcher at the Basil Hetzel Institute for Translational Health Research (BHI) Dr Rosanna Tavella has been passionately working on changing this statistic to improve health outcomes for the South Australian Community.

Dr Tavella has been working on the Coronary Angiogram Database of South Australia (CADOSA). Adopting the idea from America, CADOSA is having a positive impact for everyday Australians who have suffered heart disease.

“My current role is centred on trying to use clinical data more effectively, particularly using this data to monitor patient care and outcomes. This is so we can use the data we collect on a regular basis in a way that is useful for clinicians and researchers,” Dr Tavella explained.

“One key aspect of CADOSA I am very passionate about is our clinical outcome registry. In addition to monitoring the clinical care that patients receive, we can also measure the impact on quality of life and symptoms, and how often they come back to hospital, which is important to help shape future research and patient care.

“What we are moving towards in healthcare globally is patient related outcomes.”

Already making life-changing discoveries for patients living with heart disease both on a national and international scale, Dr Tavella and her team are hoping to optimise the CADOSA data for future use.

“Through CADOSA we’ve formed

collaborations with international groups who are working on similar research. Using this relationship, we are looking at trends in the United States to see what we are doing differently, which is stimulating discussions on how we could then approach our work in a different way,” Dr Tavella said.

“We’ve recently observed a high uptake of a different clinical approach to the angiogram procedure in South Australia. Through CADOSA we were able to show that using a patient’s arm instead of their groin to insert a catheter into the heart has actually been less invasive and preferred by patients. This was an interesting discovery considering often patients are cautious about changing treatments for their health.

“Since this approach hasn’t taken off in the United States yet, we were able to share this with the research group over there and they are very interested in it. This global collaboration is really positive and exciting for our healthcare system.”

Using the CADOSA structure, Dr Tavella and her team have observed improvements in the door-to-balloon time in South Australian hospitals. Door-to-balloon time is a time measurement in emergency cardiac care for patients with heart attacks that reflects the amount of time between a heart attack, patient’s arrival in the emergency department and the time they receive angioplasty/stenting.

“At the moment we are also starting a trial to look at different medical therapies for patients with residual angina (chest pain caused by insufficient blood flow around the heart), and we are hoping to see benefits with the use of different tablets. We’re hoping to

have early results of this in the next six months,” Dr Tavella said.

“There’s nothing else like CADOSA within Australia. I’ve been able to see changes and improvements in our healthcare system quite quickly, it’s very fulfilling. My supervisor Professor John Beltrame has been a great mentor to me and it is because of his leadership that we’ve been able to establish CADOSA. Together we have established CADOSA as one of three international sites around the world that’s piloting a standard data collection set for coronary artery disease patients which has been developed by the International Consortium for Health Outcome Measurement (ICHOM).” This collaboration with ICHOM will provide unique opportunities for us to measure, benchmark and compare patient outcomes around the world.

Clinical Data Manager

Central Adelaide Local Health Network

Registry Manager

CADOSA

Senior Lecturer

The University of Adelaide

TRANSLATIONAL VASCULAR FUNCTION RESEARCH COLLABORATIVE

CARDIOVASCULAR DISEASE

THE UNIVERSITY OF ADELAIDE
DISCIPLINE OF MEDICINE / TQEH



MOLECULAR PHYSIOLOGY

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Clinical disorders involving the coronary and peripheral circulation can be largely attributed to abnormalities within blood vessels thereby compromising the blood supply to these organs. The Translational Vascular Function Research Collaborative undertakes interdisciplinary basic, clinical and epidemiological studies into vascular dysfunction to improve our understanding of these disorders and develop new effective therapies.

The Collaborative includes both clinicians and medical scientists located at the Basil Hetzel Institute, The University of Adelaide Medical School, the Central Adelaide Local Health Network (CALHN) and the Northern Adelaide Local Health Network (NALHN). The integrative nature of the group provides a unique opportunity to ensure that innovations are bi-directionally translated; that is, as well as the traditional bench to bedside approach, innovations are derived from identifying patients with poor outcomes, understanding the contributing clinical attributes of these patients and returning to the laboratory to discover new therapies.

The multidisciplinary Collaborative consists of three groups that have combined meetings to optimise interdisciplinary input and translation:

- **Molecular Physiology**
- **Clinical Physiology, and**
- **Health Outcomes**

MOLECULAR PHYSIOLOGY

The Molecular Physiology group focuses on the pathophysiology and molecular signaling of vascular disorders including coronary artery spasm, coronary microvascular disorders, peripheral vascular disorders and reperfusion injury. Laboratory studies include the assessment of isolated human vessel function using myography, followed by a series of biomolecular assays aimed to provide a mechanistic understanding of the disorders and thus direct the translation to improvements in medical therapy.

Key findings in 2017

A unique endothelial biopsy technique has been established which can be easily implemented during routine cardiac investigations. This can provide a feasible and potential tool for personalised medicine.

Outcomes for the community

This research demonstrates that there is a real potential for capture of biological data for personalised medicine.

► Publications for Translational Vascular Function Research Collaborative

TRANSLATIONAL VASCULAR FUNCTION RESEARCH COLLABORATIVE

THE UNIVERSITY OF ADELAIDE
DISCIPLINE OF MEDICINE / TQEH

CARDIOVASCULAR DISEASE



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CLINICAL PHYSIOLOGY

The Clinical Physiology research team utilise both invasive and/or non-invasive techniques to identify the presence of vascular dysfunction in patients with vascular symptoms including angina (chest pain due to insufficient blood supply to the heart) and intermittent claudication (pain and/or cramping in the lower leg due to inadequate blood flow to the muscles). Techniques include the assessment of coronary artery spasm, coronary blood flow, cardiac magnetic resonance imaging, popliteal artery vasodilation, subcutaneous blood flow and endothelial function.

Key findings in 2017

- Reported that the use of N-acetylcysteine (NAC) administered with low-dose intravenous nitroglycerin is associated with reduced infarct size in ST-segment-elevation myocardial infarction patients undergoing percutaneous coronary intervention.
- Contributed to the collection of data for an international registry for patients with vasospastic angina.
- Established Myocardial Infarction with Non Obstructive Coronary Arteries (MINOCA) as an important clinical entity

which has resulted in an update to international clinical practice guidelines for myocardial infarction patients.

- Demonstrated that abnormalities in coronary microvascular function are associated with on-going chest pain symptoms in patients with non obstructive coronary arteries.

Outcomes for the community

For the first time, NAC has been identified as an ancillary therapy for the reduction of infarct size. This finding from the NACIAM trial comes after a long string of neutral studies that have studied a range of compounds with the hope of reducing reperfusion injury and protecting the heart muscle in acute myocardial infarction patients. The results from this trial are very encouraging, and require larger studies to assess the impact of this therapy on clinical cardiac outcomes.

► Publications for Translational Vascular Function Research Collaborative

Professor John Beltrame and members of his group visit C. Noel Bairey Merz (far right) at the Cedars-Sinai Medical Center (USA)

TRANSLATIONAL VASCULAR FUNCTION RESEARCH COLLABORATIVE

CARDIOVASCULAR DISEASE

THE UNIVERSITY OF ADELAIDE
DISCIPLINE OF MEDICINE / TQEH



HEALTH OUTCOMES

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HEALTH OUTCOMES

The Health Outcomes group focuses on the health status of patients with vascular disorders including their symptoms, physical limitations and quality of life. Consistent with the changing environment in medicine, this group adopts a 'patient-orientated' approach to the delivery of health care by evaluating patient health status and quality of care delivered. The group has developed large databases from patients with coronary artery disease, microvascular disease, coronary spasm and peripheral artery disease. Most of these databases have international links thereby providing collaborative opportunities.

Key findings in 2017

Over 6,000 coronary angiography procedures are performed each year in South Australia. Although the procedures are relatively safe, some patients experience adverse complications, with some patients at much higher risk than others. Using the coronary angiography databases we can provide personalised risk assessments so both patients and clinicians are better informed about potential harm.

Around 10% of myocardial infarction patients do not show obstructive coronary artery blockages on their angiogram which leaves the cause of the heart attack unclear. Moreover, these patients are less likely to receive secondary prevention medications which may be of benefit in reducing their risk of future cardiac events.

Outcomes for the community

For the first time in Australia, internationally established quality measures for coronary artery disease have been assessed and internationally benchmarked in preliminary analyses. These will be further developed and quality assurance programs established, thereby improving the quality of care delivered to patients in South Australian Hospitals.

► Publications for Translational Vascular Function Research Collaborative



“Effective treatment would be life-changing. It could mean I would be able to return my daily life back to something normal again.”

A world-first study into unexplained heart attacks (MINOCA)

TIM LAMMING



In 2017 The Hospital Research Foundation (THRF) announced its inaugural Basil Hetzel Translational Grant in partnership with affiliate Australian Heart Research, in memory of Dr Basil Hetzel AC. This inaugural grant was awarded to Professor John Beltrame and his world-class team at The Queen Elizabeth Hospital who are pioneering the causes and treatment of patients living with chest pain following an ‘unexplained heart attack’.

A heart attack occurs when there are cholesterol blockages within the coronary arteries, but they can be treated with the correct medication. However, around 10 percent of patients when having an x-ray of the heart (coronary angiogram) reveal no significant cholesterol blockages in the coronary arteries. This is known as a Myocardial Infarction with Non Obstructive Coronary Arteries (MINOCA).

For 48 year old Tim Lamming this condition has severely impacted his quality of life. For a year he was in and out of hospital with specialists unable to diagnose his condition.

Living with this daily chest pain has given Tim no choice but to stop work, demonstrating the importance of finding an effective treatment method for people living with chest pain following an ‘unexplained heart attack’.

Prof Beltrame’s research is expected to deliver outcomes that will impact the

lives of patients in the next three years.

“This study supported by THRF’s Basil Hetzel Translational Grant will be a world-first in examining the role of the microscopic blood vessels in these unexplained heart attacks,” Prof Beltrame said.

“Furthermore, this study is the first to scientifically evaluate if two standard heart attack treatments alleviate the recurrent chest pain experienced by patients with MINOCA. With an estimated 6,000 patients affected by MINOCA each year, the results of this study will have an important impact in their care.”

Prof Beltrame will be working alongside Associate Professor Chris Zeitz, an interventional cardiologist, who will lead the microscopic blood vessels studies and the internationally-acclaimed Coronary Angiogram Database of South Australia (CADOSA) will play a key role in the data collection for this study. This part will be coordinated by Dr Rosanna Tavella and Dr Sivabaskari (Tharshy) Pasupathy, based at the Basil Hetzel Institute.

“We will be collaborating internationally with leading researchers from Sweden, Denmark, Norway and the United Kingdom. These investigators will not only participate in the treatment study but also in a larger study investigating if these medications prevent future major complications in patients suffering MINOCA,” Prof Beltrame said.

This research has the ability to change the lives of so many people, including Tim’s.

“Effective treatment would be life-changing. It could mean I would be able to return my daily life back to something normal again,” Tim said.

“This study supported by THRF’s Basil Hetzel Translational Grant will be a world-first in examining the role of the microscopic blood vessels in these unexplained heart attacks.”

Prof John Beltrame

An exciting update from Dr Rachel Dreyer

The Hospital Research Foundation caught up with BHI Alumnus Dr Rachel Dreyer who moved to Yale University after completing her PhD at the Basil Hetzel Institute and has been making inroads in her research.

Dr Dreyer was recently promoted through the Yale School of Medicine. You can read about her achievements below.



Can you tell us about your recent promotion?

I was recently promoted to Assistant Professor in the Department of Emergency Medicine, Yale School of Medicine (section of Policy and Public Health & the Division of Analytics and Informatics) commencing 1 July 2017. I have served at the rank of Associate Research Scientist in the Department of Emergency Medicine since January 2016, supported by the Sidney Sax Overseas Public Health and Health Services Fellowship awarded by the Australian National Health and Medical Research Council (NHMRC). Prior to joining the Department of Emergency Medicine, I completed my postdoctoral training at the Yale University Centre for Outcomes Research and Evaluation from 2013 to 2015.

Has your area of interest remained in examining sex differences in young patients (under 55 years) with Acute Myocardial Infarction (AMI)?

During my postdoctoral studies at Yale University I was involved in leading several projects from the US VIRGO dataset, which was a direct extension of my PhD research. My prior work has been focused specifically on examining sex/gender disparities in patients with AMI, with a focus on younger women. My goal as a faculty member will involve bridging outcomes research to

implementation science - with the aim of developing mobile health (mHealth) applications (e.g., mobile computing, medical sensor, or communication technologies) and risk stratification tools to assist patients, particularly women, to have a more proactive role in optimizing their recovery following AMI.

Last time you mentioned that data from your research will be used to improve the delivery of care in the management of female patients after an AMI, ultimately trying to reduce morbidity and mortality in this patient population. Is that data now making an impact?

Yes, we have spent the last 3-4 years demonstrating that women experience significant sex and gender disparities across the continuum of care for patients with AMI. My research in particular has shown that younger women 55 years and less have poorer outcomes than men and poor adherence to secondary prevention. We have identified mediators of post AMI outcomes and are now poised to move on to develop interventions to improve recovery for this patient population.

What are your plans for the next 5 years?

My plan for the next 5 years is to further establish myself in the US as Assistant Professor at Yale University, and to

make important contributions to my field of research in health services and outcomes research, focusing on women's cardiovascular health.

How did the support of The Hospital Research Foundation, when you worked at the BHI, play a role in where you are today?

I am very grateful for the support I received from The Hospital Research Foundation. I received travel support from the Foundation during the course of my PhD studies at The University of Adelaide. This funding was crucial in allowing me to gain momentum in presenting my research and also in establishing collaborations with colleagues both inside the US and internationally.





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Stephen Kidd
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VASCULAR SURGERY RESEARCH GROUP

THE UNIVERSITY OF ADELAIDE
DISCIPLINE OF SURGERY / TQEH

The Vascular Surgery Research Group studies predictive modelling to assist clinicians to judge likely outcomes from therapeutic interventions. We can predict complications and mortality after endovascular abdominal aortic repair, providing useful prognostic information to the patient and the clinician. In 2017, we have extended predictive modelling into patients with diabetic foot ulcers. We will determine which factors predict whether a patient with a diabetic foot ulcer is likely to achieve healing of the ulcer or, adversely, ultimately require amputation of the foot or the leg.

Key findings in 2017

The key outcome in 2017 has been the completion of analysis of the Endovascular aneurysm repair (EVAR) trial database which followed 694 patients throughout Australia. This study was supported by an NHMRC

Project Grant from 2009-2016. Preoperative clinical and anatomical factors that predict postoperative complications have been identified and a multivariate predictive model developed. When the preoperative factors are entered into the model, the likelihood of postoperative complications, long term complications and mortality are calculated. The model is currently in the form of an interactive Excel spreadsheet but an App for use on mobile phones is also planned. A manuscript describing this model is currently in progress.

Outcomes for the community

Once developed, the EVAR App would be particularly suitable for decision making and informed consent when the patient and surgeon are considering therapeutic options.

► **Publications for Vascular Surgery Research Group**



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The Zinc and Cardiovascular Disease Research Group are investigating the role of the major dietary metal zinc in the blood vessels and vascular diseases. Our project will enable us to directly relate endothelial Zn levels and Zn transporter expression with endothelial dysfunction, vasoconstriction, cigarette smoking and both small and large artery disease in humans. It will provide the rationale for Zn interventional clinical trials.

Key findings in 2017

- In an *ex vivo* model, zinc protects human skin blood vessels against a potent vasoconstrictor known as endothelin-1. The zinc protection occurred at concentrations of available zinc that circulate in the blood stream suggesting the effect is physiological. Depriving blood vessels of zinc induced them to contract.
- We have obtained evidence for the presence of three members of the zinc transporter protein in the endothelial linings of the skin vessels. Exposure to cigarette smoke lowers the expression of one of these zinc transporters, ZIP2, and depletes endothelial zinc.
- We have further developed a technique to isolate endothelial cells from the linings

of human arteries by detaching them from guide wires, catheters and stent balloons used in coronary angiograms and related procedures. This will enable us to study the relationship between zinc levels in arterial endothelium and cardiovascular disease.

- We were successful in winning an NHMRC grant for \$685,941 over 3 years (2018-2020) to continue our research into the roles of zinc in cardiovascular physiology and protection against disease.

Outcomes for the community

As we age, the zinc levels in our body decline and make us more susceptible to disease. Our studies in blood vessels are providing the scientific evidence that zinc is important for protecting us against cardiovascular disease and that maintaining or restoring zinc levels in the body through either a well-balanced diet or via zinc supplements will help to minimise the risk of developing age-related pathological changes in our vasculature. The technique to isolate endothelial cells during coronary angiograms has a potential diagnostic role in coronary artery disease.

► **Publications for Zinc and Cardiovascular Disease Research Group**

CHRONIC DISEASE

Research Groups

Clinical Pharmacology Research Group

Endocrinology Unit

Stroke Research Programme

The Health Observatory



TQEH DEPARTMENT

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Royal Adelaide Hospital

Despite significant advances in immunosuppressive therapies to prevent rejection in kidney transplantation, the average lifespan of transplanted kidneys has not improved in 30 years. This is because some immunosuppressants cause long-term kidney damage. Current clinical care involves measuring immunosuppressants in blood to maintain exposures that minimise both rejection and toxicity. Our research aims to improve clinical outcomes by understanding the factors that determine immunosuppressant exposures at their sites of action: the immune cells that cause rejection, and the transplanted kidney.

Key findings in 2017

Our work has been supported by two PhD students, Mr Zaipun MD Dom, who was awarded his PhD in 2017 and is now a postdoctoral researcher at Harvard University; and Ms Rong Hu, who is in her second year of research investigating the immunosuppressant tacrolimus. Both students continued their research utilising a large transplant recipient and donor bank of blood and tissue samples, previously established with NHMRC funding.

We now have approximately 10 years of clinical outcome data for 200 kidney transplant recipients, and have been able to couple this with assessment of polymorphisms in genes controlling immunosuppressant exposures (e.g. the ABCB1 gene, which codes for the cellular efflux transporter p-glycoprotein; and CYP3A genes which code for tacrolimus metabolising enzymes) as well as direct measurements of immunosuppressant levels in lymphocytes and kidney biopsy specimens.

Rong presented her work at the 2017 national scientific meeting of the Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists, showing that whilst genetic polymorphisms in the transplant recipients' enzymes and transporters involved in tacrolimus clearance contribute to large variability in individual patient exposures to this immunosuppressant, the use of therapeutic drug monitoring ensures no adverse impact of this genetic variability in terms of rejection or long-term kidney function. However, we have also completed work demonstrating that the concentration of tacrolimus in the recipients' blood is a poor predictor of tacrolimus concentrations within the transplanted donor kidney. Importantly, our data suggest that the net uptake of tacrolimus from the blood into kidney tissue is affected by genetic variability in the donor kidneys, and that tacrolimus-induced renal toxicity is associated with higher exposures within the transplanted kidney. We hope these observations will lead to better individualised immunosuppressant therapy for kidney transplant recipients.

Outcomes for the community

Our research will enhance understanding of the factors that contribute to the loss of a transplanted kidney, so that we can develop blood tests to better individualise immunosuppressant therapy and prevent rejection and kidney damage.

► **See also Clinical Pharmacology Research Group - Cardiovascular Disease**

The Endocrinology Unit conducts research mainly in areas relating to diabetes and osteoporosis. We aim to gain clinical endocrine knowledge through clinical trials and other research. We also conduct translational research and patient quality improvement studies to improve patient care.

Key findings in 2017

- Mr Andrew Peel, a sixth year medical student, under the supervision of Dr David Jesudason and Professor Gary Wittert, began a study of the perception of masculinity in relation to testosterone levels in a middle/old aged male population (the Men Androgen Inflammation Lifestyle Environment and Stress (MAILES) cohort). Preliminary findings showed there is no relationship between masculinity and the level of testosterone in this population.
- Dr David Jesudason, together with Emily Meyer (Endocrine Unit, TQEH and Endocrine and Metabolic Unit, RAH) and Genevieve Gabb (Discipline of Medicine, TQEH and Department of General Medicine, RAH), conducted a clinical case series follow-up on the diagnosis of SGLT2 inhibitor associated diabetic ketoacidosis

(DKA) in diabetes patients of either type 1 or 2. The SGLT2 inhibitors are a new drug, approved in 2013, for the treatment of type 2 diabetes mellitus. Cases of DKA have since emerged but are often missed. Based on the findings of this case series study, recommendations on the use of SGLT2 have been proposed including temporary cessation of these drugs, and verifying the type of diabetes that patients have.

- Nurse educators and dieticians in the Diabetes Centre continued a study on patient care improvement: Insulin adjustment clinic data analysis in order to improve type 1 diabetes patient self-care.

Outcomes for the community

Research undertaken in the Endocrinology Unit improved the diabetes patient self-care and increased our understanding of some related issues in patient treatment.

► Publications for Endocrinology Unit



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TQEH DEPARTMENT NEUROLOGY UNIT



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Our research investigates genetic and proteomic factors that affect the risk and progress of stroke. We link internationally in our stroke-related research on genetic investigations, via collaborations with the International Stroke Genetics Collaborative and the Australian Stroke Genetics Collaborative. As part of this we investigate the cellular and molecular therapeutic application of adult stem cells and the Npas4 gene to repair the brain after stroke.

Key findings in 2017

- A study in the journal *STROKE* by Andrew Bivard et al., including Jim Jannes from the Stroke Research Programme has derived and validated a highly accurate model at predicting patient outcome after ischemic stroke, based on acute clinical and advanced imaging measures.
- In a conference poster, we described how the performance of the Stroke Unit, now combined with and based at the Royal Adelaide Hospital, has been increasingly successful at treating stroke patients, resulting in shorter lengths of stay of patients in hospital and reduced mortality (Milton et al., Stroke Unit Access Update. *Int J Stroke* 2017; 12(Suppl 3):43).
- We continued our work on genetic control factors for the Npas4 gene that is involved in neurogenesis (making new nerve cells) and investigating the genetic manipulation of adult stem cells from the tooth to a neural stem cell type.
- The Stroke Research Programme is also part of a multi-institutional research project on neuroplasticity in stroke that was awarded NHMRC project funding worth \$735,660 over five years (2014-18) entitled "Characterising post-stroke cortical plasticity in humans - identifying a critical window for rehabilitation".

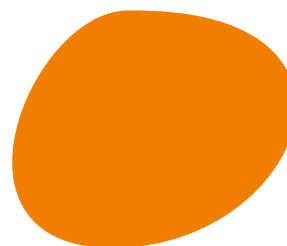
Outcomes for the community

Each year 60,000 Australians suffer from a stroke and one third are left with severe disability. Our aim is to improve stroke outcomes by administering stem cells. One aspect of our research is to work out the best time to intervene after a stroke with molecular, cellular and/or rehabilitation therapies.

While results are still being analysed, we anticipate that there will be support from our research for an early adoption of multiple strategies with rehabilitation to enhance recovery following a stroke.

At this stage it is uncertain as to when intervention is best administered to overcome stroke disability. The use of this research to better coordinate new therapies and also provide rehabilitation at an optimum time will be an exciting advance.

► Publications for Stroke Research Programme







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Research in longitudinal cohorts (eg. **MAILES: Men Androgen Inflammation Lifestyle Environment and Stress study; NWAHS: North West Adelaide Health Study**) aims to better identify people at-risk of adverse health consequences related to sleep disorders, work factors and social determinants of health. The newly-funded **NHMRC Centre for Research Excellence National Institute for Sleep Health Research**, aims to develop the ability of the healthcare system to manage sleep disorders and improve sleep health. **Cumberland.au** applies systems thinking, design thinking, mathematical/simulation modelling and operations research to achieve lasting transformative reform in healthcare.

Key findings in 2017

Our research has identified relationships between mental health and urinary/sexual health with sleep in men. Sleep apnea is independently associated with depression, and there is a substantial negative additive effect of obstructive sleep apnea (OSA) and insomnia together on depression prevalence and severity. Sleep apnea and arousals from sleep are associated with mild chronic kidney disease and with erectile dysfunction.

We have also identified a significant national burden of sleep problems and disorders in Australia, associated with chronic conditions and sickness absenteeism. Our survey data and findings contributed to a report by

Deloitte Access Economics, launched by the Federal Health Minister, which showed that the cost to Australia of sleep problems is \$64 billion annually. Together these outcomes show that sleep problems and daytime/health consequences are endemic among Australian adults. A focus on healthy sleep at a policy level as well as increased clinician and public awareness is needed.

Outcomes for the community

Altmetric tracks commentary about papers online (news stories, tweets, blog post, commentaries) and this statistic is increasingly used as an indicator of social relevance of research papers. In 2017, our paper *Lang et al. 2017* on depression and co-morbid insomnia/OSA scored in the top 1% of the 8.6 million articles across all journals, as did two articles from the NCD (non-communicable diseases) Risk Factor Collaboration looking at worldwide trends in blood pressure and obesity over 40 years.

Results from the Sleep Foundation national survey attracted considerable international media interest when it found sleep problems were very common and that around one-quarter of workers had missed work in the past month due to tiredness.

► Publications for The Health Observatory

CLINICAL SCIENCES, HEALTH SERVICES AND POPULATION HEALTH

Research Groups

Anaesthesia Research Group

Health Performance &
Policy Research Unit

Intensive Care Medicine
Research Group

Psychiatry Research Group

Respiratory Medicine Unit &
Clinical Practice Unit

Rheumatology Research Group

Surgical Science Research Group



ANAESTHESIA RESEARCH GROUP

TQEH DEPARTMENT
CRITICAL CARE SERVICES, ANAESTHESIA

CLINICAL SCIENCES,
HEALTH SERVICES AND
POPULATION HEALTH



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Director

Vasanth Rao Kadam

Regional Anaesthesia

Venkatesan Thiruvankatarajan

Laryngeal Mask Airway

Richard Watts

Beta-Blockers and Anaesthesia

Clinical Researchers

Arpudaswamy Kumar

Graeme Newcombe

Rajesh Sethi

Thavarajah Visvanathan

The primary research interests of our department are regional anaesthesia, new applications of drugs, and specific applications for and potential complications of newer laryngeal mask airway devices.

Key findings in 2017

- Over the last few years, regional anaesthetic techniques have been a research focus in our department. We have obtained Australian and New Zealand College of Anaesthetists (ANZCA) Trials Group funding and have started an RCT into transmuscular quadratus lumborum block, which appears to give a better coverage of the abdomen compared to TAP (Transversus Abdominis Plane block).
- Systematic reviews on beta-blockade and anaesthesia show that beta-blockade appears to significantly reduce analgesia and anaesthesia dosing, whilst reducing postoperative pain, nausea and vomiting. This can have significant consequences for the provision of anaesthesia in specific

higher risk cases, where for example opioids need to be avoided. Specific trials are being contemplated to explore this further.

- We are also progressing prospective trials into specific applications for Laryngeal Mask Airway devices.

Outcomes for the community

Regional anaesthesia can improve a patient's postoperative experience by improving analgesia and reducing the effects of general anaesthesia. Beta-blockers can reduce intra-operative analgesic (opioid) and anaesthetic requirements whilst improving postoperative analgesia and reducing postoperative nausea and vomiting; again improving the patient's experience.

► Publications for Anaesthesia Research Group

HEALTH PERFORMANCE AND POLICY RESEARCH UNIT

THE UNIVERSITY OF ADELAIDE
DISCIPLINE OF MEDICINE / TQEH

CLINICAL SCIENCES, HEALTH SERVICES AND POPULATION HEALTH



The Health Performance and Policy Research Unit assesses important end results of healthcare such as effectiveness, safety, quality and costs. Combining clinical medicine and data science, our goal is to generate research that informs clinical and policy strategies to improve healthcare quality and outcomes. We achieve this vision through critical and innovative health services research and training, and by generating research output that both stimulates and empowers clinicians and health services to improve patient care.

Key findings in 2017

ORION: Observing Recurrent Incidence of Adverse Outcomes following Hospitalisations

With the generous support of State Health Departments, ORION brings together a decade of cardiovascular hospitalisation and procedure data from all Australian States. Encompassing more than 100 million healthcare encounters from more than 1000 public hospitals and many private facilities, ORION allows our team to assess health outcomes such as deaths, hospital readmissions and procedural complications on a national scale and understand how these outcomes vary among the many healthcare facilities in Australia. Further funding enabled ORION to expand to consider healthcare costs associated with hospitalisations which is crucial for developing effective clinical and policy strategies to improve care as cost considerations are a major driver of decision making for health providers.

The early findings of our research were presented at several national forums including the Cardiac Society of Australia and New Zealand Annual Scientific meeting, the Health Services Research Association of Australia & New Zealand Annual Meeting and local forums.

SAFER Hospitals: SAFety, Effectiveness of Care, and Resource Use among Australian Hospitals.

The overarching goal of the SAFER Hospitals study is to estimate the national, hospital-wide incidence of serious adverse events, mortality and readmissions following hospital-based care. It further seeks to estimate the impact of these untoward outcomes by estimating the potentially avoidable costs and resources used.

Lastly, the SAFER Hospitals study seeks to develop methods to routinely monitor and profile the variation in these outcomes among hospitals.

Outcomes for the community

The ORION and SAFER Hospitals study will provide new insights into cardiovascular outcomes including data on short and long-term prognosis for common cardiovascular conditions, and how these outcomes vary among hospitals. The findings may enhance guideline adherence, reduces healthcare costs, empowers quality improvement efforts, and facilitates research and innovation.

► **Publications for Health Performance and Policy Research Unit**



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INTENSIVE CARE MEDICINE RESEARCH GROUP

TQEH DEPARTMENT
INTENSIVE CARE UNIT

CLINICAL SCIENCES,
HEALTH SERVICES AND
POPULATION HEALTH



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*The Australian & New Zealand
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The Department of Intensive Care Medicine participates in and conducts research aimed at improving patient outcomes and answering pragmatic, relevant clinical questions that are of importance to the clinicians who provide patient care. We also aim to deliver more efficient and effective treatments that will not only benefit critically ill patients but also decrease costs, preserve resources and increase access to scarce critical care beds. Five studies were conducted in 2017 relating to the treatment of patients with sepsis and those requiring nutritional and ventilatory support.

Key findings in 2017

ADjunctive coRticosteroid trEatment in criticAlly iLL patients with septic shock (ADRENAL STUDY)

TQEH ICU participated in this NHMRC funded randomised blinded placebo controlled trial of hydrocortisone which completed recruitment of 3,800 critically ill patients with septic shock in 2017. The purpose of this study is to find out whether adult patients admitted to the Intensive Care Unit with septic shock who are given hydrocortisone compared to placebo, will have an improved rate of survival 90 days later. Results will be published in 2018.

The Augmented versus Routine approach to Giving Energy Trial: A randomised controlled trial (TARGET NUTRITION STUDY)

This pivotal NHMRC funded multi-centre, double-blinded, randomised, controlled, parallel-group, phase III clinical trial completed recruitment of 4000 patients in 2017. This study aims to determine if the enteral delivery of the full-recommended calorie (energy) requirement to critically ill patients improves 90 day survival benefit when compared to standard practice. Professor Peake is a Chief Investigator and co-chair of the study Management Committee. Results will be published in 2018.

Outcomes for the community

The research conducted within the Department of Intensive Care Medicine has the potential to deliver more efficient and effective treatments in the ICU that will not only benefit critically ill patients but also decrease costs, preserve resources and increase access to scarce critical care beds.

► Publications for Intensive Care Medicine Research Group

PSYCHIATRY RESEARCH GROUP

THE UNIVERSITY OF ADELAIDE
DISCIPLINE OF PSYCHIATRY / TQEH

CLINICAL SCIENCES,
HEALTH SERVICES AND
POPULATION HEALTH

The Discipline of Psychiatry's research follows five main themes:

- 1) Personalised psychiatry and the genomics of psychiatric disorders
- 2) Psychiatric neuroscience and neuroimmunology of psychiatric disorders
- 3) Neuropsychiatry and psychiatric and medical comorbidities
- 4) Clinical phenotype research into the cognitive, emotional and behavioural underpinnings of psychiatric disorders, and
- 5) The conduct of clinical trials, including pharmacological, psychological and neurostimulation interventions.

Key findings in 2017

- Clinical risk factors, schizophrenia polygenetic risk (inversely), specific HLA alleles and inflammatory gene expression and specific mitochondrial electron transport chain gene expression are predictors of lithium response in bipolar affective disorder.
- Recognition of prosody in language and executive function (n-back test) are strongly associated with general day to day function in schizophrenia.
- Meta-analysis of clinical trials indicates that depot antipsychotic medication (slow-release, slow-acting form A:F delivered by injection) is not superior to oral antipsychotic medication in improving general function but baseline cognition and level of insight are significant predictors of functional outcomes in depot treatment of schizophrenia.
- Baseline symptoms, function and cognitive function are predictors of transition to psychosis in the Personal Assessment and Crisis Evaluation (PACE 400 Study) cohort of patients at ultra-high risk of psychosis.
- Infection during clozapine treatment for chronic psychosis results in raised clozapine levels and associated risk for toxicity. High rates of clozapine related myocarditis have been identified in metropolitan Adelaide

following the implementation of a new screening protocol.

Outcomes for the community

The discipline's work in the area of prediction of medication response for both lithium and antipsychotic medications and of prediction of outcomes in ultra-high risk psychosis represents significant advances toward personalised approaches for treatment for major mental illness. In the future these advances may help to reduce the delay to effective treatment, reduce medication side effects and improve outcomes for major mental illness.

The discipline's analysis of adverse events in the use of antipsychotic clozapine for treatment resistant schizophrenia has been directly translated into the new 2017 South Australian Clozapine Treatment Guidelines and associated SA Health Training and eLearning package. These advances in knowledge will directly benefit patients with chronic psychotic illness.

► Publications for Psychiatry Research Group



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Clinical Titleholder

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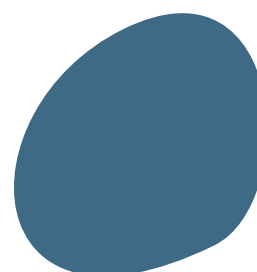
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RESPIRATORY MEDICINE UNIT AND CLINICAL PRACTICE UNIT

TQEH DEPARTMENT
RESPIRATORY MEDICINE UNIT AND
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TQEH Respiratory Medicine Unit and its associated Clinical Practice Unit work across many areas relating to clinical practice and improvement of health services. The unit has a number of epidemiological research studies underway addressing knowledge and practice gaps for prevalent respiratory conditions, including: chronic obstructive pulmonary disease (COPD), asthma, bronchiectasis, sleep apnoea, pneumonia, respiratory failure and smoking. Other key areas of research are non-invasive ventilation and intervention pulmonology and Indigenous health.

Key findings in 2017

- The Respiratory Medicine Unit & Clinical Practice Unit completed the first Australian study to examine risk factors for pneumothorax incidence in people with emphysema undergoing endobronchial valve (EBV) insertion. It was found that risk of pneumothorax is significantly increased in cases with previous pleural injury, but not a paraseptal/panlobular emphysema morphological subtype. These results will support improved risk assessment and discharge planning procedures.
- An investigation into the comparative diagnostic yield and safety of a newer, less invasive procedure (transbronchial lung cryobiopsy) for the diagnosis of interstitial

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lung disease compared to the conventional method (forceps transbronchial biopsy) was also undertaken in 2017. Results indicated that the less invasive cryobiopsy method was a safe alternative to the forceps method and provided a higher diagnostic yield. These findings were clinically significant.

- A survey of sleep physicians and electrophysicians determined that SA's mandatory reporting law for unsafe drivers is largely ignored and inconsistently applied and deteriorates doctor-patient relationships.

Outcomes for the community

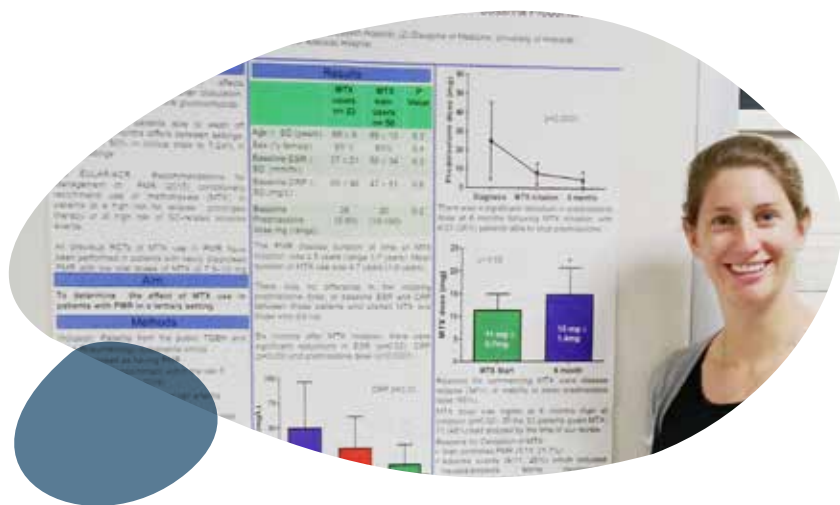
Improved patient care, reduced hospital admissions for patients, improved quality of life for patients and reduced health care expenditure are expected outcomes of this research.

► Publications for Respiratory Medicine Unit and Clinical Practice Unit

Dr Kristin Carson-Chahhoud (far right) with high school students who participated in a summer internship program.

RHEUMATOLOGY RESEARCH GROUP

TQEH DEPARTMENT
RHEUMATOLOGY UNIT



The Rheumatology Unit aims to utilise clinical data and biological samples from a range of clinical cohorts with autoimmune and chronic inflammatory diseases, to investigate epidemiology, causation, clinical outcomes, new treatments and patient reported outcome measures. Projects are on-going in a range of disease such as osteoarthritis, rheumatoid arthritis, Sjögren's syndrome, giant cell arteritis, polymyalgia rheumatic, gout and fibromyalgia. In addition the Rheumatology Department operates one of the largest Rheumatology clinical trials centres in Australia.

Key findings in 2017

- A/Prof Maureen Rischmueller has continued her international SGENE Sjögren's syndrome collaboration. Key papers published this year include confirmation that X chromosome aneuploidy (either complete or partial) contributes to disease susceptibility and genetic control of hyper-responsiveness to type I interferons (OAS1 locus) also contribute to disease susceptibility. A/Prof Rischmueller also belongs to the (European League Against Rheumatism) EULAR-SS task force and Big Data consortium which published on geolocation and ethnicity and Sjögren's manifestations, and plans to further characterise this disease on a world-wide basis. ► Brito-Zerón et al 2017.
- Dr Sam Whittle has continued with his research interest in pain, and published a paper reporting that weather variation does not influence pain levels in patients with fibromyalgia. A novel feature of this study was the use of Twitter to gather data from a first-person patient perspective.
- Professor Catherine Hill has continued with a variety of research interests. Published

papers include several characterising foot pain in the community and a systematic review demonstrating that mortality is not increased in patients with Giant Cell Arteritis. This latter publication is important given the seriousness of the illness, the elderly nature of the patients, and the treatment with high dose corticosteroids.

- With PhD student, Dr Rachel Black, and a collaboration with OMERACT (Outcome Measures in Rheumatoid Arthritis Clinical Trials), Professor Hill has also published preliminary data on patient perceptions of glucocorticoid treatment in addition to describing the drivers of glucocorticoid initiation and cessation in patients from the Australian Rheumatoid Arthritis Database (ARAD).

Outcomes for the community

All research within the Rheumatology Unit has a strong clinical focus. The aim is primarily to enable optimum patient clinical management and the best treatment outcomes, which requires an understanding of disease pathogenesis, the best treatments, their side effects, and which patients are at risk of undesirable outcomes.

As treatment is ultimately a partnership between clinician and patient, patient-oriented outcome measures are also an increasing focus. Patient education is also important, and the Rheumatology Unit maintains a high level of commitment and input into programs run by Arthritis SA, as well as performing qualitative research into the effectiveness of such programs.

► Publications for Rheumatology Research Group

CLINICAL SCIENCES, HEALTH SERVICES AND POPULATION HEALTH



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OMERACT Glucocorticoid
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OMERACT Shoulder Working
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European League against
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Syndrome Taskforce
Arthritis Genomics Recruitment
Initiative in Australasia (AGRIA)
Australian Scleroderma Interest
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Australian Arthritis & Autoimmune
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SURGICAL SCIENCE RESEARCH GROUP

THE UNIVERSITY OF ADELAIDE
DISCIPLINE OF SURGERY / TQEH

CLINICAL SCIENCES,
HEALTH SERVICES AND
POPULATION HEALTH



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The Surgical Science Research Group is primarily interested in clinical research, and benchtop to bedside research in the surgical setting.

Key findings in 2017

In 2017 the Surgical Science Research Group continued its focus on enhancing teaching methods and opportunities in surgery.

Surgical competence requires not only technical expertise, but effective non-technical skills to ensure patient safety and maintenance of standards. Recently the Royal Australasian College of Surgeons implemented a new Surgical Education and Training (SET) curriculum that incorporated non-technical skills considered essential for a competent surgeon. Our group sought to compare the non-technical skills of experienced surgeons who completed their training before the introduction of SET with the non-technical skills of more recent trainees. Surgical trainees and experienced surgeons undertook a simulated scenario designed to challenge their non-technical skills. Scenarios were video recorded and participants were assessed using the Non-Technical Skills for Surgeons (NOTSS) scoring system.

For most NOTSS elements, mean scores increased initially, peaking around the time of Fellowship, before decreasing roughly linearly over time. There was a significant downward trend in score with increasing years since being awarded Fellowship for six of the 12 NOTSS elements: including considering options, implementing and reviewing decisions, establishing a shared understanding, setting and maintaining standards, supporting others and coping with pressure.

The drop in NOTSS score was unexpected and highlights that even experienced surgeons are not immune to deficiencies in non-technical skills.

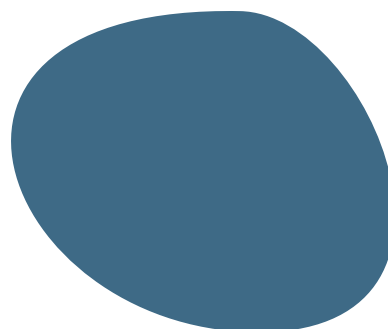
This unanticipated result has further highlighted the need for continued professional development programmes focusing on non-technical skills, regardless of the level of professional experience and emphasises the importance of our current project on surgical coaching to fill this gap in continued education.

Outcomes for the community

The concept of coaching for performance improvement is an accepted and well-established approach in fields such as sports, education, business and music. Only more recently has the application of this model of learning, which is grounded in established adult learning and psychological concepts, been applied in the health care setting. This project is investigating whether surgical coaching is a potentially valuable tool to enhance surgeons' non-technical skills and beneficial to develop a surgical coaching program for General Surgeons for the purpose of improving surgeons' ongoing professional development.

In 2017/18 we aim to design and implement a coaching program in both a theatre and outpatient setting. It will take place at The Queen Elizabeth & Royal Adelaide Hospitals positioning us at the forefront of surgical training techniques, which other institutions may then model their surgical training programs on, ultimately providing better patient care and outcomes.

► Publications for Surgical Science Research Group



DRUG AND VACCINE DEVELOPMENT

Research Groups

Therapeutics Research Centre

Virology Group





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Suleman Khan
Shuping Qiang

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Pauline Drean
Lucille Gautier

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Surgical Science Research Group
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*Intensive Care Medicine Research
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John Horowitz
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*University of Newcastle
(Newcastle)*
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Our focus is on mechanistic, pharmacokinetic, clinical and regulatory science studies in pharmaceutical science, therapeutics and toxicology of small molecules, biologicals, nanosystems and cells. Our research covers development of sophisticated analytical methods for drug and poison analysis in patients, design and testing of pharmaceutical and nanosystem products, quantifying the disposition and effects of drugs and nanosystems in living cells as well as physiological pharmacokinetic modelling to improve therapeutics for various conditions including medicine adherence and the impact of de-prescribing.

Key findings in 2017

We continue our work in several related areas including:

- Toxicology: the effects on the body and various organs following intentional (suicide attempts) or inadvertent poisoning with several classes of drugs and chemicals (6 publications);
- Skin: the permeation parameters of various topical applications including the imaging of melanoma progression (5 journal articles, 1 book chapter);
- Population kinetic modeling of dosing regimens of antibiotics and the effects of obesity on this class of drug used to treat the critically ill (2 publications);
- Liver: studied hepatic metabolism in health and disease (1 journal article, 2 book chapters) and further used visualisation and modelling to establish the *in vivo* distribution of mesenchymal stem cells (1 publication).
- Multiphoton imaging has been adapted and used for many of our studies including the tracking of dyes, nanomaterials and compounds and their association with body organs.

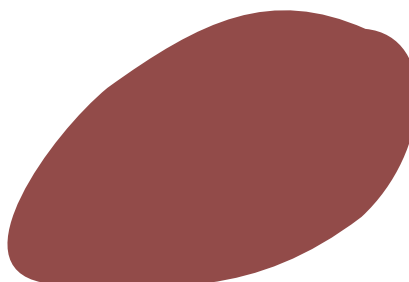
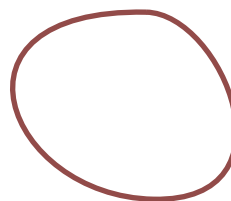
Outcomes for the community

Our work provides insight into the effects of poisons on various organs of the body and potential treatments/antidotes with effective timelines including strategies for suicide prevention.

Every day people apply various compounds to their skin desiring protection (for example against UV rays), penetration through the skin to reach the underlying systemic circulation or delivery into the skin. Our data on nanoparticle toxicity helps to establish better regulatory and safety measures to keep the community safe.

Understanding how antibiotics behave (in terms of absorption, distribution, metabolism and elimination) in the critically ill and how they are altered by confounding disease states such as obesity allows for better management of treatments in this vulnerable population.

► Publications for Therapeutics Research Centre



VIROLOGY GROUP

THE UNIVERSITY OF ADELAIDE
DISCIPLINE OF SURGERY / TQEH

DRUG AND VACCINE DEVELOPMENT



The primary aim of our research is to develop novel vaccine strategies for human immunodeficiency virus (HIV) and hepatitis C virus (HCV). To address this, we developed a novel DNA vaccine which is more effective than typical DNA vaccines. This vaccine elicits robust cell mediated immunity in vaccinated animals, including large animals, and generates protection in a HIV animal model. More recently, the focus has moved to develop vaccines which elicit humoral immunity that may be used independently or in combination with the vaccines which elicit cellular immunity.

Key findings in 2017

- We showed that the cytolytic DNA vaccine enhanced activation of dendritic cells resulting in increased priming of CD8 T cell immunity. This study showed that transfection of HEK cells with the vaccine resulted in release of lactate dehydrogenase, indicative of necrotic cell death. An *in vivo* study showed that the vaccine increased the activity of dendritic cells, a result that is important for the future translational prospects of the vaccine. More recent studies with the cytolytic DNA vaccine confirmed that a vaccine cocktail elicited a broader cell mediated immune response than a vaccine which encoded a consensus sequence.

- To complement the HCV cell mediated immune responses, a DNA vaccine was designed to elicit humoral immunity to the HCV envelope proteins, and was shown to induce HCV-specific neutralising antibody.
- A Zika virus vaccine was also shown to induce strong humoral immunity and current experiments are designed to characterise the nature of this response.

Outcomes for the community

The ability to induce HCV specific neutralising antibody simultaneously with cell mediated immune responses to a number of the viral antigens is an exciting new development that has the potential to change the direction of HCV vaccine research.

The Zika research also has a unique opportunity for introduction into human clinical trials.

► Publications for Virology Group



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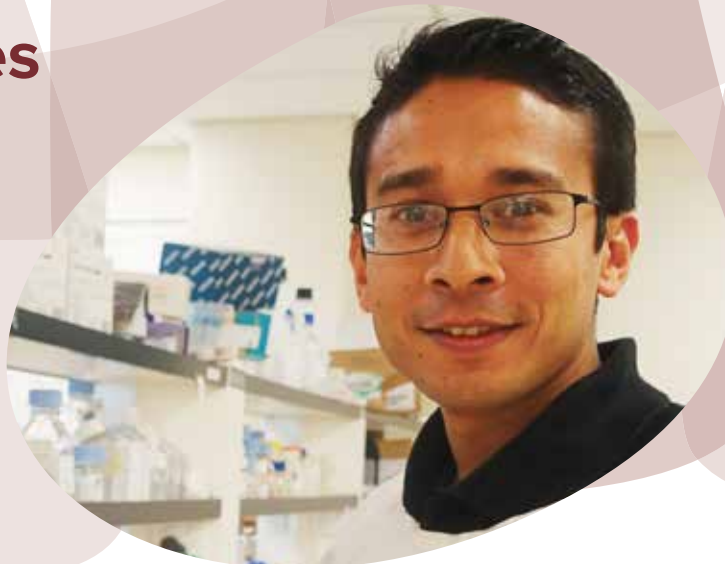
Michael Beard

The University of Adelaide

“The number of Hepatitis C cases in Australia is increasingly reported each year, so a new and cheaper vaccine is vital.”

Developing vaccines against viruses to save lives

DR ASHISH SHRESTHA
VIROLOGY GROUP



Supported by The Hospital Research Foundation (THRF), Dr Ashish Shrestha's research aims to develop a universal Hepatitis C virus vaccine and a DNA vaccine to provide effective protection against the Zika virus. Currently there are no licensed vaccines for clinical use against either virus.

Hepatitis C is a blood-borne disease caused by Hepatitis C virus which can cause inflammation of the liver and can lead to carcinoma and liver cirrhosis.

Globally, more than 185 million people have been infected with the virus and estimated health care costs for the treatment is around \$252 million per annum in Australia.

Zika is a disease contracted by an infected mosquito bite, which can cause fever, rash and muscle and joint pain. Aiming to develop vaccines against these viruses, Dr Shrestha's background in microbiology will be a vital contribution to this research.

Awarded a THRF Early Career Fellowship in 2017, Dr Shrestha relocated to the Basil Hetzel Institute for Translational Health Research from the University of Queensland to pursue this vital research. Dr Shrestha is working under Professor Eric Gowans who is leading this research.

“Prof Gowans has already developed an experimental novel cytolytic Hepatitis

C DNA vaccine and I am researching to develop a vaccine which can protect against the four most common Hepatitis C virus genotypes found globally,” Dr Shrestha explained.

“I am also working on the development of a vaccine for the Zika virus. As the Zika virus belongs to the same family as the Hepatitis C virus I will be using a similar strategy to target it.”

“Although there are existing treatment methods for people who contract Hepatitis C, they are very expensive. The number of Hepatitis C cases in Australia is increasing each year, so a new and cheaper vaccine is vital.”

Dr Shrestha's potential Zika virus vaccine will be targeted to people living in tropical regions, travellers and also pregnant women, as mothers infected during pregnancy are more likely to have children with microcephaly (small brain syndrome) for which there is no treatment.

Dr Shrestha is grateful to THRF and the donor community for the opportunity to potentially develop new much-needed vaccines for these life threatening viruses.

Fellowship

The Hospital Research Foundation Early Career Fellow

“Although there are existing treatment methods for people who contract Hepatitis C, they are very expensive.”

DR ASHISH SHRESTHA

INFLAMMATORY DISEASE

Research Groups

ENT Surgery

Inflammatory Bowel Disease
Research Group

Zinc and Inflammatory Disease
Research Group



ENT SURGERY

TQEH DEPARTMENT

OTOLARYNGOLOGY, HEAD AND NECK SURGERY

INFLAMMATORY DISEASE



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The Department of Otolaryngology, Head and Neck Surgery is focused mainly on understanding the pathogenesis of chronic rhinosinusitis (CRS), using a multidisciplinary approach, aimed at identifying new diagnostic/prognostic markers and treatment strategies to the benefit of our patients. Research projects cover all aspects of rhinological research from pathophysiological aspects of CRS to the identification and validation of new treatment strategies *in vitro* and *in vivo*, bringing research from bench to bedside. Other aspects of our research focus on wound healing and skull base surgery.

Key findings in 2017

- We have found the presence of tertiary lymphoid organs in recalcitrant CRS patients. These lymphoid follicle like structures are thought to be important in determining the type of inflammation in these patients.
- We have also identified a new treatment combination (deferiprone and gallium protoporphyrin) that has strong antimicrobial properties and can kill difficult to treat infections.
- We have made progress in wound healing projects where we have found deferiprone to have strong anti-adhesive properties in a sheep model of back surgery.

Outcomes for the community

Our research is translational, aimed at the discovery of new treatments for CRS. Hence, our research findings are bringing direct benefit to the community by developing safe and effective new treatments for CRS.

Our department is also actively involved in direct interactions with the community with the organisation of research forums and presentations that are accessible to all. An example is 'The Pint of Science Festival', a festival held over 3 days that brings research to the public through scientific talks in local pubs. One of the 2017 organisers was Katharina Richter, a recent PhD graduate from our department.

The department also engaged with the public via invited articles published in The University of Adelaide alumni magazine Lumen (worldwide readership), the Australasian Science magazine (readership in Australia, New Zealand and Asia) and ENT Today (readership in the USA).

► Publications for ENT Surgery

Commercialisation: Patent #AU2017900650 filed by The University of Adelaide.

Title: Methods and products for reducing adhesions.

Investigators: PJ Wormald and SJ Vreugde.

“ We have developed a surgical gel which uses a polymer derived from squid which possesses both anti-bleeding and anti-scarring properties.”

PROF PJ WORMALD

Innovative gel to treat chronic back pain

**PROF PETER-JOHN WORMALD AND
A/PROF SARAH VREUGDE**
ENT SURGERY



Over ten years ago world-renowned Ear, Nose and Throat Specialist Professor Peter-John Wormald had the revolutionary idea of developing a gel to treat chronic and recurring inflammation after sinus surgery.

A decade later this gel is showing such life-changing results for patients' post-surgery that Professor Wormald was awarded The Hospital Research Foundation's 2017 Development Grant of \$200,000 to expand its use to chronic pain after back surgery.

When a patient undergoes routine back surgery, it is very common for scarring and adhesions to form, leaving some patients in more pain than they had before surgery. Despite this, there are currently no therapies available to these patients to help relieve their pain. Until now!

Prof Wormald and colleague Associate Professor Sarah Vreugde have discovered the same gel they now use to treat nasal inflammation following surgery, can also be used to prevent scarring following routine back surgery. Now armed with the support of this grant, this innovative gel will soon be available to patients through a clinical trial.

“In a collaboration between the Centres of Excellence in New Zealand and our department of ENT at The University of Adelaide, we have developed a surgical gel which uses a polymer derived from squid which possesses both anti-bleeding and

anti-scarring properties,” Prof Wormald explains.

“Having had success with the gel in nasal cavities and sinuses, we identified problems with back surgery and a high failure rate with scar tissue and it seemed a logical extension to trial the gel to see if it is going to be effective.”

A/Prof Vreugde says it was the breakthrough idea of adding an additional anti-scarring compound to the gel which showed significant effects in reducing scarring after back surgery.

“We soon discovered that adding a particular compound called deferiprone, which has strong anti-scarring properties, to the gel actually strengthened its effect on preventing adhesions following back surgery,” A/Prof Vreugde said.

“Through our initial research it was determined that without the gel there was 94 per cent of cases after surgery where adhesions formed, but with the gel this reduced significantly,” she said.

An incredibly exciting discovery for the team, Prof Wormald and A/Prof Vreugde are now preparing the gel for a clinical trial, and are hopeful the treatment could be available to patients across the globe undergoing back surgery within five years.

With additional support from THRF, the research team are also exploring the use of this same gel to reduce the formation of scarring following abdominal surgery.

“In 95 per cent of cases, patients

will have adhesion formation following abdominal surgery, and a significant number of these people will then require another surgery within two years to remove this scarring due to chronic pain. We're now in the process of optimising the gel to prevent these adhesions from occurring,” A/Prof Vreugde said.

“ Our initial research determined that without the gel there was 94 per cent of cases after surgery where adhesions formed, but with the gel this reduced significantly.

A/PROF SARAH VREUGDE

INFLAMMATORY BOWEL DISEASE RESEARCH GROUP

TQEH DEPARTMENT

GASTROENTEROLOGY AND HEPATOLOGY UNIT



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CSIRO

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The University of Adelaide

Trevor Lawley

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Oliver Waters

Fiona Stanley Hospital (Fremantle)

Lito Papanicolaou

Flinders Medical Centre

Simon Travis

Oxford University (UK)



Our research focusses on the role of the microbiome and diet in inflammatory bowel disease (IBD) and other gut disorders and manipulating the microbiome and diet for therapeutic effect.

Key findings in 2017

- **Faecal transplantation in ulcerative colitis:** We completed 12 months of follow up for patients in the faecal microbiota transplant (FMT) for induction of remission in ulcerative colitis study. This double blind placebo randomised controlled trial demonstrated that faecal transplant can induce remission in active ulcerative colitis however the effect diminishes over time. We have learnt about the microbial and metabolite characteristics of donor stool that are associated with the treatment effect. We have concluded that more research is required to determine if FMT can be used as a maintenance therapy.
- **‘Treat to target’ in ulcerative colitis:** A multicentre study was performed evaluating current clinical practice in ulcerative colitis, finding that only a modest proportion of patients meet the proposed treatment target of clinical and endoscopic remission. Survey data exposed clinician perceptions and behaviour as key challenges to implementation of a ‘treat to target’ strategy in practice.

- **Commercialisation:** We have made a commercialisation agreement with Microbiotica (Cambridge, UK) with the aim of using our intellectual property to help develop artificial faecal microbiota transplant (FMT).

Outcomes for the community

We have demonstrated that faecal microbiota transplantation can safely induce remission of active ulcerative colitis but that the clinical effect diminishes with time. This provides evidence that this new therapy is both effective and practical in terms of delivery for patients. It is a therapeutic option for patients that does not result in immune suppression that many current therapies do.

We have also established a not for profit organisation “BiomeBank” with The Hospital Research Foundation (THRF) that will run the stool bank that is also used to treat South Australian patients with recurrent *Clostridium difficile* infection.

► Publications for Inflammatory Bowel Disease Research Group

Would you ever imagine that a faecal transplant could save your life? Research underway in Adelaide is leading to treatments for patients living with chronic gut conditions. The results? Lifesaving!

Getting to the bottom of gut health

MEET STEPHANEE



A normal 16 year old enjoying a game of netball, Stephanie collapsed with no warning signs or known previous health issues. Doctors discovered she was living with an undiagnosed health issue of kidney reflux, meaning urine would travel up to her kidneys and damage them. In fact, Stephanie's kidney function was just eight per cent.

With Stephanie's health rapidly declining, she underwent a kidney transplant in March 2016 at the Royal Adelaide Hospital. The transplant was a success thanks to her loving mother Sam donating a kidney.

"We were compatible and it was a no brainer for me, I just wanted Stephanie to start feeling better and live a normal life at her young age," Sam said.

Unfortunately, Stephanie's health issues continued post-surgery and she was diagnosed with a *Clostridium difficile* infection, a consequence of antibiotics and the anti-rejection medication she was taking following the transplant.

"All my gut flora (good bacteria) was destroyed, which resulted in me being extremely sick and back in hospital. By this time my friends had part time jobs, buying new cars and travelling overseas and I was missing out," Stephanie said.

The infection was having a drastic impact on Stephanie's quality of life and antibiotic therapy was failing.

She was then referred to see Dr Sam Costello, Gastroenterologist at The Queen Elizabeth Hospital (TQEH) who recommended that Stephanie have a stool transplant to help restore her gut health.

"The faecal transplant provides healthy gut microorganisms that can out compete the *Clostridium difficile* infection in the bowel and rejuvenate the damaged gut ecosystem. In doing this it prevents *Clostridium difficile* from causing infection" Dr Costello said.

"Stephanee had tried many courses of traditional antibiotic therapy that had not been able to eradicate her infection and so faecal transplant was the last remaining option for her."

On December 30, 2016 Stephanie underwent a stool transplant at TQEH, making her the first patient in Australia to have had a kidney transplant and a stool transplant. The stool transplant successfully restored Stephanie's normal bowel function. Stephanie's anaemia (low red blood cells) also resolved following faecal transplant.

"I was back to normal the day after my faecal transplant and had regained my energy. I'm so glad I had the operation and I hope this will work for others in a similar situation as me – it's been life changing!"

The Hospital Research Foundation are thrilled to be working with

Dr Costello to support BiomeBank, the first ever public stool bank in Australia to treat severe and chronic bowel conditions, which will improve the lives of more people like Stephanie!

“

Stephanee had tried many courses of traditional antibiotic therapy that had not been able to eradicate her infection and so faecal transplant was the last remaining option for her.

DR SAM COSTELLO

ZINC AND INFLAMMATORY DISEASE RESEARCH GROUP

THE UNIVERSITY OF ADELAIDE
DISCIPLINE OF MEDICINE / TQEH



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Research Leader
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Hai Tran
Rhys Hamon
The University of Adelaide

Chronic Obstructive Pulmonary Disease (COPD) is an incurable, cigarette-smoke related, chronic inflammatory airways disease that is predicted to be the third leading cause of death in the world by 2020. There are no treatments that prevent the disease progression, and identifying new therapeutic targets is a priority for COPD research.

Autophagy is emerging as an exciting new area of clinical research interest with therapeutic potential. We have identified several clinically approved agents that reduce autophagy and apoptosis by targeting Zinc homeostatic mechanisms. This work is funded by an NHMRC project grant 2016-2018.

Key findings in 2017

- We made the important discovery that zinc (Zn) transporter proteins and XIAP (a Zn-dependent inhibitor of apoptosis) are central to both apoptosis and autophagy, and are dysregulated in COPD and in response to cigarette smoke.
- We showed that exposure to cigarette smoke lowers the expression of one of these zinc transporters, ZIP2, and depletes airway epithelial zinc.
- An *ex vivo* model of differentiated human airway epithelium exposed to Zn depletion and cigarette smoke was used to determine the contribution of Zn in maintaining normal epithelial permeability. We showed a significant downregulation of the tight junction proteins and increased epithelial permeability.

INFLAMMATORY DISEASE

Outcomes for the community

As we age, the zinc levels in our body decline and make us more susceptible to disease. Zn deficiency is an influential codeterminant that drives epithelial damage in smokers and patients with chronic obstructive pulmonary disease. Targeting this phenomenon may be a previously unidentified and critical avenue toward preventing and ameliorating lung damage.

► **Publications for Zinc and Inflammatory Disease Research Group**

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2017



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SA Koblar BMBS FRACP PhD

Chief Clinical Neuropsychologist

AC Kneebone BA Dip App Psych MA PhD FAPS

Consultant Neurologists

C Short BSc MBBS FRACP

A Tan BMBS FRACP

J Hafner BMBS FRACP

R Ghaoui BMBS FRACP

S Lee BMBS FRACP

Affiliate Associate Professor / Principal Medical Scientist/ Co-Director of SRP

MA Hamilton-Bruce BSc MSc MBA PhD AFCHSE CBiol FRSB CSci FIBMS

Senior Medical Scientist

MB Donk BHSc

Chief EEG Technologist

J Pruszkowski Diploma in Medical Analysis

Memory Unit Secretary

K McKinna

Clinical Nurse Manager

KJ Webb RN BN

Epilepsy Nurse Practitioner

S Horn NP MNSc

Transient Ischaemic Attack (TIA) Nurses

P Toner RN BN

S Castle RN

Clinical Research Trials

PCK Cheung RN

S Casey RN BN

Senior Medical Scientist for SRP

AG Milton BSc(Hons) Dip Comp Sci

Postdoctoral Research Fellows

K Kremer BBtech (Hons) PhD

X Kaidonis BSc (Biomed Sci) (Hons) PhD

PSYCHIATRY, THE UNIVERSITY OF ADELAIDE, DISCIPLINE OF

Professor

BT Baune MD PhD FRANZCP

Clinical Academics

S Clark MBBS PhD BSc(Hons) FRANZCP

O Shubert MD PhD FRANZCP

N Mills MBBS PhD FRANZCP

Lecturers

C Toben PhD

C Jawahar PhD

Research Assistant

E Lyrtzis BHSc (Hons Psychology)

RESPIRATORY MEDICINE UNIT AND CLINICAL PRACTICE UNIT, TQEH

Professor

BJ Smith MBBS FRACP Dip Clin Epi PhD

Clinical Practice Unit Staff

K Carson-Chahhoud PhD

J van Agteren BSc MSc

M Kluge

TB Truong BPsych(Hons)

Consultants

D Grosser FRACP MBBS

S Lehman FRACP MBBS

J Polasek FRACP MBBS

A Roy FRACP MBBS

Z Usmani FRACP MBBS

A Veale PhD FRACP MBBS

S Lehman FRACP MBBS

Advanced Trainees

M Tan MBBS

A Oh MBBS

Principal Medical Scientist

M Jurisevic PhD

Pulmonary Function Laboratory

D Keatley BSc (Biomed) (Hons)

X Liu BSc PhD

P Kid BSc

Clinical Trials Unit Coordinators

K Boath Mgt Cert Adv Cert BHlthSc

TB Truong BPsych(Hons)

RESEARCH STAFF 2017 cont.

Research Nurse

P Gluyas RN RM CC Cert

Sleep Laboratory

T Faulkner BPsych (Hons)

V Coe BSc

N Elgar BSc (Hons) BTh

Respiratory Nurses

K Lawton BAN

K Royals RN

RHEUMATOLOGY UNIT, TQEH

Director

C Hill MBBS MD MSc (Epi) FRACP

Staff Consultant Rheumatologists

M Rischmueller MBBS FRACP

S Whittle MBBS (Hons) MClinEpi

S Burnet MBBS FRACP

Rheumatology Clinical Research Administrator

S Downie-Doyle PhD

Clinical Trial Coordinators

C Ruediger PhD

C Davis PhD

Rheumatology Infusion Nurse

C Jukic RN

Rheumatology Nurse

H Vanderhaak RN

Rheumatology Clinical Trials Nurses

A Cayzer RN

S White RN

Clinical Trial Assistant

J Harris BBus

Chief Medical Scientist

S Lester BSc(Hon)

Secretary

M Devine

SURGERY, THE UNIVERSITY OF ADELAIDE DISCIPLINE OF/SURGICAL DIRECTORATE

RP Jepson Professor of Surgery

G Maddern PhD MS MD FRACS FAAHMS

Professor of Colorectal Surgery

P Hewett MBBS FRACS

Associate Professor

M Goggin MB BCh BAO DO FRCSI (Ophth) FRCOphth FRANZCO MS

Senior Medical Scientist

E Hauben PhD

Research Officers

C Kirana PhD

K Fenix PhD

Research Assistant

Z Tvorogova Production Engineer (Saint-Petersburg Mining University)
LabTech (Helsinki) Med Equip Maintenance (Helsinki)

Visiting Research Fellow

P Drew PhD

Project Coordinators

L Leopardi BSc BEng(Biomedical)(Hons)

A Bonnici BHLthSc (until Feb 2017)

J Reid BSc PhD

Technical Officers

M Smith

M Slawinski

B Hutchens

SURGERY - ENT

Professor of Otolaryngology Head & Neck Surgery and Head of Department

PJ Wormald MD FRACS FCS(SA) FRCS(Ed)

Head of Clinical Services

A Psaltis MBBS FRACS PhD

Senior Lecturer

G Rees MBBS FRACS

Staff Specialists

S Floreani MBBS FRACS

J Ling MBBS FRACS

S Rajapaksa MBBS FRACS

H Pant MBBS FRACS

D Close MBBS FRACS

K Ha MBBS FRACS

RESEARCH STAFF 2017 cont.

SURGERY - ENT cont.

Rhinology Fellow

Yi Chen Zhao MBBS FRACS

ENT Registrars

J Murphy MBBS

C Frauenfelder MBBS

Chief Scientist, Otolaryngology Head & Neck Surgery

S Vreugde MD PhD

ENT Research Assistants

C Cooksley BSc PhD

M Ramezanpour MSc PhD

D Miljkovic BMedPharmBiotechnology

C Bennett BMSc

Visiting Research Fellow

M Suzuki PhD

Clinical Nurse Operating Theatres

A Nieckarz RN

Secretaries

L Martin (retired October 2017)

A Kreutner AssocDipAcc

SURGERY - VIROLOGY GROUP

Professor

EJ Gowans MAppSci PhD

Research Fellow

B Grubor-Bauk BSc(Hons) PhD

THRF Early Career Research Fellows

A Shrestha PhD

D Wijesundara BSc(Hons) PhD

SURGERY - BREAST CANCER RESEARCH UNIT

Professor

A Evdokiou PhD

Postdoctoral Researcher

I Zinonos PhD

THRF Early Career Research Fellow

V Panagopoulos PhD

SURGERY – VASCULAR SURGERY RESEARCH GROUP

Professor

R Fitridge MBBS MS FRACS

Vascular Fellow

J Dawson MBBS ChM MD MRCS

Principal Medical Scientist

P Cowled BSc(Hons) PhD

Data Manager

R Battersby BSc Grad Cert Drug Dev (UNSW)

SA-PROSTATE CANCER CLINICAL OUTCOMES COLLABORATIVE

Chair

K Moretti MBBS FRACS(Urol)

THERAPEUTICS RESEARCH CENTRE, UNIVERSITY OF SOUTH AUSTRALIA

Professor

MS Roberts BPharm PhD DSc MBA FACP

Centre Manager

L Mackenzie BSc PhD

Postdoctoral Researchers/Research Associates

A Abdalla BPharm PhD

A Alinaghi BPharm PhD

O Chernyavskiy PhD

A Holmes BSc(Hons) PhD

L Sandiford PhD

T Robertson BSc PhD

Technical Officer

K Burns BSc (until 24 March 2017)

**RESEARCH STUDENTS
2017**



RESEARCH STUDENTS 2017



RESEARCHERS IN TRAINING

The Basil Hetzel Institute (BHI) is committed to providing academic training opportunities in research, and this year a total of over 80 students across our campus were being supervised by BHI clinical and science staff affiliated with either The University of Adelaide or the University of South Australia.

Of the 80, we are proud to report that 18 students completed their research higher degrees and were awarded either PhDs or Masters Degrees (Surgery and Medicine). We congratulate them for their aptitude, dedication and particularly for their contribution to knowledge in their chosen field.

The BHI has excellent research facilities at The Queen Elizabeth Hospital campus, providing an ideal environment for undertaking research. The majority of students are colocated with research and technical staff in the Basil Hetzel Institute facility, and with scientific and academic

support to get on with their research projects, as well as ample opportunity to broaden their knowledge and understanding of other areas of research through regular scientific talks and presentations. Opportunities to obtain communication training to better tell their research story to media, lay audiences etc are also available.

Enquiries from new students with clinical (medical/nursing/allied health) and science backgrounds interested in tackling real health and medical issues affecting patients in our hospitals, are always welcome.

L-R Dr Aneta Zysk, Dr Dijana Miljkovic and Dr Katharina Richter after their graduation ceremony at The University of Adelaide

RESEARCH STUDENTS 2017 COMPLETED HIGHER DEGREES

BHI BASED SUPERVISORS ARE UNDERLINED

THE UNIVERSITY OF ADELAIDE DISCIPLINE OF MEDICINE (TQEH)

Cher-Rin CHONG BPharm

A pharmacological approach towards myocardial protection: new perspectives in acute and chronic cardiac disease

Supervisors: Horowitz JD, Sallustio B

Cardiovascular Pathophysiology and Therapeutics Group

The University of Adelaide, PhD awarded 1 June 2017

Michael DJUKIC BHSci(Hons) GradCertBus(Acc) GradCert Sci&TechComm Doctor of Physiotherapy (UMelb)

Proteomic investigations and biomarker discovery in Transient Ischaemic Attack

Supervisors: Chatway T, Lewis M, Hamilton-Bruce A, Koblar S

Stroke Research Programme

The University of Adelaide, PhD awarded 7 July 2017

Zaipul MD DOM BHSc(Hons)

Mycophenolic Acid pharmacokinetics and clinical outcomes in renal transplantation: effect of ABCC2 Haplotype analysis and distribution into lymphocytes and kidney

Supervisors: Sallustio BC, Somogyi AA, Collier JK

Clinical Pharmacology Research Group

The University of Adelaide, PhD awarded 27 January 2017

Victor LAMIN BSc(Hons) MSc MPhil

Molecular mechanisms of sex-differences in vascular reactivity of human internal mammary artery

Supervisors: Beltrame JF, Wilson D

Translational Vascular Function Research Collaborative – Molecular Physiology

The University of Adelaide, PhD awarded 9 June 2017

Zeya KZY MAUNG BSc(Hons)

AML gene discovery project

Supervisors: Gray JX, Bray SC, Arceri CD, D'Andrea R

Haematology and Medical Oncology Department

The University of Adelaide, PhD awarded 20 December 2017

Graeme TUCKER B.MathSc

Supervisors: Adams R, Wilson D, Wittert G

Statistical and methodological aspects of assessment of health-related quality of life

The Health Observatory

The University of Adelaide, PhD awarded 26 May 2017



WMASB WICKRAMASINGHE BSc (Hons)

Ambulatory monitoring using passive RFID Technology

Supervisors: Ranasinghe D, Visvanathan R

Aged and Extended Care Services

The University of Adelaide, PhD awarded 25 January 2017

THE UNIVERSITY OF ADELAIDE DISCIPLINE OF SURGERY (TQEH)

Chun CHAN MBBS

The microbiome of otitis media with effusion and the influence of Alloicoccus otitidis on Haemophilus influenza in polymicrobial biofilm

Supervisors: Wormald PJ, Psaltis A, Vreugde S

ENT Surgery

The University of Adelaide, PhD awarded 30 January 2017

Jason GUMMOW BSc(Hons)

The development of a Multi-Antigenic Cytolytic DNA vaccine against HCV

Supervisors: Gowans EJ, Grubor-Bauk B

Virology Group

The University of Adelaide, PhD awarded 10 February 2017

Dean's Commendation for Doctoral Thesis Excellence

Thanh HA MBBS

Strategies for controlling bleeding and healing during and after sinus surgery

Supervisors: Wormald PJ, Vreugde S

ENT Surgery

The University of Adelaide, PhD awarded 27 March 2017

PhD students **Zenab Dubhwala** (left) and **Clementine Labroschiano** presented their results at the Florey Postgraduate Research Conference, The University of Adelaide.

RESEARCH STUDENTS 2017

COMPLETED HIGHER DEGREES cont.

THE UNIVERSITY OF ADELAIDE DISCIPLINE OF SURGERY (TQEH) cont.

Dijana MILJKOVIC BMedPharmBiotechnology

The role of immune cells in Chronic Rhinosinusitis

Supervisors: Wormald PJ, Vreugde S, Psaltis A

ENT Surgery

The University of Adelaide, PhD awarded 18 April 2017

Dean's Commendation for Doctoral Thesis Excellence

Vasilios (Bill) LIAPIS BAgSc

Targeting cancer in the bone with the hypoxia activated pro-drug Evofosfamide

Supervisors: Evdokiou A, De Nichilo M, Zinonos I

Breast Cancer Research Unit

The University of Adelaide, PhD awarded 3 July 2017

Aneta ZYSK BSc(Hons)

Adoptive transfer of ex vivo expanded Gamma Delta T Cells targeting osteolytic cancer in the bone

Supervisors: Evdokiou A, De Nichilo M

Breast Cancer Research Unit

The University of Adelaide, PhD awarded 18 July 2017

Katharina RICHTER MSc(Pharmacy)

Staphylococcus aureus biofilm molecular ultrastructure and its breakdown upon challenge with antibacterial compounds

Supervisors: Wormald PJ, Vreugde S, Prestidge C

ENT Surgery

The University of Adelaide, PhD awarded 31 July 2017

Dean's Commendation for Doctoral Thesis Excellence

Siti Noor DIN BHLthSc(Hons)

Effect of Ctq null mutation on mammary gland development and breast cancer risk

Supervisors: Ingman W, Robertson S

Breast Biology and Cancer Unit

The University of Adelaide, PhD awarded December 2017

UNIVERSITY OF SOUTH AUSTRALIA – THERAPEUTICS RESEARCH CENTRE

Michael PASTORE BPharm MPharm

Getting through the skin's formidable barrier: understanding the role of solute structure, skin morphology and formulation in skin delivery

Supervisors: Roberts MS, Mackenzie L

Therapeutics Research Centre

University of South Australia PhD awarded 23 February 2017

Vivek NOONEY BPharm

Determinants of clinical response to platelet ADP receptor antagonists

Supervisors: Roberts M, Horowitz JD, Chirkov Y

Therapeutics Research Centre

University of South Australia, PhD awarded 15 June 2017

Ana MACEDO BPharm

Skin deep - understanding the transport within the skin and nail for formulation design

Supervisors: Roberts MS, Mackenzie L, Holmes A

Therapeutics Research Centre

University of South Australia, PhD awarded December 2017



Poster Presenters at TQEH Research Day.

RESEARCH STUDENTS 2017

CONTINUING PHD STUDENTS

THE UNIVERSITY OF ADELAIDE DISCIPLINE OF MEDICINE (TQEH)

Clare MCNALLY MPhil (Dent) GCHP Assoc DDH
Oral Health, General Health and Operative Risk in Hospitalised Older Patients

Supervisors: Adams R, Visvanathan R, Liberali S
Joint The Hospital Research Foundation/Medicine
Postgraduate Scholarship

David DI FIORE MBBS MD FRACP
*Vasospastic Angina: Clinical considerations
in coronary artery spasm*

Supervisors: Beltrame JF, Zeitz C

Abdul SHEIKH MBBS MD FRACP
*Coronary and peripheral haemodynamic studies
of patients with angina and normal coronary arteries*

Supervisors: Beltrame JF, Zeitz C, Rajendran S

Clementine LABROSCIANO BSc BHSc(Hons)
*Adverse patient outcomes following pacemaker and
implanted converter defibrillator implantations in Australia*

Supervisors: Beltrame J, Ranasinghe, Tavella R
The University of Adelaide Faculty of Health and
Medical Sciences Divisional Scholarship

AGED AND EXTENDED CARE SERVICES/ADELAIDE G-TRAC CENTRE

Agathe Daria JADCZAK Dip Sports Science
Exercise in Older People

Supervisors: Visvanathan R, Luscombe N
The University of Adelaide Beacon of Enlightenment
Postgraduate Scholarship

Kareeann Sok Fun KHOW MBBS
Fractures and Outcomes In Older People

Supervisors: Visvanathan R, Yu S
NHMRC (App1133707) Postgraduate Research Scholarship

Anupam Datta GUPTA FAFRM
Lower Limb Spasticity

Supervisors: Visvanathan R, Koblar S, Cameron I

Beatriz MARTINS BMed (University of San Paolo, Brazil)
-specialisation in Geriatric and Internal Medicine

*Physical Activity and Frailty: Exploring Cross-cultural and
Neighbourhood Influences*

Supervisors: Visvanathan R, Barrie H

The University of Adelaide Beacon of Enlightenment/Nagoya
University Joint Postgraduate Postgraduate Scholarship

James SMYTH MBBS MB, BCh, BAO, FACEM, FRCEM, FRCSI,
FFSEM, DCH, BA(Mod)

*Potential roles of assessments of frailty and activities of daily
living for nursing home residents in relation to the transfer to the
hospital emergency department*

Supervisors: Visvanathan R, Arendts G, Grantham H

CARDIOLOGY UNIT

Chucks AJAERO MBBS FMCP FRACP

*Vascular "remodelling" from a physiological and biochemical
point of view as a potential source of variable improvement
post CRT insertion*

Supervisors: Horowitz JD, Arstall M, Chan A, McGavigan A

Vincent GOH MBBS FRACP

*Reverse genesis: does atrial fibrillation perpetuate
dyshomeopathic origins?*

Supervisors: Horowitz JD, Hii J

Hasan IMAM MedBiosc BPharm

*Post-receptor signalling mechanisms and platelet
responsiveness to ADP receptor antagonists*

Supervisors: Horowitz JD, Chirkov Y

The University of Adelaide International Postgraduate
Research Scholarship

Gao ONG MBChB

*The natural history and treatment of Tako-Tsubo
Cardiomyopathy*

Supervisors: Horowitz JD, Chirkov Y

Sven SURIKOW BSc(Hons)

*The role of oxidative and nitrosative stress in the pathogenesis
of Tako-Tsubo Cardiomyopathy-Tsubo Cardiomyopathy*

Supervisors: Horowitz JD, Nguyen TH, Chirkov Y

The University of Adelaide Research Training Program Stipend

RESEARCH STUDENTS 2017

CONTINUING PHD STUDENTS cont.

CLINICAL PHARMACOLOGY UNIT

Rong HU BSc ms

Pharmacogenomics research on tacrolimus and mycophenolate mofetil among patients receiving kidney transplantation

Supervisors: Somogyi AA, Sallustio BC, Collier JK, Daniel TB
The University of Adelaide International Postgraduate Research Scholarship.

ENDOCRINOLOGY UNIT

Sunita DESOUSA MBBS

The role of ARMC5 in non-adrenal tumours

Supervisors: Torpy D, Gagliardi L, Scott H

DEPARTMENT OF HAEMATOLOGY AND MEDICAL ONCOLOGY

Yoko TOMITA MBBS FRACP MSc

Pharmacological Blocking of Aquaporin 1 to Restrict Tumour Angiogenesis and Metastasis in Pre-Clinical Models of Human Colon Cancer

Supervisors: Hardingham J, Price T, Yool A
The University of Adelaide Research Training Program Stipend

NEUROLOGY: STROKE RESEARCH PROGRAMME

Anjali Nagpal MBBS MD FRCA (UK)

TOOTH Stroke Study – Impact analysis of an early phase clinical stem cell study

Supervisors: Koblar S, Hamilton-Bruce A

Joshua WINDERLICH BSc(HealthSc)(Hons)

Investigations into the mechanisms of action of stem cell therapy for stroke

Supervisors: Koblar S, Kremer K

Victor J KRAWCZYK BSocSc(Hum Serv) BA(Hons) GDipArtHist

Human-animal relations in organizations: Identifying discourses for compassionate engagements with animals

Supervisors: Higgins-Desbiolles F, Caluya G, Hamilton-Bruce A, Walton S

Chelsea GRAHAM BSc (Animal Sc)(Hons)

*Developing a Schwann cell line from Tasmanian devil (*Sarcophilus harrisii*) dental pulp stem cells*

Supervisors: Pyecroft SB, Trott D, Hamilton-Bruce A, Kremer KL.
The University of Adelaide Research Training Program Stipend

RESPIRATORY MEDICINE UNIT AND CLINICAL PRACTICE UNIT

Zafir USMANI MBBS FRACP

Treatment of anxiety in patients with Chronic Obstructive Pulmonary Disease

Supervisors: Smith B, Esterman AJ

Zoe KOPSFTIS BMedRadSc(NucMed) BHLthSc(Hons)

A multimodal evidence based clinical guideline for multi-disciplinary use in the management of patients with COPD

Supervisors: Smith B, Phillips P, Carson-Chahhoud K
The University of Adelaide Research Training Program Stipend

RHEUMATOLOGY UNIT

Rachel BLACK MBBS

The epidemiology of glucocorticoid prescribing and ophthalmological side effects in patients with rheumatoid arthritis

Supervisors: Hill C, Dixon WG, Cleland L
The University of Adelaide Research Training Program Stipend

Jem NINAN MBBS

Giant Cell Arteritis - Understanding mechanisms of disease, improving the diagnostic certainty, and optimising management through Fast Track Clinics

Supervisors: Hill C, McNeil J, Bartholomeusz D

Joanna TIEU MBBS

Optimising therapy in ANCA-associated Vasculitis

Supervisors: Hill C, Proudman S, Jayne D (Cambridge), Peh CA
NHMRC Postgraduate Research Scholarship



RESEARCH STUDENTS 2017

CONTINUING PHD STUDENTS cont.

THE UNIVERSITY OF ADELAIDE DISCIPLINE OF PSYCHIATRY (TQEH)

Andrew OLAGUNJU MBBS Psych

Predictors of functional outcome in individuals with Psychosis

Supervisors: Baune B; [Clark S](#)

The University of Adelaide International Scholarship

THE UNIVERSITY OF ADELAIDE DISCIPLINE OF SURGERY (TQEH)

ENT SURGERY

Jae MURPHY MBBS

The mucosal barrier in chronic rhinosinusitis

Supervisors: [Wormald PJ](#), [Vreugde S](#), [Psaltis A](#)

Garnet Passe and Rodney Williams Memorial Foundation Research Scholarship

Mian Li OOI MBBS

The use of chitodex gel as slow-release drug delivery system to improve wound healing after sinus surgery in chronic rhinosinusitis

Supervisors: [Wormald PJ](#), [Psaltis A](#), [Vreugde S](#)

Joint The Hospital Research Foundation/The University of Adelaide Postgraduate Research Scholarship

Ho Yin (Aden) LAU MSc

Autoimmunity in salivary gland and upper airway mucosal surfaces

Supervisors: [Vreugde S](#), [Lester S](#), [Rischmueller M](#)

Joint The Hospital Research Foundation/Rheumatology Unit Postgraduate Research Scholarship

Stephanie FONG MBBS DipChildHlth

Surfactant-based carriers incorporating corticosteroids for the treatment of Chronic Rhinosinusitis

Supervisor: [Wormald PJ](#)

Joint The Hospital Research Foundation/The University of Adelaide Postgraduate Research Scholarship

Sathish PARAMASIVAN MBBS BMedSc(Hons)

Microbe-microbe and microbe-host interactions in Chronic Rhinosinusitis

Supervisors: [Wormald PJ](#), [Vreugde S](#)

The University of Adelaide Research Training Program Stipend

Alistair JUKES MBBS(Hons) B.LibStud(USYD)

Haemorrhage control in skull base surgery

Supervisors: [Wormald PJ](#), [Vreugde S](#)

Lisa CHERIAN MBBS

The effect of topical and oral corticosteroids on the sino nasal microbiome

Supervisors: [Wormald PJ](#), [Vreugde S](#)

The University of Adelaide International Scholarship

Rachel GOGGIN MBBS BMedSc(Hons)

The role of viruses in Chronic Rhinosinusitis

Supervisor: [Wormald PJ](#)

The University of Adelaide Research Training Program Stipend

Beula Subashini PANCHATCHARAM MBBS MD(Microbiology)

Effect of toxins of Staphylococcus aureus on the nasal epithelial barrier in chronic sinusitis

Supervisors: [Wormald PJ](#), [Vreugde S](#)

The University of Adelaide International Scholarship

Giri KRISHNAN MBBS MClinSc

Evaluating the accuracy of lymphotropic iron tracers for sentinel lymph node mapping in an orthotopic VX2 rabbit head and neck cancer model

Supervisors: [Wormald PJ](#), [Foreman A](#)

The University of Adelaide Faculty of Health and Medical Sciences Divisional Scholarship

VIROLOGY GROUP

Makutiro MASAVULI BSc(Hons)

DNA vaccines to induce neutralising antibody to HCV

Supervisors: [Gowans EJ](#), [Grubor-Bauk B](#), [Wijesundara D](#)

The University of Adelaide Faculty of Health and Medical Sciences Divisional Scholarship

Zelalem MEKONNEN BSc(Hons)

A novel large animal challenge for HCV

Supervisors: [Gowans EJ](#), [Grubor-Bauk B](#), [Wijesundara D](#)

The University of Adelaide International Scholarship

RESEARCH STUDENTS 2017

CONTINUING PHD STUDENTS cont.

BREAST CANCER RESEARCH UNIT

Christopher DIFELICE BSc (Hons)

Fibrosis, cancer and the pre-metastatic niche: implications for peroxidases

Supervisors: Evdokiou A, De Nichilo M, Zinonos I

The University of Adelaide Research Training Program Stipend

Alexandra SHOUBRIDGE BSc(Hons)

The role of peroxidase enzymes during bone repair and regeneration

Supervisors: Evdokiou A, De Nichilo M, Anderson P

The University of Adelaide Research Training Program Stipend

Namfon (Bee) PANTARAT BSc(Biology) MSc(Biotech)

Hydrogel-based delivery of cancer fighting T cells for the localised treatment of completely resected or inoperable tumours

Supervisors: Evdokiou A, Zinonos I, Hauben E

The University of Adelaide Discipline of Surgery Scholarship

SOLID CANCER REGULATION GROUP

Helen M PALETHORPE BMedPharmSci(Hons) BLabMed
DipBiomedSci

The regulation of tumour cell behaviour by cancer associated fibroblasts

Supervisors: Drew P, Smith E

The University of Adelaide Faculty of Health and Medical Sciences Divisional Scholarship

Jannatul (Tuli) FERDOUSH BSc MSc

Characterisation of human cancers by molecular imaging mass spectrometry

Supervisors: Drew P, Gustafsson J

The University of Adelaide Research Training Program Stipend

BREAST BIOLOGY AND CANCER UNIT

Madison ARCHER BSc(Biomedical science) BHSc(Hons)

Immune modulation of breast density and cancer risk

Supervisors: Ingman W, Evdokiou A, Dasari P

The University of Adelaide Research Training Program Stipend

Vahid ATASHGARAN BSc(Medical Bioscience)
MBiotech(Biomedical)

Hormonal regulation of immune microenvironment in the breast: implications for breast cancer susceptibility

Supervisors: Ingman W, Dasari P, Barry S

Adelaide Graduate Research Scholarship

Sarah BERNHARDT BSc(Biomedical) BHSc(Hons)

Hormonal modulation of prognostic and predictive biomarkers in premenopausal breast cancer

Supervisors: Ingman W

The University of Adelaide Research Training Program Stipend

Amita GHADGE Integrated BSc MSc

Biological determinants of breast density

Supervisors: Ingman W, Dasari P

The University of Adelaide International Wildcard Scholarship

Joe WRIN BSc

The role of Ctg and macrophages in breast carcinogenesis and cancer progression

Supervisor: Ingman W

The University of Adelaide Research Training Program Stipend

GASTROENTEROLOGY & HEPATOLOGY UNIT, TQEH

Sam COSTELLO MBBS FRACP

The role of faecal transplantation in the treatment of ulcerative colitis

Supervisors: Roberts-Thomson I, Hughes P, Conlon M, Andrews J

Zenab DUDHWALA BHSc(Hons)

Promotion of intestinal adaptation by induction of crypt fission through the Wnt-b-catenin pathway

Supervisors: Cummins A, Howarth G, Gibson R

The University of Adelaide Research Training Program Stipend

SURGERY

Joseph SMITH PhD

Surgery, ethics and climate change

Supervisors: Maddern G, Hewett P

Royal Australasian College of Surgeons Foundation for Surgery in Surgical Ethics Scholarship

RESEARCH STUDENTS 2017

CONTINUING PHD STUDENTS *cont.*



UNIVERSITY OF SOUTH AUSTRALIA - THERAPEUTICS RESEARCH CENTRE

Lemlem GEBREMICHAEL MSc (Pharmacology)

Pharmacokinetics of drugs and drug response in at risk patients

Supervisors: Roberts MS, Mackenzie L

University of South Australia Postgraduate Research
Scholarship

Shuping QIANG BSc

*Quantification, pharmacokinetics and efficacy of drug poisoning
treatment*

Supervisors: Roberts M, Mackenzie L

University of South Australia President's Scholarship

Muhammad Suleman KHAN MMedBiol(Sweden) MPhil(Clinical
Epidemiology) Australia

*Optimising therapies in vulnerable patients- a pharmacokinetic
approach*

Supervisors: Roberts M, Mackenzie L

University of Queensland Postgraduate Research Scholarship

Hanumanth Srikanth CHERUVU BPharm MPharm
(Pharmaceutics)

*Improving drug delivery and safety using Quality by Design
principles*

Supervisors: Roberts M, Mackenzie L

Joint The Hospital Research Foundation/University of South
Australia Postgraduate Research Scholarship

L-R: Senior PhD students who presented at TQEH Research Day,
Vahid Atashgaran, **Maddison Archer**, **Christopher DiFelice** and
Ade Lau.

RESEARCH STUDENTS 2017

CONTINUING MASTERS STUDENTS

THE UNIVERSITY OF ADELAIDE DISCIPLINE OF MEDICINE (TQEH)

Sally AHIP M.Med MBBS

The Malaysian Pictorial Fit-Frail Scale (M-PFFS): Development and testing of feasibility, validity and reliability in Malaysia

Supervisors: Visvanathan R, Theou O

Master of Philosophy (Medicine)

Government of Malaysia Scholarship

Kathy LAWTON BAN

Management of Bronchiectasis: a tertiary healthcare perspective

Supervisors: Smith B, Veale A, Carson-Chahhoud K

Master of Philosophy (Medicine)

Usman MUSHTAQ MBBS FRACP

Pathophysiology of changes in calcium homeostasis and testosterone levels and its impact on regulation of bone mineral density following bariatric surgery

Supervisors: Wittert G, Jesudason D

Masters of Philosophy (Medicine)

Freemason's Centre for Men's Health Scholarship/THRF Scholarship

Karen ROYALS RN

Outreach respiratory nursing in the management of Chronic Obstructive Pulmonary Disease (COPD)

Supervisors: Smith B, Veale A, Carson-Chahhoud K

Masters of Philosophy (Medicine)

Ruth TEH BPharm (Hon) MBBS

A health information tool to prevent falls

Supervisors: Visvanathan R, Wilson A, Mahajan N

Masters of Philosophy (Medicine)

Mark THOMPSON BAppliedSc (Occupational Therapy)
M Pub Health

The influence of frailty on four years mortality, disability and quality of life in community dwelling older South Australians

Supervisors: Visvanathan R, Yu S

Masters of Philosophy (Medicine)

THE UNIVERSITY OF ADELAIDE DISCIPLINE OF SURGERY (TQEH)

Justin CHAN MBBS, FRACS

Morbidity and Mortality in Australian cardiothoracic surgery

Supervisors: Maddern G, Worthington M

Master of Philosophy (Surgery)

Tom ELDREDGE MBBS

Diagnosing Bile reflux

Supervisors: Kiroff G, Shenfine J

Master of Philosophy (Surgery)

Hannah GOSTLOW MBBS

Development of a simulated laparoscopic short course that can be delivered in a Mobile Simulation Unit to both rural and metropolitan surgical trainees

Supervisors: Maddern G, Babidge W

Master of Philosophy (Surgery)

Royal Australasian College of Surgeons scholarship (to end January 2017)

Annika MASCARENHAS MBBS

An endoscopic bovine model of small vessel intracranial arterial haemorrhage control

Supervisors: Wormald PJ, Psaltis A

Master of Philosophy (Surgery)

The University of Adelaide Faculty of Health and Medical Sciences Postgraduate Research Scholarship

Jaewook OH MBBS

Effect and biocompatibility of human recombinant Lubricin on the formation of adhesions in rats

Supervisors: Maddern G, Tiong L

Master of Philosophy (Surgery)

Sakiko OUE MBBS

Neo-osteogenesis in chronic rhinosinusitis

Supervisors: Wormald PJ, Psaltis A, Vreugde S

Master of Philosophy (Surgery)

RESEARCH STUDENTS 2017

CONTINUING MASTERS STUDENTS cont.

Panos PANAYIOTOU BSc(Hons equiv.)

Injectable Fibrin as a biocompatible polymer scaffold that propagates T cell-mediated cytotoxicity to Cancer

Supervisors: Evdokiou A, Zinonos I, Panagopoulos B

Master of Philosophy (Surgery)

The University of Adelaide International Wildcard Scholarship

Guilherme PENA MD Basic Surgical training degree (Federal University of Minas Gerais, Brazil)

Predicting outcomes in patients with diabetic foot ulcers

Supervisors: Fitridge R, Cowled P, Dawson J

Master of Philosophy (Surgery)

Richard SMITH FRACS

Optimising post-operative radiotherapy for retroperitoneal sarcoma

Supervisors: Maddern G, Neuhaus S

Master of Philosophy (Surgery)

Claire STEVENS MBBS, FRACS

Trends and variability in Hepatobiliary Surgery in Australia

Supervisors: Maddern G, Trochsler M

Master of Philosophy (Surgery)

HONOURS STUDENTS

Kyle BREWER BSc

Injectable thermoresponsive Hydrogels for adaptive cell therapies

Supervisors: Blencowe A, Evdokiou A

Breast Cancer Research Unit

The Hospital Research Foundation Honours Scholarship

Awarded: BSc(Hons) First class

Dongqin (Kelly) CHEN BChem and Pharm Eng

Early Detection of Chemotherapy-Induced Cardiomyopathy

Supervisors: Horowitz J, Liu S

Cardiovascular Pathophysiology and Therapeutics Group

Honours in BHealthSc 2017-2018 (mid-year commencement)

Sean MANGION BHealthSc(Advanced)

The role of formulation in the effective delivery of solutes for various skin conditions

Supervisors: Holmes A, Mackenzie L

Therapeutics Research Centre

The Hospital Research Foundation Honours Scholarship

Awarded: BBiomed Research (Hons) First class

The University of Adelaide Postgraduate Coordinators for 2018 based at the Basil Hetzel Institute:

Dr Prue Cowled

Surgery

► prue.cowled@adelaide.edu.au

Associate Professor Betty Sallustio

Medicine

► benedetta.sallustio@sa.gov.au or

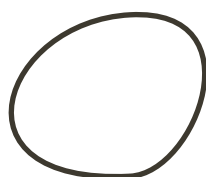
► benedetta.sallustio@adelaide.edu.au

University of South Australia Postgraduate Coordinator for 2018:

Associate Professor Craig Williams

Associate Head/Research/Research Degrees Coordinator,
School of Pharmacy and Medical Sciences

► craig.williams@unisa.edu.au



GRANTS 2017

NHMRC grants 2017

Other peer reviewed grants 2017
(excluding NHMRC and THRF)

The Hospital Research Foundation
grants 2017

Non-peer reviewed externally
funded grants 2017

Peer reviewed grants
commencing in 2018

NON-PEER
\$979,393

THRF
\$2,870,533

**OTHER PEER
REVIEWED**
\$3,892,358

NHMRC
\$6,053,149

NHMRC GRANTS

\$6,053,149

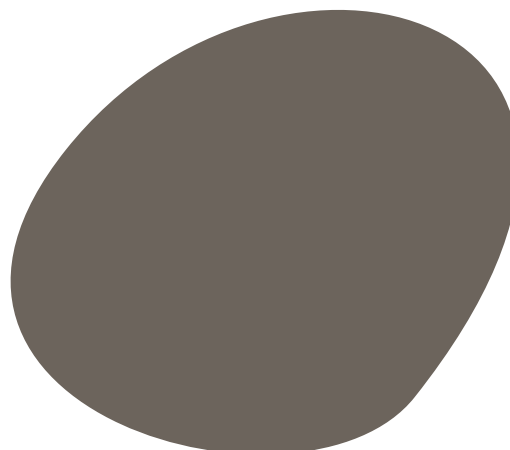
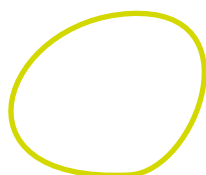
BHI BASED RESEARCHERS ARE IN **BOLD**

GRANT RECIPIENTS	GRANTING BODY FUNDING PERIOD	PROJECT TITLE	REVENUE 2017 TYPE OF GRANT	TOTAL GRANT FUNDING
Lang CL	NHMRC 399221 2012-17	The role of zinc in the respiratory system and in Chronic Obstructive Pulmonary Disease	39,673 Early Career Fellowship	238,038
Sverdllov A	NHMRC 1037603 2012-17	Lipotoxicity, mitochondrial dysfunction and the pathogenesis of heart failure	34,903 CJ Martin Biomedical Fellowship	364,884
Buckley N, Isbister G, Dawson A, Roberts M	NHMRC 1055176 2014-18	An integrated research program in human toxicology to ensure rapid translation of results into practice and regulation	310,269 Program	6,846,800
Ridding MC, Rothwell JC, Koblar S , Ward N, McDonnell M	NHMRC 1058639 2014-17	Characterising post-stroke cortical plasticity in humans - identifying a critical window for rehabilitation	183,195 Project	735,660
Beltrame JF, Zeitz CJ, Tavella R , Worthley MI	NHMRC 1062331 Sept 2013-31 August 2017	The ACCESS Project - Assessment of Coronary Artery disease using CT Effectively for Stable Symptoms	95,386 Partnership	1,564,165
Chapman M, Peake SL , Dean A, O'Connor	NHMRC 1078026 2015-19	The Augmented versus Routine approach to Giving Energy Trial (TARGET)	707,847 Project	3,534,236
Stevenson A, Solomon M, Hewett P , Lumley J, Fleshman J, Clouston A, Hague W	NHMRC 1078113 2015-19	A La CaRT: Australasian Laparoscopic Cancer of the Rectum Trial. A phase III prospective randomised trial comparing laparoscopic-assisted resection versus open resection for rectal cancer	108,846 Project	573,259
Visvanathan R , Hill K, Ranasinghe D, Lange K, Wilson A	NHMRC 1082197 2015-17	Effectiveness of an Ambient Intelligence Geriatric Management system to prevent falls in older people in hospitals: a clinical trial	276,102 Project	1,609,305
Khow K	NHMRC 1133707 2017-18	Fragility fractures and outcomes in older people	43,366 Postgraduate Research Scholarship	86,733
Andrews J, Hughes P, Conlon M, Roberts-Thompson I , Costello S	NHMRC 1085080 2015-17	Faecal microbiota transplant for ulcerative colitis: A randomised controlled trial	200,000 Project	695,895
Holliday E, Attia J, Thijs V, Koblar S , Sturm J, Maguire J, Lincz L	NHMRC 1085550 2015-18	Helping stroke physicians choose who to thrombolysse – the “Targeting Optimal Thrombolysis Outcomes” (TOTO) study	257,917 Project	1,031,670
Carson KV	NHMRC 1092680 and Cancer Australia (cofunded) 2015-17	Translating Research into Practice Fellowship	14,414 TRIP Fellowship	272,911
Hodge S, Zalewski P , Roscioli E	NHMRC 1099040 2016-18	Exploiting increased autophagy in bronchial epithelial cells: a new therapeutic approach for chronic obstructive pulmonary disease (COPD)	241,387 Project	724,161
Roberts JA, Lipman J, Peake S , Turnidge J, Slavin M, Hopkins P, Bulitta J, Paul S, De Waele J, Joynt G	NHMRC 1099452 2016-20	Centre for REdefining antibiotic use to reDUce resistancE and prolong the lives of antibiotics (REDUCE)	431,659 Centres of Research Excellence - Clinical	2,158,296
Visvanathan R , Karnon J, Kitson A, Beilby J, Cameron I, Chehade M, Bell S, Feist H	NHMRC 1102208 2016-20	Frailty Trans-Disciplinary Research To Achieve Healthy Ageing	449,861 Centres of Research Excellence - Health Services	2,301,169

NHMRC GRANTS cont.

\$6,053,149

GRANT RECIPIENTS	GRANTING BODY FUNDING PERIOD	PROJECT TITLE	REVENUE 2017 TYPE OF GRANT	TOTAL GRANT FUNDING
Jones G, Wluka A, Hill CL , March L, Keen H, Laslett L	NHMRC 1102732 2016-18	A randomised trial of krill oil for osteoarthritis of the knee	250,497 Project	751,491
Roberts M	NHMRC 1107356 2016-20	Research Fellowship	170,396 Research Fellowship	851,980
Smith B, Veale A, Carson KV , Esterman A, Peters M, Gould G	NHMRC 1108309 2016-18	Training health professionals in tobacco cessation and evidence translation for Aboriginal Australians	255,914 Project	823,732
Adams R , McEvoy D, Antic N, Appleton S , Wittert G, Catcheside P, Vakulin A, Vincent A, Taylor A	NHMRC 1122342 2017-19	Health impacts of sleep apnea in Australian men- a longitudinal population study	104,019 Project	312,056
Teichtahl A et al, inc Hill C	NHMRC 1127981 2017-19	METHODS - A randomised controlled trial of METHotrexate to treat Hand Osteoarthritis with Synovitis	256,671 Project	770,014
Ritchie R, Horowitz J , Kemp-Harper B, Du XJ, Chirkov Y	NHMRC 1120895 2017-19	Therapeutic Approaches to Circumvent NO• Resistance in the Type 2 Diabetic Heart and Vasculature	187,779 Project	563,337
Lipman J, Peake S et al	NHMRC 1121481 2017-21	BLING III: A phase III randomised controlled trial of continuous beta-lactam infusion compared with intermittent beta-lactam dosing in critically ill patients	653,989 Project	3,269,943
B Bonevski B, Gould GS, Clough A, Mattes J, Carson K , Doran C, O'Mara P, Oldmeadow C, Smith R, Boydell K	NHMRC GACD 1116084 2017-19	Indigenous Counselling and Nicotine (ICAN) QUIT in Pregnancy: a cluster randomised trial to implement culturally competent evidence- based smoking cessation for Aboriginal and Torres Strait Islander pregnant smokers	779,732 Project	2,339,196



PEER REVIEWED GRANTS (EXCLUDING NHMRC AND THRF)

\$3,892,358

GRANT RECIPIENTS	GRANTING BODY FUNDING PERIOD	PROJECT TITLE	REVENUE 2017 TYPE OF GRANT	TOTAL GRANT FUNDING
Kopsaftis Z, Carson KV, Van Agteren J, Smith BJ	ANZSOG 2016-17	Smoking cessation policies for hospitalised smokers	5,000 Policy	10,000
Rao Kadam V, Van Wijk R, Moran J, Williams P, Thiruvengkatarajan V	ANZCA Trials Group 2017-19	Comparison of Trans-muscular Quadratus Lumborum (TQL) block catheter technique with surgical pre-peritoneal catheter for postoperative analgesia in abdominal surgery	14,000 Novice Grant	14,000
Beltrame J, Zeitz C, Worthley M, Arstall M, Tavella R	Astra Zeneca: ESR-14- 10465 2016-17	Ticagrelor In Coronary microvascular dysfunction (TIC) Program: Anti-anginal Efficacy in Primary Coronary Microvascular Disorders	150,000 Project	300,000
Hill CL, Ruediger C	Arthritis Australia/THRF 2017	A randomised clinical trial of colchicine in inflammatory hand osteoarthritis	50,000 Project	50,000
Gowans EJ, Grubor- Bauk B, Wijesundara D	Australian Centre for HIV and Hepatitis Virology 2016-17	A multigenotypic HCV DNA vaccine	85,000 Project	85,000
Yool A, Heng S, Hardingham J	Australian Research Council DP160104641 2016-18	Properties enabling rapid cell migration by Aquaporin-1 channel expression	116,650 Discovery	350,000
Haydon A, Segelov E, Zalcborg J, Simes J, Walpole E, Yip D, Price T, Jefford M	Cancer Australia 1086013 2015-17	SCOT - Short Course Oncology Therapy - A study of adjuvant chemotherapy in colorectal cancer	20,195 Project	90,253
Carson K, Bedson D, Van Agteren J, Williamson L, Veale A, Smith B	Fay Fuller Foundation 2016-17	Investigation into the causative factors contributing to the high incidence of asthma hospitalisation and mortality in South Australia, compared to other states and territories	138,436 Partnership	276,872
Foreman A, Evdokiou A	Garnett Passe and Rodney Williams Memorial Foundation 2016-18	Tumour-associated microbiota and its role in oral cavity cancer carcinogenesis	125,000 Conjoint	375,000
Psaltis A, Vreugde S	Garnett Passe and Rodney Williams Memorial Foundation 2015-17	The effect of corticosteroid therapy on the host immune response and microbiome profile in Chronic Rhinosinusitis (CRS)	125,000 Project	375,000
Mackay M, Adams R, Bean N	Government, SA 2015-18	The Promulgation of Operational Research, Systems Thinking and Design Thinking within the Australian Health Care Sector	80,000 Premier's International Research Fund	400,000
Wesselingh S, Visvanathan R, Whitehead C, Russell P, Daniel M, Roder D, Stanley A, Griffith L, Karnon J, Miller C, Phillips P, Denson L, Ward L, Gill T, Ratcliffe J, Walters J, Kerrins E	Government, SA 2017-20	Measuring and Intervening for Healthy Ageing In South Australia - R Visvanathan component: Frailty In Residential Sector Over Time (FIRST) Study	600,000 Premier's Research and Industry Fund Research Consortia Program	4,000,000

PEER REVIEWED GRANTS (EXCLUDING NHMRC AND THRF) cont.

\$3,892,358

GRANT RECIPIENTS	GRANTING BODY FUNDING PERIOD	PROJECT TITLE	REVENUE 2017 TYPE OF GRANT	TOTAL GRANT FUNDING
Ranasinghe I, Beltrame J, Tavella R, Zeitz C, Mazumdar S, Cooper B	HCF Research Foundation IRUA2015149 2016-17	Reducing Unwarranted Variation in Early Complications After Cardiac Pacemaker and Defibrillator Implantation among Australian Hospitals	125,000 Project	250,000
C Pham, J Karnon, C Gibb, Fitridge R, Maddern G	Health Sciences Charitable Gifts Board 2015-17	Predicting 12 month mortality risk in elderly patients after elective surgery	84,000 Project	252,000
Adams R, Appleton SL, McEvoy RD, Beltrame J	Heart Foundation 2017	Cardiovascular impacts of obstructive sleep apnea in men	75,000 Vanguard	75,000
Tavella R, Beltrame JF, Zeitz C, Ranasinghe I	Heart Foundation 2017	EVALuation of Appropriate Use of Elective Percutaneous Coronary Intervention – Value of PCI	75,000 Vanguard	75,000
Ranasinghe I	Heart Foundation (101186) 2017-20	Leveraging Big Data to Inform Cardiovascular Healthcare Outcomes	130,000 Future Leader Fellowship	520,000
Tavella R	Heart Foundation (Tom Simpson Trust Fund) 2017	Coronary Angiogram Database of South Australia (CADOSA) Biobank	14,030 Equipment	14,030
Clark SR, Schubert KO, Watson D, Baune BT	Lundbeck Institute 2016-18	Trajectories of response to Aripiprazole Maintena (TRAMS)	46,667 Investigator Initiated	140,000
Gowans EJ, Grubor-Bauk B, Wijesundara D	National Foundation for Medical Research and Innovation 2016-18	A DNA vaccine for Zika virus	73,250 Project	293,000
Kremer K, Kaidonis X, Koblar S	National Stroke Foundation 2016-17	Preclinical investigations towards the TOOTH Clinical Stroke Trial	9,950 Small Project	19,900
Gould G, Bonevski B, O'Mara P, Clarke M, Oldmeadow C, Clough A, Carson KV , Reath J, Bar Zeev U	NSW Minister of Health 2016-18	The Indigenous Counselling and Nicotine (ICAN) QUIT in Pregnancy: a Cluster Randomised Control Trial to Improve Strategies for the Management of Smoking Cessation in Pregnant Aboriginal and/or Torres Strait Islander Women	50,000 Project	150,000
Marlow N, Maddern G	Royal Australasian College of Surgeons James Ramsay Foundation 2016-17	Laparoscopic simulations skills program	180,000 Project	320,000
Jones KL, Horowitz M, Rayner CK, Soenen S, Visvanathan R	RAH Research Foundation 2017	Management of post-prandial hypotension (PPH) is suboptimal and there is a need for new and effective therapy	57,205 Near Miss	57,205
Koblar SA, Choy FC, Hamilton-Bruce MA, Kremer KL, Milton AG	Rebecca L. Cooper Medical Research Foundation Ltd 2017	Npas4, a promising target to repair brain injury after stroke	25,000 Equipment	25,000
Moretti K	SAHMRI/Beat Cancer/ The Hospital Research Foundation 2017	SA-PCCOC - Consumer Website	37,480 Project	37,480

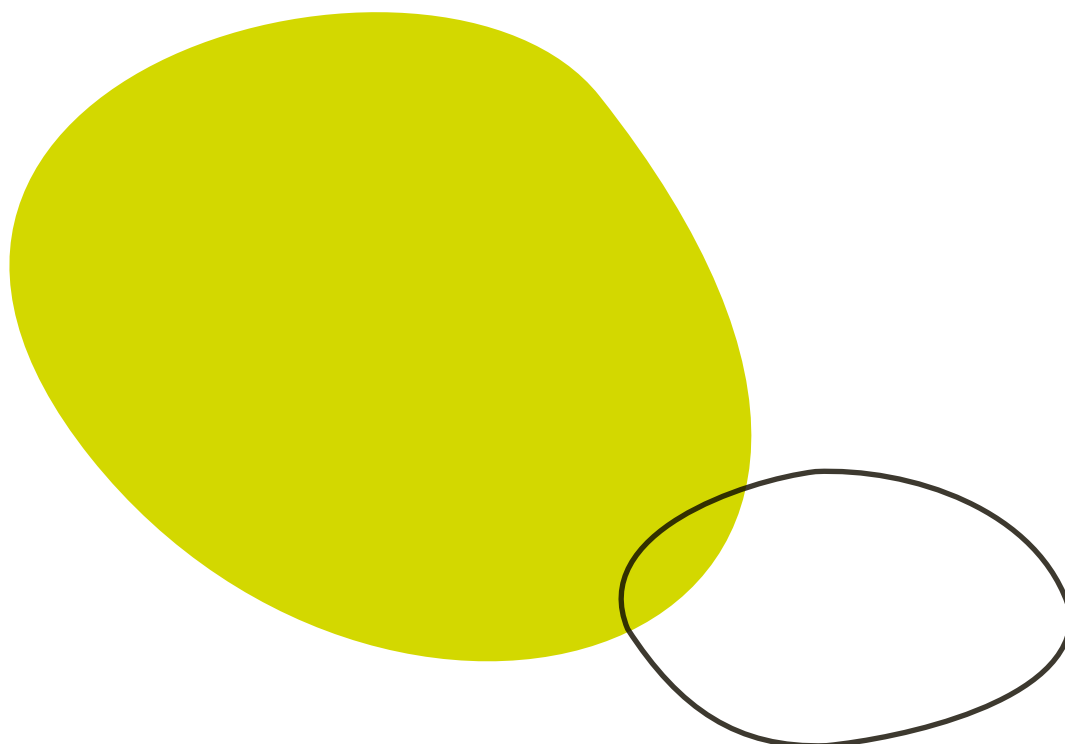
PEER REVIEWED GRANTS (EXCLUDING NHMRC AND THRF) cont.

\$3,892,358

GRANT RECIPIENTS	GRANTING BODY FUNDING PERIOD	PROJECT TITLE	REVENUE 2017 TYPE OF GRANT	TOTAL GRANT FUNDING
Maddern G, Price T, Young J, Hewett P, Hardingham J, Worthley D, White D, Mulligan D	SAHMRI/Beat Cancer/ The Hospital Research Foundation 2014-19 financial years	Individualised Risk Assessment and Therapeutic Intervention for Colorectal Cancer in the South Australian Population	150,000 Project	750,000
Graham C	Sir Mark Mitchell Foundation Research Grant 2017	Developing a Schwann cell line from Tasmanian Devil (<i>Sarcophilus harrisii</i>) dental pulp stem cells	10,000 PhD Support Grant	10,000
Nann T, Voelcker NH, Roberts M	South Australian Collaboration Pathways Program 2014-17	Nanotechnology based delivery and response systems	99,333 Program	600,000
Ahip SS, Visvanathan R, Shariff S, Theou O	The Ministry of Health Malaysia 2017-19	The Malaysian Pictorial Fit-Frail Scale (M-PFFS): Development and Testing of Feasibility, Validity and Reliability in Malaysia	83,500 (AUD) National Institutes of Health Research Grant (MTG)	282,400 MYR
Beltrame JF	The University of Adelaide 2017-18	The anti-anginal benefits of Zibotentan in the Coronary Slow Flow Phenomenon (CSFP)	7,000 Commercial Accelerator Scheme (CAS) Project	87,000
Somogyi AA, Sallustio BC, Collier JK, Hutchinson M, Barratt D	The University of Adelaide 2017	Ultra high performance liquid chromatography – tandem mass spectrometer	302,000 Pharmacology Equipment Round	302,000
Khan S, Roberts M	Translational Australian Clinical Toxicology Program 2017	Minimising treatment related toxicities in vulnerable patients using a pharmacokinetic based approach	18,000 Project - pilot	18,000
Mackenzie L, Burns K, Abdalla A, Roberts M	Translational Australian Clinical Toxicology Program 2017	Optimising sample preparation for analysis for Toxicokinetic and Toxicodynamic assessment, storage and tracking following Poison Exposure	10,000 Project - pilot	10,000
Zalewski P, Hodge S, Beltrame J, Murgia C, Tavella R	The University of Adelaide 2017	Endothelial Zinc Deficiency As A Previously Unrecognized Factor Linked To Cardiovascular Disease Risk Factors	9,992 Investment for success NHMRC Near-Miss grant	9,992
Wormald PJ	The University of Adelaide 2017	The microbiome in chronic rhinosinusitis	10,000 Investment for success NHMRC Near-Miss grant	10,000
Sverdllov A	The University of Adelaide 2017	Are mitochondrial reactive oxygen species key mediators of metabolic syndrome-induced heart disease?	10,000 Start up	10,000
Maddern G	The University of Adelaide FHMS 2017	High Speed centrifuge for BHI - co contribution from THRF (\$15,500)	33,000 Faculty of Health and Medical Sciences Research Infrastructure Award	33,000

PEER REVIEWED GRANTS (EXCLUDING NHMRC AND THRF) cont.
\$3,892,358

GRANT RECIPIENTS	GRANTING BODY FUNDING PERIOD	PROJECT TITLE	REVENUE 2017 TYPE OF GRANT	TOTAL GRANT FUNDING
Ranasinghe I	The University of Adelaide Interdisciplinary Research Funding Scheme 2016-17	Novel Applications of Machine Learning in Healthcare	12,500 Project	25,000
Koblar SA, Choy FC, Hamilton-Bruce MA, Kremer KL, Milton AG	The University of Adelaide Medical School 2017	The potential of Npas4 to enhance brain repair following ischaemic stroke	10,000 Investment for Success NHMRC Near-Miss Grant	10,000
Roberts M	University of South Australia 2017	Vivascope upgrade (co-contribution of \$20,000 from THRF)	32,000 Sansom Institute Equipment grant	32,000
Roberts M	US Food and Drug Administration 2014-19	Characterisation of critical quality attributes for semisolid topical drug products	314,447 (AUD) Project	1,499,500 USD
Roberts M	US Food and Drug Administration 2014-17	Physiologically based biopharmaceutics and pharmacokinetics of drug products for dermal absorption in humans	251,223 (AUD) Project	600,000 USD
Fitridge R, Miller M, Delaney C	Vascular Foundation 2017	Outcomes in diabetic foot ulcers	37,500 Project	37,500



THE HOSPITAL RESEARCH FOUNDATION

\$2,870,533



BHI BASED RESEARCHERS ARE IN **BOLD**

GRANT RECIPIENTS	GRANTING BODY FUNDING PERIOD	PROJECT TITLE	REVENUE 2017 TYPE OF GRANT
Beltrame J, Zeitz C, Lindahl B	The Hospital Research Foundation 2017-18	Potential mechanisms and treatment of post-infarct Angina in patients with Myocardial Infarction with Non Obstructive Coronary Arteries (MINOCA)	375,000 Translational
Wormald PJ, Vreugde S, Prestige C	The Hospital Research Foundation 2017-18	A novel formulation to prevent epidural adhesions post- laminectomy	50,000 Development
Gowans E, Wijesundara D, Maddern G	The Hospital Research Foundation 2017-18	The protective efficacy of cytolytic DNA vaccine for HCV in marmosets: a step forward towards human clinical trials	50,000 Development
Evdokiou A	The Hospital Research Foundation 2011-19	Michell McGrath Breast Cancer Research Fellowship	250,000 Fellowship
Ingman W	The Hospital Research Foundation 2011-19	THRF Breast Cancer Research Fellowship	200,000 Associate Professor in Breast Cancer Research Fellowship
Taylor D	The Hospital Research Foundation 2017-20	Inequalities in neighborhood Accessibility: Implications for Frailty and Healthy Ageing	70,000 Mid Career Fellowship
Ngo D	The Hospital Research Foundation 2015-17	Modulation of the anti-angiogenic VEGF-A165b in adipose tissue: novel approach to combat obesity	120,000 Mid Career Fellowship
Wijesundara D	The Hospital Research Foundation 2015-18	Exploiting cytolytic adjuvants and novel recombinant viral cvaccines as a way forward for HIV-1 and HCV vaccine design	120,000 Early Career Researcher
Panagopoulos V	The Hospital Research Foundation 2017-19	Targeted inhibition of inflammatory peroxidases, a new therapeutic strategy against breast cancer and metastatic disease	60,000 Early Career Researcher
Shrestha A	The Hospital Research Foundation 2017-19	The development of novel cytolytic DNA vaccine which elicits cellular immunity to conserved viral proteins	60,000 Early Career Researcher
Ranasinghe I	The Hospital Research Foundation 2016-17	Reducing unwanted variation in early complications after cardiac pacemaker and defibrillator implantation among Australian hospitals	50,000 Mid Career Fellowship
Visvanathan R	The Hospital Research Foundation 2016-20	Frailty to achieve healthy ageing	125,000 Challenge funding
Evdokiou A	THRF/UAFHMS 2017-20	New Immunotherapeutic approaches targeting incompletely resected or inoperable tumours	42,500 Elcombe Fellowship
Townsend A, Hardingham J, Tomita Y, Yool A, Price T, Evdokiou A	The Hospital Research Foundation 2017-20	Preclinical investigation of the efficacy of novel aquaporin 1 inhibitors in preventing growth and metastasis of breast cancer	85,000 ABCR Elcombe Preclinical Project
Maddern G, Price T, Young J, Hewett P, Hardingham J, Worthley D, White D, Mulligan D	SAHMRI/Beat Cancer/ The Hospital Research Foundation 2016-19	Individualised Risk Assessment and Therapeutic Intervention for Colorectal Cancer in the South Australian Population	54,225 Project
Moretti K	SAHMRI/Beat Cancer/ The Hospital Research Foundation 2016-2017	SA - PCCOC - Data Collection Automation Project	55,126 Project

GRANT RECIPIENTS	GRANTING BODY FUNDING PERIOD	PROJECT TITLE	REVENUE 2017 TYPE OF GRANT
Gowans E	The Hospital Research Foundation 2017	A DNA vaccine to induce protective neutralizing antibodies to the HIV Tat	80,000 Project
Maddern G	The Hospital Research Foundation 2017	The nexus between visceral adiposity, associated liver composition, and metastatic progression in colorectal cancer patients	75,000 Near Miss Project
Wormald PJ	The Hospital Research Foundation 2017	Preclinical development of a novel formulation to prevent adhesions post-abdominal surgery	75,000 Near Miss Project
Hill CL	The Hospital Research Foundation 2017-20	The Australian Arthritis and Autoimmune Biobank Collaborative (A3BC)	38,853 Project
Mackay M, Adams R, Bean N, Varley J	The Hospital Research Foundation 2017-18	Identification of causes of access block for short stay and long-term patients at TQEH, and use of simulation to formulate wait-reduction strategies.	62,500 Project
Hauben E, Voelcker N, Maddern G	The Hospital Research Foundation 2017-18	Development of targeted nanoparticles as preventative therapy for liver metastasis	62,500 Project
Ingman W	The Hospital Research Foundation 2017-18	Breaking immune tolerance in triple negative breast cancer	62,500 Project
Evdokiou A	The Hospital Research Foundation 2017-18	Localised treatment of solid tumours with cytotoxic γδ T cells	62,500 Project
Visvanathan R, Martins B	The Hospital Research Foundation 2017	InBody 570 Body Composition Analyser	27,665 Equipment
Maddern G	The Hospital Research Foundation/The University of Adelaide 2017	High Speed centrifuge for BHI - co contribution (\$33,000) from The University of Adelaide	15,500 Equipment
Costello S	The Hospital Research Foundation 2017	Anaerobic Chamber	41,475 Equipment
Roberts MS	The Hospital Research Foundation 2017	Upgrade of Vivascope 2500	20,000 Equipment
Wijesundara D	The Hospital Research Foundation 2017	FlowJo software	7,381 Equipment
Various	The Hospital Research Foundation 2017	Honours projects	9,000 Strategic Research Directions
Various	The Hospital Research Foundation 2017	Postgraduate Research Scholarships	75,381 Strategic Research Directions
BHI	The Hospital Research Foundation 2017	Infrastructure support	250,000 Strategic Research Directions
BHI	The Hospital Research Foundation 2017	Career and research skills training support for Postgraduate students (attendance at workshops, conference dinners, posters, conference travel awards, TQEH Research Day)	38,447 Strategic Research Directions

NON-PEER REVIEWED EXTERNALLY FUNDED GRANTS 2017

\$979,393

CHIEF INVESTIGATOR	DEPARTMENT/ORGANISATION NAME	SOURCE TYPE (EG FEDERAL GOVERNMENT, STATE GOVERNMENTS, PHARMA, NON- GOVERNMENT)	REVENUE 2017
Gupta AD	Neurology / Aged and Extended Care Services	Allergan Australia	80,000
Maddern G	The University of Adelaide, Discipline of Surgery	Australian Department of Health, Queensland Department of Health, Victorian Department of Health and Human Services, The Sax Institute, Medibank Pty Ltd, Ludwig Boltzmann Institute, American College of Surgeons, Government of Sri Lanka	899,393

EXCLUDES EXTERNALLY FUNDED CLINICAL TRIALS

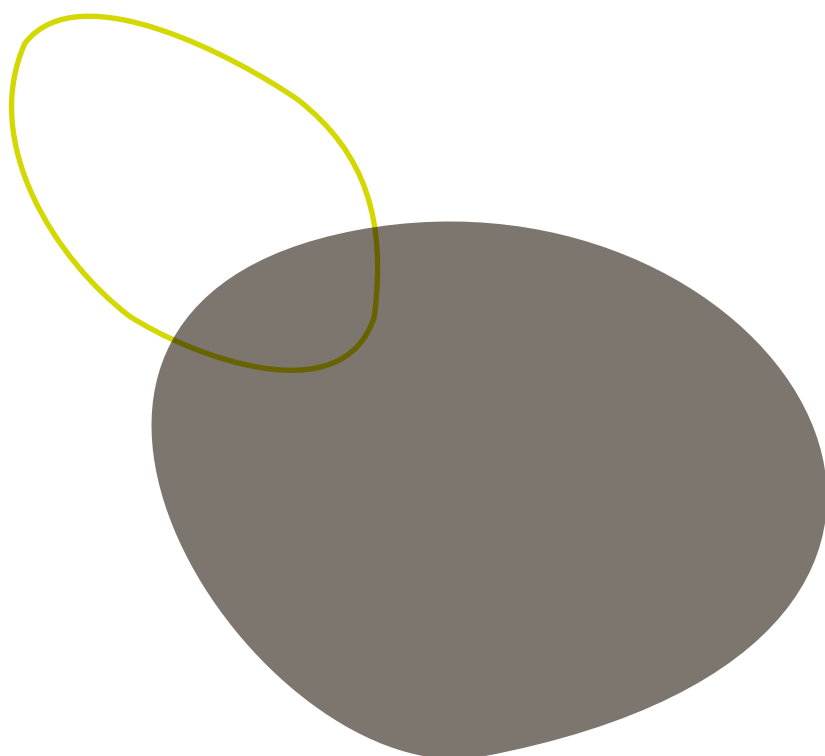
PEER REVIEWED GRANTS COMMENCING IN 2018

\$1,958,803

GRANT RECIPIENTS	GRANTING BODY FUNDING PERIOD	PROJECT TITLE	REVENUE 2018 TYPE OF GRANT	TOTAL GRANT FUNDING
Soebarto V, Pisaniello D, Zuo J, Williamson T, Hansen A, Visvanathan R , van Hoof J	ARC 2018-20	Improving thermal conditions in housing to support ageing in place	137,667 Discovery	413,000
Keen H, Whittle S , Delir Haghighi P, Sharma C	Arthritis Australia 2018	Community perceptions of rheumatoid arthritis pharmacotherapy: An analysis of social media platforms	35,000 Project	35,000
Krishnan G	Australian-American Fulbright Commission 2018	2018 Fulbright SA Postgraduate Scholarship	38,500 Scholarship	38,500
Young J, Price T , Tomlinson I, Rosty C, Ruzsiewicz A, Schrieber A, Platell C, Hardingham J, Smith E, Drew P	Cancer Council SA 1138776 2018	Personal and family history of type 2 diabetes and risk for colorectal cancer in young adults	75,000 Project	75,000
Krishnan S (Giri)	Garnett Passe and Rodney Williams Memorial Foundation 2018-21	Magnetic Nanotechnology For Diagnostics and Guided Therapeutics in Oral Cancer	75,000 Academic Surgeon Scientist Research Scholarship	300,000
Paramasivan S	Garnett Passe and Rodney Williams Memorial Foundation 2018-21		75,000 Academic Surgeon Scientist Research Scholarship	300,000
Ranasinghe I , Kaambwa B, Adams R	Heart Foundation 101830 2018	Healthcare Costs and Resource Use associated with 30-day Hospital Readmissions among Heart Failure Patients	75,000 Vanguard	75,000
Beltrame JF, Tavella R, Zeitz C , Spertus J, Arstall M, Worthley M, Chew D	NHMRC 1062331 2018-21	Value-Based Healthcare in Elective Coronary Stenting	267,122 Partnership	2,440,223
McEvoy D, Stocks N, Zwar N, Grunstein R, Chai-Coetzer CL, Lack L, Adams R , Redman S, Vakulin A, Wesselingh S	NHMRC 1134954 2018-22	National Centre for Sleep Health Services Research - Positioning Primary Care at the Centre of Sleep Health Management	500,000 CRE in Health Services Research	2,500,000
Zalewski P , Hodge S, Beltrame J , Murgia C, Tavella R	NHMRC 1138917 2018-20	Role for zinc and ZIP2 in the action of nitric oxide and in vascular protection against cigarette smoke and cardiovascular disease	219,055 Project	685,941
Sallustio B, Evdokiou A, Horowitz J	NHMRC 1145776 2018-20	Prevention of Heart Damage during anthracycline cancer	109,071 Project	327,214
Johnson G, Abramson M, Dooley M, Bonevski B, Smith BJ , Webb A	Pfizer 2018-19	Varenicline And Nicotine replacement therapy for Smokers admitted to Hospitals (VANISH)	\$USD 100,000 Global Research Awards for Nicotine Dependence (GRAND)	\$USD 200,000
Clark, SR , Ciobanu, L, Baune BT	RAH Research Committee 2017-18	Patterns of gene expression in chronic psychosis associated with cognitive and general function	49,888 Clinical Project	49,888
Rogerson T, Schubert KO, Toben C, Clark S , Baune BT	SA RANZCP 2018	The association between Interleukin-1 and psychotic symptoms in patients treated with clozapine and aripiprazole	2,500 Student	2,500

NEW PEER REVIEWED GRANTS COMMENCING IN 2018 cont.
\$1,958,803

GRANT RECIPIENTS	GRANTING BODY FUNDING PERIOD	PROJECT TITLE	REVENUE 2018 TYPE OF GRANT	TOTAL GRANT FUNDING
Richter K	The University of Adelaide/The Hospital Research Foundation 2018	Ironing out superbugs- validation and translation of a novel treatment that kills antibiotic-resistant bacteria by targeting iron metabolism	145,000 Research Fellowship	145,000
Gupta AD	The Hospital Research Foundation 2018-20	A Randomized Placebo Controlled Double Blind Trial of Post Stroke Lower Limb Spasticity Using Botulinum Toxin A (BoNTA)	35,000 Project	105,000
Wormald PJ, Vreugde S, Richter K	The University of Adelaide/The Hospital Research Foundation 2018	A new medicated surgical hydrogel to improve wound healing after endoscopic sinus surgery	120,000 CAS grant	120,000



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By Administrative Unit

Aged & Extended Care Services, TQEH

Anaesthesia, TQEH

Cardiology Unit, TQEH

Emergency Medicine, TQEH

Endocrinology Unit, TQEH

Gastroenterology & Hepatology Unit,
TQEH

Haematology & Medical Oncology
Department, TQEH

Intensive Care Unit, TQEH

The University of Adelaide
Discipline of Medicine, TQEH

Neurology Unit, TQEH

The University of Adelaide
Discipline of Psychiatry /
TQEH Psychiatry

Respiratory Medicine Unit & Clinical
Practice Unit, TQEH

Rheumatology Unit, TQEH

The University of Adelaide
Discipline of Surgery, TQEH

Therapeutics Research Centre,
University of South Australia

AGED & EXTENDED CARE SERVICES, TQEH

- 1 Ambagtsheer R, [Visvanathan R](#), Cesari M, Yu S, Archibald M, Schultz T, Karnon J, Kitson A, Beilby J. Feasibility, acceptability and diagnostic test accuracy of frailty screening instruments in community-dwelling older people within the Australian general practice setting: a study protocol for a cross-sectional study. *BMJ Open*. 2017 Aug; 7(8):e016663.
- 2 Archibald M, Ambagtsheer R, Beilby J, Chehade M, [Gill T](#), [Visvanathan R](#), Kitson A. Perspectives of Frailty and Frailty Screening: Protocol for a Collaborative Knowledge Translation Approach and Qualitative Study of Stakeholder Understandings and Experiences. *BMC Geriatrics*. Apr 17 2017;17(1):87.
- 3 Archibald M, Kitson A, Frewin D, [Visvanathan R](#). Transdisciplinary Research In Frailty: Knowledge Translation To Inform New Models of Care. *J Frailty Aging*. 2017;6(2):62-64.
- 4 Arendts G, Burkett E, Hullick C, Carpenter CR, Nagaraj G, [Visvanathan R](#). Frailty, thy name is.... *Emerg Med Australas*. Oct 3 2017. doi: 10.1111/1742-6723.12869. [Epub ahead of print] PubMed PMID: 28971594.
- 5 De Silva T, Ahip S, Theou O, Tufanaru C, [Visvanathan R](#), Umaphathysivam K. Frailty in nursing home residents: a scoping review protocol. *JBIR Database System Rev Implement Rep*. 2017 Aug;15(8):2040-2046.
- 6 Dent E, Chapman I, Piantadosi C, [Visvanathan R](#). Screening for malnutrition in hospitalised older people: Comparison of the Mini Nutritional Assessment with its short-form versions. *Australas J Ageing*. 2017 Jun;36(2):E8-E13.
- 7 Dent E, Hoon E, Karnon J, Kitson A, [Dollard J](#), Newbury J, Harvey G, [Gill T](#), Beilby J. Management of Musculoskeletal Conditions in Rural South Australia: A Randomised Controlled Trial. *J Frailty Aging*. 2017;6(4):212-215.
- 8 [Jadczyk AD](#), Tam KL, [Yu S](#), [Visvanathan R](#). Medical students' perceptions of the importance of exercise and their perceived competence in prescribing exercise to older people. *Australas J Ageing*. 2017 Sep;36(3):E7-E13.
- 9 [Jadczyk A](#), Luscombe-Marsh N, Taylor P, Barnard R, Makwana N, [Visvanathan R](#). The EXPRESS Study: Exercise and Protein Effectiveness Supplementation Study supporting autonomy in community dwelling frail older people-study protocol for a randomized controlled pilot and feasibility study. *Pilot Feasibility Stud*. 2017 Jul 6;4:8.
- 10 [Jadczyk AD](#), [Mahajan N](#), [Visvanathan R](#). The Feasibility of Standardised Geriatric Assessment Tools and Physical Exercises in Frail Older Adults. *J Frailty Aging*. 2017; 6(4):195-198.
- 11 [Jadczyk AD](#), [Dollard J](#), [Mahajan N](#), [Visvanathan R](#). The perspectives of pre-frail and frail older people on being advised about exercise: a qualitative study. *Fam Pract*. 2017 Nov 14. doi: 10.1093/fampra/cmz108. [Epub ahead of print]
- 12 [Jayatilaka A](#), [Ranasinghe DC](#), [Falkner K](#), [Visvanathan R](#), [Wilson A](#). Care workers' voices in designing assistive technologies for preventing malnutrition in older people with dementia: Innovative Practice. *Dementia (London)*. 2017 Jan 1:1471301217722852.
- 13 [Khow K](#), [Shibu P](#), [Yu S](#), [Chehade M](#), [Visvanathan R](#). Epidemiology and postoperative outcomes of atypical femoral fractures in older adults: A systematic review. *Journal of Nutrition, Health and Aging*. 2017 Jan; 21(1):83-91.
- 14 [Khow K](#), [Visvanathan R](#). Falls in the aging population. *Clinics in Geriatric Medicine*. 2017 Aug; 33(3):357-368.
- 15 [Khow KS](#), [Paterson F](#), [Shibu P](#), [Yu SC](#), [Chehade MJ](#), [Visvanathan R](#). Outcomes between older adults with atypical and typical femoral fractures are comparable. *Injury*. 2017 Feb;48(2):394-398.
- 16 [Morley JE](#), [Arai H](#), [Cao L](#), [Dong B](#), [Merchant RA](#), [Vellas B](#), [Visvanathan R](#), [Woo J](#). Integrated Care: Enhancing the Role of the Primary Health Care Professional in Preventing Functional Decline: A Systematic Review. *J Am Med Dir Assoc*. 2017 Jun 1;18(6):489-494.
- 17 [Preston D](#), [Nguyen TNM](#), [Visvanathan R](#), [Wilson A](#). Nutrition and the community-dwelling older person: a pilot study in general practice. *Int J Evid Based Healthc*. 2017 Oct 27. doi: 10.1097/XEB.0000000000000124. [Epub ahead of print] PubMed PMID: 29084014.
- 18 [Shinmoto Torres RL](#), [Visvanathan R](#), [Abbott D](#), [Hill KD](#), [Ranasinghe DC](#). A battery-less and wireless wearable sensor system for identifying bed and chair exits in a pilot trial in hospitalized older people. *PLoS One*. 2017 Oct 9;12(10):e0185670. C
- 19 [Teh RC](#), [Visvanathan R](#), [Ranasinghe D](#), [Wilson A](#). Evaluation and refinement of a handheld health information technology tool to support the timely update of bedside visual cues to prevent falls in hospitals. *Int J Evid Based Healthc*. 2017 Nov 27. doi: 10.1097/XEB.0000000000000129. [Epub ahead of print]
- 20 [Teh RC](#), [Wilson A](#), [Ranasinghe D](#), [Visvanathan R](#). Use and clinical efficacy of standard and health information technology fall risk assessment tools. *Australas J Ageing*. 2017 Dec;36(4):327-331.
- 21 [Thompson MQ](#), [Theou O](#), [Yu S](#), [Adams RJ](#), [Tucker GR](#), [Visvanathan R](#). Frailty prevalence and factors associated with the Frailty Phenotype and Frailty Index: Findings from the North West Adelaide Health Study. *Australas J Ageing*. 2017 Dec 4. doi: 10.1111/ajag.12487. [Epub ahead of print]
- 22 [Trahair LG](#), [Rajendran S](#), [Visvanathan R](#), [Chapman M](#), [Stadler D](#), [Horowitz M](#), [Jones KL](#). Comparative effects of glucose and water drinks on blood pressure and cardiac function in older subjects with and without postprandial hypotension. *Physiol Rep*. 2017 Jul;5(13). pii: e13341.

PUBLICATIONS 2017 cont.

- 23 [Visvanathan R](#), [Ranasinghe DC](#), [Wilson A](#), [Lange K](#), [Dollard J](#), [Boyle E](#), [Karnon J](#), [Raygan E](#), [Maher S](#), [Ingram K](#), [Pazhvoor S](#), [Hoskins S](#), [Hill K](#). Effectiveness of an Ambient Intelligent Geriatric Management system (AmbIGeM) to prevent falls in older people in hospitals: protocol for the AmbIGeM stepped wedge pragmatic trial. *Inj Prev*. 2017 Aug 19. pii: injuryprev-2017-042507. doi:10.1136/injuryprev-2017-042507. [Epub ahead of print] PubMed PMID: 28823995.
- 24 [Walker R](#), [Ratcliffe J](#), [White A](#), [Visvanathan R](#). Dementia assessment services: What are the perceptions of older people? *Australas J Ageing*. 2017 Oct 10. doi: 10.1111/ajag.12455. [Epub ahead of print] PubMed PMID: 29024346.
- 25 [Wallace CL](#), [Swagerty D](#), [Barbagallo M](#), [Vellas B](#), [Cha HB](#), [Holmerova I](#), [Dong B](#), [Koopmans R](#), [Cruz-Jentoft AJ](#), [Gutierrez Robledo LM](#), [Moreno JC](#), [Hajjar R](#), [Woo J](#), [Arai H](#), [Okochi J](#), [Visvanathan R](#), [Abdul-Rahman SA](#), [Goel A](#), [Moser A](#), [Rolland Y](#), [Abbatecola AM](#), [Russo M](#), [Morley JE](#). IAGG/IAGG GARN International Survey of End-of-Life Care in Nursing Homes. *J Am Med Dir Assoc*. 2017 Jun 1;18(6):465-469.
- 26 [Wilsdon T](#), [Hendrix I](#), [Thynne T](#), [Mangoni A](#). Effectiveness of interventions to deprescribe inappropriate proton pump inhibitors in older adults. *Drugs and Aging*. 2017 Apr;34(4):265-287.eCollection 2018.
- 27 [Wickramasinghe A](#), [Ranasinghe DC](#), [Fumeaux C](#), [Hill KD](#), [Visvanathan R](#). Sequence Learning with Passive RFID Sensors for Real-Time Bed-Egress Recognition in Older People. *IEEE J Biomed Health Inform*. 2017 Jul;21(4):917-929.
- 28 [Woo T](#), [Yu S](#), [Adams R](#), [Visvanathan R](#). The association between sarcopenia and quality of life is different in community dwelling older Australian men and women. *Aust J Ageing*. 2017;36:31-41.
- 29 [Umapathysivam K](#), [Tufanaru C](#), [Visvanathan R](#), [Yu S](#). Anthropometric prediction equations for estimating body mass composition: a scoping review protocol. *JBI Database of Systematic Reviews and Implementation Reports*. 2017 Oct; 15(10):2427-2432.

ANAESTHESIA, TQEH

- 1 [Adhikary S](#), [McQuillan P](#), [Fortunato M](#), [Owen D](#), [Liu WM](#), [Thiruvenkatarajan V](#). A manikin-based evaluation of a teaching modality for ultrasound-guided infraclavicular longitudinal in-plane axillary vein cannulation in comparison with ultrasound-guided internal jugular vein cannulation: A pilot study. *J Anaesthesiol Clin Pharmacol*. 2017 Jul-Sep; 33(3):337-341.
- 2 [Rao Kadam V](#), [Kiroff G](#). Continuous Transversus Abdominis Plane (TAP) Block and Intraoperative Coeliac Plexus Block (CPB) for Post-Operative Analgesia Following Laparotomy: Two Case Reports. *Anesth Pain Med*. 2017 Feb; 7(1):e43091.

- 3 [Rao Kadam V](#), [Van Wijk RM](#), [Moran JL](#), [Ganesh S](#), [Kumar A](#), [Sethi R](#), [Williams P](#). Continuous transversus abdominis plane block vs intermittent bolus for analgesia after abdominal surgery: a randomized trial. *J Pain Res*. 2017 Jul 18; 10:1705-1712.
- 4 [Thiruvenkatarajan V](#), [Watts R](#), [Calvert M](#), [Newcombe G](#), [Van Wijk RM](#). The effect of esmolol compared to opioids on postoperative nausea and vomiting, postanesthesia care unit discharge time, and analgesia in noncardiac surgery: A meta-analysis. *J Anaesthesiol Clin Pharmacol*. 2017 Apr-Jun;33(2):172-180.
- 5 [Watts R](#), [Thiruvenkatarajan V](#), [Calvert M](#), [Newcombe G](#), [van Wijk R](#). The effect of perioperative esmolol on early postoperative pain: A systematic review. *Journal of Anaesthesiology Clinical Pharmacology*. 2017 Jan-Mar; 33(1):28-39.

CARDIOLOGY UNIT, TQEH

- 1 [Ajaero CN](#), [Chong CR](#), [Procter NEK](#), [Liu S](#), [Chirkov YY](#), [Heresztyn T](#), [Chan WPA](#), [Arstall MA](#), [McGavigan AD](#), [Frenneaux MP](#), [Horowitz JD](#). Does cardiac resynchronization therapy restore peripheral circulatory homeostasis? *ESC Heart Fail*. 2017 Oct 13. doi: 10.1002/ehf2.12211. [Epub ahead of print] PubMed PMID: 29030923.
- 2 [Al-Omary MS](#), [Khan AA](#), [Davis AJ](#), [Fletcher PJ](#), [McIvor D](#), [Bastian B](#), [Oldmeadow C](#), [Sverdllov AL](#), [Attia JR](#), [Boyle AJ](#). Outcomes following heart failure hospitalization in a regional Australian setting between 2005 and 2014. *ESC Heart Fail*. 2017 Dec 19; doi: 10.1002/ehf2.12239 (Epub ahead of print).
- 3 [Amarasekera A](#), [Assadi-Khansari B](#), [Liu S](#), [Black M](#), [Dymott G](#), [Rogers N](#), [Sverdllov A](#), [Horowitz JD](#), [Ngo D](#). Vitamin D supplementation lowers thrombospondin-1 levels and blood pressure in healthy adults. *PLoS ONE*. 2017;12(5):e0174435.
- 4 [Canavese M](#), [Ngo DT](#), [Maddern GJ](#), [Hardingham JE](#), [Price TJ](#), [Hauben E](#). Biology and therapeutic implications of VEGF-A splice isoforms and single-nucleotide polymorphisms in colorectal cancer. *Int J Cancer*. 2017 May 15;140(10):2183-2191.
- 5 [Guimarães PO](#), [Wojdyla DM](#), [Alexander JH](#), [Thomas L](#), [Alings M](#), [Flaker GC](#), [Al-Khatib SM](#), [Hanna M](#), [Horowitz JD](#), [Wallentin L](#), [Granger CB](#), [Lopes RD](#). Anticoagulation therapy and clinical outcomes in patients with recently diagnosed atrial fibrillation: Insights from the ARISTOTLE trial. *Int J Cardiol*. 2017 Jan 15;227:443-449.
- 6 [Karki S](#), [Ngo DTM](#), [Farb MG](#), [Park SY](#), [Saggese SM](#), [Hamburg NM](#), [Carmine B](#), [Hess DT](#), [Walsh K](#), [Gokce N](#). WNT5A regulates adipose tissue angiogenesis via antiangiogenic VEGF-A165b in obese humans. *Am J Physiol Heart Circ Physiol*. 2017 Jul 1;313(1):H200-H206.
- 7 [Nguyen TH](#), [Liu S](#), [Ong GJ](#), [Stafford I](#), [Frenneaux MP](#), [Horowitz JD](#). Glycocalyx shedding is markedly

PUBLICATIONS 2017 cont.

- increased during the acute phase of Takotsubo cardiomyopathy. *Int J Cardiol.* 2017 Sep 15;243:296-299.
- 8 Nguyen TH, Ong GJ, Surikow SY, Stansborough J, Worthley M, Mahadavan G, Dawson D, Frenneaux MP, Horowitz JD. Recent progress in the diagnosis and management of Tako-Tsubo syndrome. *Scientific pages of Heart.* 2017;1(1):27-34.
 - 9 Nguyen TH, Liu S, Ong G, Stafford I, Frenneaux MP, Horowitz JD. Glycocalyx shedding is markedly increased during the acute phase of Tako-Tsubo Cardiomyopathy. *Int J Cardiol.* 2017; 243:296-299.
 - 10 Pasupathy S, Tavella R, Grover S, Raman B, Procter NEK, Du YT, Mahadavan G, Stafford I, Heresztyn T, Holmes A, Zeitz C, Arstall M, Selvanayagam JB, Horowitz JD, Beltrame JF. Early use of N-Acetylcysteine (NAC) with Nitrate Therapy in Patients Undergoing Primary Percutaneous Coronary Intervention for ST-Segment Elevation Myocardial Infarction Reduces Myocardial Infarct Size (The NACIAM Trial). *Circulation.* 2017 Sep 5;136(10):894-903.
 - 11 Schwarz K, Ahearn T, Srinivasan J, Neil C, Scally C, Rudd A, Jagpal B, Frenneaux M, Pislaru C, Horowitz JD, Dawson D. Author's Reply. *Journal of the American Society of Echocardiography.* 2017 Oct; 30 (10): 1042.
 - 12 Schwarz K, Ahearn T, Srinivasan J, Neil CJ, Scally C, Rudd A, Jagpal B, Frenneaux MP, Pislaru C, Horowitz JD, Dawson DK. Alterations in Cardiac Deformation, Timing of Contraction and Relaxation, and Early Myocardial Fibrosis Accompany the Apparent Recovery of Acute Stress-Induced (Takotsubo) Cardiomyopathy: An End to the Concept of Transience. *J Am Soc Echocardiogr.* 2017 Aug;30(8):745-755.
 - 13 Schwarz K, Singh S, Parasuraman S, Rudd A, Shepstone L, Feelisch M, Minnion M, Ahmad S, Madhani M, Horowitz J, Dawson D, Frenneaux M. Inorganic Nitrate in Angina Study: A Randomized Double-Blind Placebo-Controlled Trial. *Journal of the American Heart Association.* 2017 Sep 8;6(9).
 - 14 Scuffham PA, Ball J, Horowitz JD, Wong C, Newton PJ, Macdonald P, McVeigh J, Rischbieth A, Emanuele N, Carrington MJ, Reid CM, Chan YK, Stewart S; WHICH? II Trial Investigators. Standard vs. intensified management of heart failure to reduce healthcare costs: results of a multicentre, randomized controlled trial. *Eur Heart J.* 2017 May 20;38(30):2340-8.
 - 15 Sverdlov AL, Ngo DT. Response to the letter to editor: Galectin-3 and atrial fibrillation. *Int J Cardiol.* 2017 Feb 15;229:2.

EMERGENCY MEDICINE, TQEH

- 1 Burke J, Greenslade J, Chabrowska J, Greenslade K, Jones S, Montana J, Bell A, O'Connor A. Two hour evaluation and referral model for shorter turnaround times in the emergency department. *EMA - Emergency Medicine Australasia.* 2017 Jun;29(3):315-323.

- 2 Mackenzie S, Edmonds M. Making the transition to specialist practice as a new FACEM. *EMA - Emergency Medicine Australasia.* 2017;29 101-103.
- 3 Sundararajan K, Schoeman T, Hughes L, Edwards S, Reddi B. Predictors and outcomes of acute pancreatitis in critically ill patients presenting to the emergency department of a tertiary referral centre in Australia. *Emergency Medicine Australasia.* 2017 Apr; 29(2):184-191.

ENDCRINOLOGY UNIT, TQEH

- 1 De Sousa S M C, Stowasser M, Feng J, Schreiber A W, Wang P, Hahn C N, Gordon R D, Torpy D J, Scott H S & Gagliardi L. ARMC5 is not implicated in familial hyperaldosteronism type II (FH-II). *Journal of Human Hypertension.* 2017; 31, 857-859.

GASTROENTEROLOGY & HEPATOLOGY UNIT, TQEH

- 2 Atkinson NSS, Bryant RV, Dong Y, Maaser C, Kucharzik T, Maconi G, Asthana AK, Blaivas M, Goudie A, Gilja OH, Nuernberg D, Schreiber-Dietrich D, Dietrich CF. How to perform gastrointestinal ultrasound: Anatomy and normal findings. *World J Gastroenterol.* 2017 Oct 14;23(38):6931-6941.
- 3 Bezzio C, Bryant RV, Manes G, Maconi G, Saibeni S. New horizons in the imaging of perianal Crohn's disease: transperineal ultrasonography. *Expert Rev Gastroenterol Hepatol.* 2017 Jun;11(6):523-530.
- 4 Bezzio C, Bryant RV, Manes G, Maconi G, Saibeni S. New horizons in the imaging of perianal Crohn's disease: transperineal ultrasonography. *Expert Rev Gastroenterol Hepatol.* 2017 Jun;11(6):523-530.
- 5 Bryant RV, Costello SP, Schoeman S, Sathananthan D, Knight E, Lau SY, Schoeman MN, Mountfield R, Tee D, Travis SPL, Andrews JM. Limited uptake of ulcerative colitis 'treat to target' recommendations in real-world practice. *J Gastroenterol Hepatol.* 2017 Aug 14. doi: 10.1111/jgh.13923. [Epub ahead of print]
- 6 Bryant RV, Prowse S, Nguyen-Hoang A, Lewis MC. Gastrointestinal: Adenocarcinoma in ileal Crohn's disease: A devil in disguise. *J Gastroenterol Hepatol.* 2017 Sep;32(9):1535.
- 7 Costello SP, Soo W, Bryant RV, Jairath V, Hart AL, Andrews JM. Systematic review with meta-analysis: faecal microbiota transplantation for the induction of remission for active ulcerative colitis. *Aliment Pharmacol Ther.* 2017 Aug;46(3):213-224.
- 8 Costello SP, Soo W, Bryant RV, Jairath V, Hart AL, Andrews JM. Editorial: faecal microbiota transplantation for ulcerative colitis-not quite there yet? Authors' reply. *Aliment Pharmacol Ther.* 2017 Sep;46(6):631-632.
- 9 Dudhwala ZM, Howarth GS, Drew PA, Moore DJ, Cummins AG. Abstract: Intestinal crypt fission and

PUBLICATIONS 2017 cont.

- expression of Wnt β -catenin signalling in the small intestine of humans. *J Gastroenterol and Hepatol*. 2017; 32(Suppl 2): 184.
- 10 Dudhwala ZM, Howarth GS, Drew PA, Moore DJ, Cummins AG. Abstract: Intestinal crypt fission and expression of Wnt β -catenin in the small intestine of humans. *Gastroenterology*. 2017; 152(Suppl 1): s170-s171.
 - 11 Guirgis M, Wendt E, Wang LM, Walsh A, Burger D, Bryant RV, Kent A, Adamson R, Brain O, Travis SPL, Keshav S. Beyond Histological Remission: Intramucosal Calprotectin as a Potential Predictor of Outcomes in Ulcerative Colitis. *J Crohns Colitis*. 2017 Apr 1;11(4): 460-467.
 - 12 Mitrev N, Vande Casteele N, Seow C, Andrews J, Connor S, Moore G, Barclay M, Begun J, Bryant R, Chan W, Corte C, Ghaly S, Lemberg D, Kariyawasam V, Lewindon P, Martin J, Mountfield R, Radford-Smith G, Slobodian P, Sparrow M, Toong C, van Langenberg D, Ward M, Leong R; IBD Sydney Organisation & the Australian Inflammatory Bowel Diseases Consensus Working Group. Review article: consensus statements on therapeutic drug monitoring of anti-tumour necrosis factor therapy in inflammatory bowel diseases. *Alimentary Pharmacology & Therapeutics*. 46:1037-1053, 2017 doi: 10.1111/apt.14368
 - 13 Roberts-Thomson IC, Lung T. Cost-effective options for the prevention and management of gastrointestinal and liver disease in the Asia-Pacific region. *J Gastroenterol Hepatol*. 2017 Aug 17. doi: 10.1111/jgh.13925. [Epub ahead of print] Review.
 - 14 Schwerd T, Bryant RV, Pandey S, Capitani M, Meran L, Cazier JB, Jung J, Mondal K, Parkes M, Mathew CG, Fiedler K, McCarthy DJ; WGS500 Consortium; Oxford IBD cohort study investigators; COLORS in IBD group investigators; UK IBD Genetics Consortium, Sullivan PB, Rodrigues A, Travis SPL, Moore C, Sambrook J, Ouwehand WH, Roberts DJ, Danesh J; INTERVAL Study, Russell RK, Wilson DC, Kelsen JR, Cornall R, Denson LA, Kugathasan S, Knaus UG, Serra EG, Anderson CA, Duerr RH, McGovern DP, Cho J, Powrie F, Li VS, Muise AM, Uhlig HH. NOX1 loss-of-function genetic variants in patients with inflammatory bowel disease. *Mucosal Immunol*. 2017 Nov 1. doi: 10.1038/mi.2017.74. [Epub ahead of print]
 - 15 Weismüller TJ, Trivedi PJ, Bergquist A, Imam M, Lenzen H, Ponsioen CY, Holm K, Gotthardt D, Färkkilä MA, Marschall HU, Thorburn D, Weersma RK, Fevery J, Mueller T, Chazouillères O, Schulze K, Lazaridis KN, Almer S, Pereira SP, Levy C, Mason A, Naess S, Bowlus CL, Floreani A, Halilbasic E, Yimam KK, Milkiewicz P, Beuers U, Huynh DK, Pares A, Manser CN, Dalekos GN, Eksteen B, Invernizzi P, Berg CP, Kirchner G, Sarrazin C, Zimmer V, Fabris L, Braun F, Marziani M, Juran BD, Said K, Rupp C, Jokelainen K, Benito de Valle M, Saffioti F, Cheung A, Trauner M, Schramm C, Chapman RW, Karlsen TH, Schrupf E, Strassburg CP, Manns MP, Lindor KD, Hirschfield GM, Hansen BE, Boberg KM; International PSC Study Group. Patient Age, Sex, and Inflammatory Bowel Disease Phenotype Associate With Course of Primary Sclerosing Cholangitis. *Gastroenterology*. 2017 Jun;152(8):1975-1984.e8.
 - 16 Wong S, Lidums I, Rosty C, Ruszkiewicz A, Parry S, Win A, Tomita Y, Vatandoust S, Townsend A, Patel D, Hardingham J, Roder D, Smith E, Drew P, Marker J, Uylaki W, Hewett P, Worthley D, Symonds E, Young G, Price T, Young J. Findings in young adults at colonoscopy from a hospital service database audit. *BMC Gastroenterology*. 2017 Apr; 17(1):56.

HAEMATOLOGY AND MEDICAL ONCOLOGY DEPARTMENT, TQEH

- 1 Adelson P, Fusco K, Karapetis C, Wattchow D, Joshi R, Price T, Sharplin G, Roder D. Use of guideline-recommended adjuvant therapies and survival outcomes for people with colorectal cancer at tertiary referral hospitals in South Australia. *Journal of Evaluation in Clinical Practice*. 2017 May 4. doi: 10.1111/jep.12757. [Epub ahead of print]
- 2 Abraham J, Sinha R, Robinson K, Scotland V, Cardone D. Aetiology of preoperative anaemia in patients undergoing elective cardiac surgery-the challenge of pillar one of Patient Blood Management. *Anaesthesia & Intensive Care*. 2017 Jan; 45(1):46-51.
- 3 Anderson RL, Ingman WV, Britt KL. Editorial: How Reproductive History Influences Our Breast Cancer Risk. *Front. Oncol*. 7:289.
- 4 Asiedu MN, Han C, Dib-Hajj SD, Waxman SG, Price TJ, Dussor G. The AMPK Activator A769662 Blocks Voltage-Gated Sodium Channels: Discovery of a Novel Pharmacophore with Potential Utility for Analgesic Development. *PLoS One*. 2017 Jan 24;12(1):e0169882.
- 5 Bradstock K, Link E, Di Iulio J, Szer J, Marlton P, Wei A, Enno A, Schwarzer A, Lewis I, D'Rozario J, Coyle L, Cull G, Campbell P, Leahy M, Hahn U, Cannell P, Tiley C, Lowenthal R, Moore J, Cartwright K, Cunningham I, Taper J, Grigg A, Roberts A, Benson W, Hertzberg M, Deveridge S, Rowlings P, Mills A, Gill D, Bardy P, Campbell L, Seymour J. Australasian Leukaemia & Lymphoma Group. Idarubicin dose escalation during consolidation therapy for adult acute myeloid leukemia. *Journal of Clinical Oncology*. 2017 May;35(15):1678-1685.
- 6 Canavese M, Ngo DT, Maddern GJ, Hardingham JE, Price TJ, Hauben E. Biology and therapeutic implications of VEGF-A splice isoforms and single-nucleotide polymorphisms in colorectal cancer. *Int J Cancer*. 2017 May 15;140(10):2183-2191.
- 7 Casolari D, Nguyen T, Butcher C, Iarossi D, Hahn C, Bray S, Neufing P, Parker W, Feng J, Maung K, Wee A, Vidovic L, Kok C, Bardy P, Branford S, Lewis I, Lane S, Scott H, Ross D, D'Andrea R. A novel, somatic, transforming mutation in the extracellular domain of Epidermal Growth Factor Receptor identified in myeloproliferative neoplasm. *Scientific Reports*. 2017 May; 7(1):2467.

- 8 Chan D, Sjoquist K, Goldstein D, [Price T](#), Martin A, Bang Y, Kang Y, Pavlakakis N. The effect of anti-angiogenic agents on overall survival in metastatic oesophago-gastric cancer: A systematic review and meta-analysis. *PLoS ONE*. 2017;12(2):e0172307.
- 9 Chandrasegaram MD, Gill AJ, Samra J, [Price T](#), Chen J, Fawcett J, Merrett ND. Ampullary cancer of intestinal origin and duodenal cancer - A logical clinical and therapeutic subgroup in periampullary cancer. *World J Gastrointest Oncol*. 2017 Oct 15;9(10):407-415.
- 10 Cheng A, Cornelio G, Shen L, [Price T](#), et al. Efficacy, tolerability, and biomarker analyses of once-every-2-weeks cetuximab plus first-line FOLFOX or FOLFIRI in patients with KRAS or all RAS Wild-Type metastatic colorectal cancer: The phase2 APEC Study. *Clinical Colorectal Cancer*. 2017 Jun; 16 (2):e73-e88.
- 11 Chew T, Bright T, [Price TJ](#), Watson DI, Devitt PG. Follow-Up Practices of Surgeons and Medical Oncologists in Australia and New Zealand Following Resection of Esophagogastric Cancers. *Ann Thorac Cardiovasc Surg*. 2017 Oct 20;23(5):217-222. doi: 10.5761/atcs.0a.17-00049. Epub 2017 Aug 15.
- 12 Chong L, Healey T, Michele T, [Price T](#). Capecitabine in locally advanced anal cancer, do we need randomised evidence? *Expert Review of Anticancer Therapy*. 2017 May;17(5):411-416.
- 13 Chionh F, Lau D, Yeung Y, [Price T](#), Tebbutt N. Oral versus intravenous fluoropyrimidines for colorectal cancer. *Cochrane Database Syst Rev*. 2017 Jul 28;7:CD008398.
- 14 Finlay B, [Price T](#), Hewett P. Neutropenia and thrombocytopenia after cytoreductive surgery and heated intraperitoneal chemotherapy. *Pleura and Peritoneum*. 2017 Sep; 2(3):137-141.
- 15 Hiwase D, Singhal D, Strupp C, Chhetri R, Kutyna M, Wee L, Harrison P, Nath S, Wickham N, Hui C, [Gray J](#), [Bardy P](#), Ross D, Lewis I, Reynolds J, To L, Germing U. Dynamic assessment of RBC-transfusion dependency improves the prognostic value of the revised-IPSS in MDS patients. *American Journal of Hematology*. 2017 Jun; 92(6):508-514.
- 16 Kirana C, Ruskiewicz A, Stubbs RS, [Hardingham JE](#), Hewett PJ, Maddern GJ, Hauben E. Soluble HLA-G is a differential prognostic marker in sequential colorectal cancer disease stages. *Int J Cancer*. 2017 Jun 1;140(11):2577-2586.
- 17 Knox J, Barrios C, Kim T, Cosgriff T, Srimuninnimit V, [Pittman K](#), Sabbatini R, Rha S, Flaig T, Page R, Beck J, Cheung F, Yadav S, Patel P, Geoffrois L, Niolat J, Berkowitz N, Marker M, Chen D, Motzer R. Final overall survival analysis for the phase II RECORD-3 study of first-line everolimus followed by sunitinib versus first-line sunitinib followed by everolimus in metastatic RCC. *Annals of Oncology*. 2017 Jun;28 (6):1339-1345.
- 18 Kumar S, [Tomita Y](#), [Wrin J](#), [Bruhn M](#), [Swalling A](#), [Mohammed M](#), [Price T](#), [Hardingham J](#). High early growth response 1 (EGR1) expression correlates with resistance to anti-EGFR treatment *in vitro* and with poorer outcome in metastatic colorectal cancer patients treated with cetuximab. *Clinical and Translational Oncology*. 2017 Jun;19(6):718-726.
- 19 Lee O, Horvath N, [Lee C](#), Joshua D, Ho J, Szer J, Quach H, Spencer A, Harrison S, Mollee P, Roberts A, Talaulikar D, Brown R, Augustson B, Ling S, [Jaksic W](#), Gibson J, Kalff A, Johnston A, Kalro A, Ward C, Prince H, Zannettino A. Bisphosphonate guidelines for treatment and prevention of myeloma bone disease. *Internal Medicine Journal*. 2017 Aug;47(8):938-951.
- 20 Leyden J, Pavlakakis N, Chan D, Michael M, Clarke S, Khasraw M, [Price T](#). Patient-reported experience of the impact and burden of neuroendocrine tumors: Oceania patient results from a large global survey. *Asia Pac J Clin Oncol*. 2017 Nov 6. doi: 10.1111/ajco.12785. [Epub ahead of print]
- 21 Martin AJ, Gibbs E, Sjoquist K, Pavlakakis N, Simes J, [Price T](#), Shannon J, Gill S, Jain V, Liu G, Kannourakis G, Kim YH, Kim JW, Goldstein D; INTEGRATE I investigators. Health-related quality of life associated with regorafenib treatment in refractory advanced gastric adenocarcinoma. *Gastric Cancer*. 2017 Aug 16. doi: 10.1007/s10120-017-0754-1. [Epub ahead of print]
- 22 Marshall-Webb M, Bright T, [Price T](#), Thompson S, Watson D. Venous thromboembolism in patients with esophageal or gastric cancer undergoing neoadjuvant chemotherapy. *Diseases of the Esophagus*. 2017 Feb; 30(2):1-7.
- 23 Moore J, [Price T](#), Carruthers S, Selva-Nayagam S, Luck A, Thomas M, Hewett P. Prospective randomized trial of neoadjuvant chemotherapy during the 'wait period' following preoperative chemoradiotherapy for rectal cancer: results of the WAIT trial. *Colorectal Dis*. 2017 Nov;19(11):973-979.
- 24 Palethorpe HM, Drew PA, [Smith E](#). Androgen Signaling in Esophageal Adenocarcinoma Cell Lines *In Vitro*. *Dig Dis Sci*. 2017 Dec;62(12):3402-3414.
- 25 Parry S, Burt R, Ko Win A, Kyaw Aung Y, Woodall S, Arnold J, Clendenning M, Buchanan D, [Price T](#), Rosty C, [Young J](#). Reducing the polyp burden in serrated polyposis by serial colonoscopy: the impact of nationally coordinated community surveillance. *New Zealand Medical Journal*. 2017 Mar;130(1451):57-67.
- 26 [Price T](#). Advanced colorectal cancer treatment options beyond standard systemic therapy. *The Lancet Oncology*. 2017 Feb; 18(2): 157-159.
- 27 Roder D, Farshid G, Kollias J, Koczwara B, Karapetis C, Adams J, Joshi R, Keefe D, Miller C, Powell K, Fusco K, Eckert M, Buckley E, Beckmann K, [Price T](#). Female breast cancer management and survival: The experience of major public hospitals in South Australia over 3 decades-trends by age and in the elderly. *J Eval Clin Pract*. 2017 Oct 8. doi: 10.1111/jep.12819. [Epub ahead of print]
- 28 Segelov E, Lordick F, Goldstein D, Chantrill LA, Croagh D, Lawrence B, Arnold D, Chau I, Obermannova R, [Price TJ](#). Current challenges in optimizing systemic therapy for patients with pancreatic cancer: expert perspectives

PUBLICATIONS 2017 cont.

- from the Australasian Gastrointestinal Trials Group (AGITG) with invited international faculty. *Expert Rev Anticancer Ther.* 2017 Oct;17(10):951-964.
- 29 [Sime FB](#), [Hahn U](#), [Warner MS](#), [Tiong IS](#), [Roberts MS](#), [Lipman J](#), [Peake SL](#), [Roberts JA](#). Using Population Pharmacokinetic Modeling and Monte Carlo Simulations To Determine whether Standard Doses of Piperacillin in Piperacillin-Tazobactam Regimens Are Adequate for the Management of Febrile Neutropenia. *Antimicrob Agents Chemother.* 2017 Oct 24;61(11).
 - 30 [Smith E](#), [Palethorpe HM](#), [Hayden AL](#), [Young JP](#), [Underwood TJ](#), [Drew PA](#). Fibroblasts derived from oesophageal adenocarcinoma differ in DNA methylation profile from normal oesophageal fibroblasts. *Sci Rep.* 2017 Jun 13;7(1):3368.
 - 31 [Sultana A](#), [Meng R](#), [Piantadosi C](#), [Brooke-Smith M](#), [Chen J](#), [Dolan P](#), [Maddern G](#), [Price T](#), [Padbury R](#). Liver resection for colorectal cancer metastases: a comparison of outcomes over time in South Australia. *HPB (Oxford).* 2017; pii: S1365-182X(17)31102-4.
 - 32 [Sun X](#), [Glynn D](#), [Hodson L](#), [Huo C](#), [Britt K](#), [Thompson E](#), [Woolford L](#), [Evdokiou A](#), [Pollard J](#), [Robertson S](#), [Ingman W](#). CCL2-driven inflammation increases mammary gland stromal density and cancer susceptibility in a transgenic mouse model. *Breast Cancer Research.* 2017 Jan; 19(1):4.
 - 33 [Talaulikar D](#), [Tam C](#), [Joshua D](#), [Ho J](#), [Szer J](#), [Quach H](#), [Spencer A](#), [Harrison S](#), [Mollee P](#), [Roberts A](#), [Horvath N](#), [Lee C](#), [Zannettino A](#), [Brown R](#), [Augustson B](#), [Jaksic W](#), [Gibson J](#), [Kalff A](#), [Johnston A](#), [Trotman J](#), [Kalro A](#), [Grigoriadis G](#), [Ward C](#), [Prince H](#). Treatment of patients with Waldenstrom macroglobulinaemia: clinical practice guidelines from the Myeloma Foundation of Australia Medical and Scientific Advisory Group. *Internal Medicine Journal.* 2017 Jan;47(1):35-49.
 - 34 [Tapia Rico G](#), [Townsend A](#), [Broadbridge V](#), [Price T](#). Targeted therapies in elderly patients with metastatic colorectal cancer: A review of the evidence. *Drugs and Aging.* 2017 Feb;34:173-189.
 - 35 [Tapia Rico G](#), [Klevansky M](#), [Townsend A](#), [Price T](#). Synovial metastasis of the knee in a KRAS mutant rectal adenocarcinoma patient. *BMJ Case Rep.* 2017 Aug 7;2017. pii: bcr-2017-220008. doi: 10.1136/bcr-2017-220008.
 - 36 [Tapia Rico G](#), [Price TJ](#), [Karapetic C](#), [Piantadosi C](#), [Padbury R](#), [Roy A](#), [Maddern G](#), [Moore J](#), [Carruthers S](#), [Roder D](#), [Townsend AR](#). Brain metastasis in advanced colorectal cancer: results from the South Australian metastatic colorectal cancer (SAmCRC) registry. *Cancer Biol Med.* 2017; 14(4): 371-376.
 - 37 [Thavaneswaran S](#), [Kok PS](#), [Price T](#). Evaluating the addition of oxaliplatin to single agent fluoropyrimidine in the treatment of locally advanced rectal cancer: a systematic review and meta-analysis. *Expert Rev Anticancer Ther.* 2017 Oct;17(10):965-979.
 - 38 [Tiong I](#), [Rodgers S](#), [Lee C](#), [McRae S](#). Baseline and treatment-related changes in thrombin generation in patients with multiple myeloma. *Leukemia & Lymphoma.* 2017 Apr; 58(4):941-949.
 - 39 [Tomita Y](#), [Dorward Hu Yool A](#), [Smith E](#), [Townsend A](#), [Price T](#), [Hardingham J](#). Role of aquaporin 1 signalling in cancer development and progression. *International Journal of Molecular Sciences.* 2017 Jan;18(2).
 - 40 [Wong G](#), [Kumar R](#), [Beeke C](#), [Ullah S](#), [Chen J](#), [Karapetis C](#), [Price T](#), [Padbury R](#). Survival outcomes for patients with indeterminate 18fdg-pet scan for extrahepatic disease before liver resection for metastatic colorectal cancer: A retrospective cohort study using a prospectively maintained database to analyze survival outcomes for patients with indeterminate extrahepatic disease on 18fdg-pet scan before liver resection for metastatic colorectal cancer. *Annals of Surgery.* 2017 Feb; DOI: 10.1097/SLA.0000000000002170.
 - 41 [Wong G](#), [Kumar R](#), [Beeke C](#), [Ullah S](#), [Chen J](#), [Karapetis C](#), [Price T](#), [Padbury R](#). Response to: "Consideration of KRAS mutation status may enhance the prognostic impact of indeterminate extrahepatic disease in the lungs, as identified by 18FDG-PET, in Patients With Colorectal Liver Metastases". *Annals of Surgery.* 2017 Apr 19. doi: 10.1097/SLA.0000000000002266. [Epub ahead of print].
 - 42 [Wong S](#), [Lidums I](#), [Rosty C](#), [Ruszkiewicz A](#), [Parry S](#), [Win A](#), [Tomita Y](#), [Vatandoust S](#), [Townsend A](#), [Patel D](#), [Hardingham J](#), [Roder D](#), [Smith E](#), [Drew P](#), [Marker J](#), [Uylaki W](#), [Hewett P](#), [Worthley D](#), [Symonds E](#), [Young G](#), [Price T](#), [Young J](#). Findings in young adults at colonoscopy from a hospital service database audit. *BMC Gastroenterology.* 2017 Apr; 17(1):56.
 - 43 [Young JP](#), [Price TJ](#), [Parry S](#). Serrated polyposis: the problem of definition and its relationship to the population at risk for syndrome-related colorectal cancer. *Transl Cancer Res.* 2017 doi: 10.21037/tcr2017.11.16.

INTENSIVE CARE UNIT, TQEH

- 1 [Bihari S](#), [Prakash S](#), [Peake SL](#), [Bailey M](#), [Pilcher D](#), [Bersten A](#). ICU mortality is increased with high admission serum osmolality in all patients other than those admitted with pulmonary diseases and hypoxia. *Respirology.* 2017 Aug;22(6):1165-1170.
- 2 [Davies ML](#), [Chapple LS](#), [Chapman MJ](#), [Moran JL](#), [Peake SL](#). Protein delivery and clinical outcomes in the critically ill: a systematic review and meta-analysis. *Crit Care Resusc.* 2017 Jun;19(2):117-127.
- 3 [Deane AM](#), [Hodgson CL](#), [Young P](#), [Little L](#), [Singh V](#), [Poole A](#), [Young M](#), [Mackle D](#), [Lange K](#), [Williams P](#), [Peake SL](#), [Chapman MJ](#), [Iwashyna TJ](#). The rapid and accurate categorisation of critically ill patients (RACE) to identify outcomes of interest for longitudinal studies: a feasibility study. *Anaesth Intensive Care.* 2017 Jul;45(4):476-484.
- 4 [Gotmaker R](#), [Peake SL](#), [Forbes A](#), [Bellomo R](#);

PUBLICATIONS 2017 cont.

- ARISE Investigators. Mortality is Greater in Septic Patients with Hyperlactatemia than with Refractory Hypotension. *Shock*. 2017 Sep;48(3):294-300.
- 5 Moran J, Santamaria J. Reconsidering lactate as a sepsis risk biomarker. *PLoS One*. 2017 Oct 3;12(10):e0185320.
 - 6 Moran J, Solomon P: Procalcitonin as a Biomarker for Infection and Sepsis: Yet Again. *Pulmonary and Critical Care Medicine*. 2017, 2(2).
 - 7 Moran J, Solomon PJ: Volatility in High-Frequency Intensive Care Mortality Time Series: Application of Univariate and Multivariate GARCH Models. *Open Journal of Applied Sciences*. 2017, 7:385-411.
 - 8 Peake SL, Delaney A, Bailey M, Bellomo R; ARISE Investigators. Potential Impact of the 2016 Consensus Definitions of Sepsis and Septic Shock on Future Sepsis Research. *Ann Emerg Med*. 2017 Jun 7. pii: S0196-0644(17)30423-7.
 - 9 Peake SL, Delaney A, Bailey M, Bellomo R; ARISE Investigators. Potential Impact of the 2016 Consensus Definitions of Sepsis and Septic Shock on Future Sepsis Research. *Ann Emerg Med*. 2017 Oct;70(4):553-561.
 - 10 PRISM Investigators, Rowan KM, Angus DC, Bailey M, Barnato AE, Bellomo R, Canter RR, Coats TJ, Delaney A, Gimbel E, Grieve RD, Harrison DA, Higgins AM, Howe B, Huang DT, Kellum JA, Mouncey PR, Music E, Peake SL, Pike F, Reade MC, Sadique MZ, Singer M, Yealy DM. Early, Goal-Directed Therapy for Septic Shock – A Patient-Level Meta-Analysis. *N Engl J Med*. 2017 Jun 8;376(23):2223-2234.
 - 11 Santamaria JD, Duke GJ, Pilcher DV, Cooper DJ, Moran J, Bellomo R; Discharge and Readmission Evaluation (DARE) Study Group. Readmissions to Intensive Care: A Prospective Multicenter Study in Australia and New Zealand. *Crit Care Med*. 2017 Feb;45(2):290-297.
 - 12 Sime FB, Hahn U, Warner MS, Tiong IS, Roberts MS, Lipman J, Peake SL, Roberts JA. Using Population Pharmacokinetic Modeling and Monte Carlo Simulations To Determine whether Standard Doses of Piperacillin in Piperacillin-Tazobactam Regimens Are Adequate for the Management of Febrile Neutropenia. *Antimicrob Agents Chemother*. 2017 Oct 24;61(11).
- disease and sleep apnea association of kidney disease with obstructive sleep apnea in a population study of men. *Sleep*. 2017 Jan 1;40(1).
- 3 Agewall S, Beltrame J, Reynolds H, Niessner A, Rosano G, Caforio A, De Caterina R, Zimarino M, Roffi M, Kjeldsen K, Atar D, Kaski J, Sechtem U, Tornvall P. ESC working group position paper on myocardial infarction with non-obstructive coronary arteries. *European Heart Journal*. 2017 Jan; 38(3):143-153.
 - 4 Aliprandi-Costa B, Sockler J, Kritharides L, Morgan L, Snell L, Gullick J, Brieger D, Ranasinghe I. The contribution of the composite of clinical process indicators as a measure of hospital performance in the management of acute coronary syndromes-insights from the CONCORDANCE registry. *European Heart Journal Quality of Care & Clinical Outcomes*. 2017 Jan; 3(1):37-46.
 - 5 Appleton SL, Gill TK, Lang CJ, Taylor AW, McEvoy RD, Stocks NP, González-Chica DA, Adams RJ. Prevalence and co-morbidity of sleep conditions in Australian adults: 2016 Sleep Health Foundation national survey. *Sleep Health*. DOI: <http://dx.doi.org/10.1016/j.sleh.2017.10.006> Epub 2017 Dec 6.
 - 6 Astley CM, Ranasinghe I, Brieger D, Ellis CJ, Redfern J, Briffa T, Aliprandi-Costa B, Howell T, Bloomer SG, Gamble G, Driscoll A, Hyun KK, Hammett CJ, Chew DP. Expertise and infrastructure capacity impacts acute coronary syndrome outcomes. *Aust Health Rev*. 2017 Apr 20. doi: 10.1071/AH16244. [Epub ahead of print]
 - 7 Beltrame J. Coronary microvascular dysfunction in acute ST elevation myocardial infarction. *Coronary Artery Disease*. 2017;28(1): 3-4.
 - 8 Beltrame J, Crea F, Kaski J, Ogawa H, Ong P, Sechtem U, Shimokawa H, Bairey Merz C. Coronary Vasomotion Disorders International Study Group (COVADIS). International standardization of diagnostic criteria for vasospastic angina. *European Heart Journal*. 2017 Sep; 38(33):2565-2568.
 - 9 Bucholz EM, Strait KM, Dreyer RP, Lindau ST, D'Onofrio G, Geda M, Spatz ES, Beltrame JF, Lichtman JH, Lorenze NP, Bueno H, Krumholz HM. Editor's Choice-Sex differences in young patients with acute myocardial infarction: A VIRGO study analysis. *Eur Heart J Acute Cardiovasc Care*. 2017 Oct;6(7):610-622.
 - 10 Cao Y, Taylor AW, Wittert G, Adams R, Shi Z. Dietary patterns and sleep parameters in a cohort of community dwelling Australian men. *Asia Pac J Clin Nutr*. 2017;26(6):1158-1169.
 - 11 Cao Y, Taylor AW, Zhen S, Adams R, Appleton S, Shi Z. Soy Isoflavone Intake and Sleep Parameters over 5 Years among Chinese Adults: Longitudinal Analysis from the Jiangsu Nutrition Study. *J Acad Nutr Diet*. 2017 Apr;117(4):536-544.e2.
 - 12 Cai S, Coates AM, Buckley JD, Berry NM, Burres L, Beltrame J, Howe PR, Schrader G. There is no association between the Omega-3 Index and

THE UNIVERSITY OF ADELAIDE DISCIPLINE OF MEDICINE, TQEH

- 1 Adams R, Appleton S, Taylor AW, Gill T, Lang C, McEvoy R, Antic N. Sleep health of Australian adults in 2016: results of the 2016 Sleep Health Foundation national survey. *Sleep Health*. 2017 Feb; 3(1):35-42.
- 2 Adams R, Appleton S, Vakulin A, Hanly P, McDonald S, Martin S, Lang C, Taylor A, McEvoy R, Antic N, Catcheside P, Vincent A, Wittert G. Chronic kidney

PUBLICATIONS 2017 cont.

- Depressive Symptoms in patients with heart disease who are low fish consumers. *Heart Lung Circ.* 2017 Mar;26(3):276-284.
- 13 Cao Y, Wittert G, Taylor A, Adams R, Appleton S, Shi Z. Nutrient patterns and chronic inflammation in a cohort of community dwelling middle-aged men. *Clinical Nutrition.* 2017 Aug;36 (4):1040-1047.
 - 14 Carroll SJ, Paquet C, Howard N, Coffee NT, Adams RJ, Taylor AW, Niyonsenga T, Daniel M. Local descriptive body weight and dietary norms, food availability and 10-year change in glycosylated haemoglobin in an Australian population-based biomedical cohort. *BMC Public Health.* (2017) 17 149.
 - 15 Crea F, Bairey Merz C, Beltrame J, Kaski J, Ogawa H, Ong P, Sechtem U, Shimokawa H, Camici P. Coronary Vasomotion Disorders International Study Group (COVADIS). The parallel tales of microvascular angina and heart failure with preserved ejection fraction: a paradigm shift. *European Heart Journal.* 2017 Feb; 38(7):473-477.
 - 16 Gonzalez-Chica D, Adams R, Dal Grande E, Avery J, Hay P, Stocks N. Lower educational level and unemployment increase the impact of cardiometabolic conditions on the quality of life: results of a population-based study in South Australia. *Quality of Life Research.* 2017 Jun;26(6):1521-1530.
 - 17 Grodzinsky A, Kosiborod M, Tang F, Jones P, McGuire D, Spertus J, Beltrame JF, Jang J, Goyal A, Butala N, Yeh R, Arnold S. Residual angina after elective percutaneous coronary intervention in patients with diabetes mellitus. *Circulation Cardiovascular Quality Outcomes.* 2017 Sep; 10(9):1-7.
 - 18 Kaambwa B, Ratcliffe J, Horsfall M, Astley C, Karnon J, Coates P, Arstall M, Zeitz C, Worthley M, Beltrame J, Chew D. Cost effectiveness of high-sensitivity troponin compared to conventional troponin among patients presenting with undifferentiated chest pain: A trial based analysis. *International Journal of Cardiology.* 2017 Jul 238:144-150.
 - 19 Lang CJ, Appleton SL, Vakulin A, McEvoy RD, Vincent A, Wittert GA, Martin SA, Taylor AW, Antic NA, Catcheside PG, Adams RJ. Associations of Obstructive sleep apnea and excessive daytime sleepiness with depression: An Australian population study. *J Clin Sleep Med.* 2017 Apr;13(4):575-582.
 - 20 Lang CJ, Appleton SL, Vakulin A, McEvoy RD, Wittert GA, Martin SA, Catcheside PG, Antic NA, Lack L, Adams RJ. Co-morbid OSA and insomnia increases depression prevalence and severity in men. *Respirology.* 2017 Oct;22(7):1407-1415.
 - 21 Lee C, Woodward M, Pandeya N, Adams R, Barrett-Connor E, Boyko E, Eliasson M, Franco L, Fujimoto W, Gonzalez C, Howard B. Comparison of relationships between four common anthropometric measures and incident diabetes. *Diabetes Research Clinical Practice.* 2017 Oct 1;132:36-44.
 - 22 Li J, Appleton S, Gill T, Vakulin A, Wittert G, Antic N, Taylor A, Adams R, Hill C. Association of musculoskeletal joint pain with obstructive sleep apnea, daytime sleepiness, and poor sleep quality in men. *Arthritis Care Research (Hoboken).* 2017 May, 69(5):742-747.
 - 23 Li JJ, Newbury JW, Adams RJ. Sarcopenia: a potential cause and consequence of type 2 diabetes in Australia's ageing population? *Med J Aust.* 2017 Jul 17;207(2):88-89.
 - 24 Marathe J, Woodroffe J, Ogden K, Hughes C. How do regional and rural general practitioners use the internet to gather patient information? *Australian Journal of Rural Health.* 2017 Feb;25(1):60-61.
 - 25 Martin S, Appleton S, Adams R, Taylor A, Vincent A, Brook N, Catcheside P, Vakulin A, McEvoy R, Antic N, Wittert G. Erectile dysfunction is independently associated with apnea-hypopnea index and oxygen desaturation index in elderly, but not younger, community-dwelling men. *Sleep Health.* 2017 Aug; 3(4):250-256.
 - 26 Melaku YA, Gill TK, Appleton SL, Taylor AW, Adams R, Shi Z. Prospective Associations of Dietary and Nutrient Patterns with Fracture Risk: A 20-Year Follow-Up Study. *Nutrients.* 2017 Oct 31;9(11).
 - 27 Melaku YA, Appleton SL, Gill TK, Ogbo FA, Buckley E, Shi Z, Driscoll T, Adams R, Cowie BC, Fitzmaurice C. Incidence, prevalence, mortality, disability-adjusted life years and risk factors of cancer in Australia and comparison with OECD countries, 1990-2015: findings from the Global Burden of Disease Study 2015. *Cancer Epidemiol.* 2017 Dec 4;52:43-54.
 - 28 Minges KE, Strait KM, Owen N, Dunstan DW, Camhi SM, Lichtman J, Geda M, Dreyer RP, Bueno H, Beltrame JF, Curtis JP, Krumholz HM. Gender differences in physical activity following acute myocardial infarction in adults: A prospective, observational study. *Eur J Prev Cardiol.* 2017 Jan;24(2):192-203.
 - 29 Myles H, Myles N, Liu D, Adams R, Wittert G, Antic NA, Galletly C. How long will we sleep on OSA in Schizophrenia? *Aust N Z J Psychiatry.* 2017 Jan;51(1):95-96.
 - 30 Myles N, Large M, Myles H, Adams R, Liu D, Galletly C. Australia's economic transition, unemployment, suicide and mental health needs. *Aust N Z J Psychiatry.* 2017 Feb;51(2):119-123.
 - 31 NCD Risk Factor Collaboration (NCD-RisC) including Adams RJ. Worldwide trends in body-mass index, underweight, overweight, and obesity from 1975 to 2016: a pooled analysis of 2416 population-based measurement studies in 128.9 million children, adolescents, and adults. *Lancet.* 2017 Dec 16;390(10113):2627-2642.
 - 32 Ong P, Camici PG, Beltrame JF, Crea F, Shimokawa H, Sechtem U, Kaski JC, Bairey Merz CN and Coronary Vasomotion Disorders International Study G. International standardization of diagnostic criteria for microvascular angina. *Int J Cardiol.* 2018;250:16-20.
 - 33 Pasupathy S, Tavella R, Beltrame J. Myocardial

- Infarction with Nonobstructive Coronary Arteries (MINOCA): The Past, Present, and Future Management. *Circulation*. 2017 Apr; 135 (16) pp 1490-1493.
- 34** Pasupathy S, Tavella R, Grover S, Raman B, Procter NEK, Du YT, Mahadavan G, Stafford I, Heresztyn T, Holmes A, Zeitz C, Arstall M, Selvanayagam JB, Horowitz JD, Beltrame JF. Early use of N-Acetylcysteine (NAC) with Nitrate Therapy in Patients Undergoing Primary Percutaneous Coronary Intervention for ST-Segment Elevation Myocardial Infarction Reduces Myocardial Infarct Size (The NACIAM Trial). *Circulation*. 2017 Sep 5;136(10):894-903.
- 35** Reynolds AC, Appleton SL, Gill TK, Taylor AW, McEvoy RD, Ferguson SA, Adams RJ. Sickness absenteeism is associated with sleep problems independent of sleep disorders: results of the 2016 Sleep Health Foundation national survey. *Sleep Health*. 2017 Oct;3(5):357-361.
- 36** Roscioli E, Tran HB, Jersmann H, Nguyen PT, Hopkins E, Lester SE, Farrow N, Zalewski PD, Reynolds PN, Hodge S. The Uncoupling of Autophagy and Zinc Homeostasis in Airway Epithelial Cells as a Fundamental Contributor to COPD. *Am J Physiol Lung Cell Mol Physiol*. 2017 Sep 1;313(3):L453-L465.
- 37** Roscioli E, Jersmann HP, Lester S, Badiel A, Fon A, Zalewski P, Hodge S. Zinc deficiency as a codeterminant for airway epithelial barrier dysfunction in an ex vivo model of COPD. *Int J Chron Obstruct Pulmon Dis*. 2017 Dec 5;12:3503-3510.
- 38** Roscioli E, Hamon R, Ruffin RE, Grant J, Hodge S, Zalewski P, Lester S. BIRC3 single nucleotide polymorphism associate with asthma susceptibility and the abundance of eosinophils and neutrophils. *J Asthma*. 2017 Mar;54(2):116-124.
- 39** Ross JS, Bates J, Parzynski CS, Akar JG, Curtis JP, Desai NR, Freeman JV, Gamble GM, Kuntz R, Li SX, Marinac-Dabic D, Masoudi FA, Normand ST, Ranasinghe I, Shaw RE, Krumholz HM. Can machine learning complement traditional medical device surveillance? A case study of dual-chamber implantable cardioverter-defibrillators. *Med Devices (Auckl)*. 2017 Aug 16;10:165-188.
- 40** Shi Z, Atlantis E, Taylor AW, Gill TK, Price K, Appleton S, Wong ML, Licinio J. SSRI antidepressant use potentiates weight gain in the context of unhealthy lifestyles: results from a 4-year Australian follow-up study. *BMJ Open*. 2017 Aug 11;7(8):e016224.
- 41** Smolderen K, Spertus J, Gosch K, Dreyer R, D'Onofrio G, Lichtman J, Geda M, Beltrame J, Safdar B, Bueno H, Krumholz H. Depression treatment and health status outcomes in young patients with acute myocardial infarction: Insights from the virgo study (variation in recovery: role of gender on outcomes of young AMI patients). *Circulation*. 2017 May; 135(18):1762-1764.
- 42** Thompson MQ, Theou O, Yu S, Adams RJ, Tucker GR, Visvanathan R. Frailty prevalence and factors associated with the Frailty Phenotype and Frailty Index: Findings from the North West Adelaide Health Study. *Australas J Ageing*. 2017 Dec 4. doi: 10.1111/ajag.12487. [Epub ahead of print]
- 43** Zhou B, Bentham J, Di Cesare M ... Adams R, Jamrozik K, Taylor A, et al. Worldwide trends in blood pressure from 1975 to 2015: A pooled analysis of 1479 population-based measurement studies with 19.1 million participants. *The Lancet*. 2017 Jan;389(10064):37-55.
- 44** Xu X, Bao H, Strait KM, Edmondson DE, Davidson KW, Beltrame JF, Bueno H, Lin H, Dreyer RP, Brush JE, Spertus JA, Lichtman JH, D'Onofrio G and Krumholz HM. Perceived Stress After Acute Myocardial Infarction: A Comparison Between Young and Middle-Aged Women Versus Men. *Psychosom Med*. 2017;79:50-58.

NEUROLOGY UNIT, TQEH

- 1** Balabanski A, Goldsmith K, Giarola B, Buxton D, Castle S, McBride K, Brady S, Burrow J, Thrift A, Koblar S et al. Excessive stroke incidence in Aboriginal people in Central Australia: a retrospective population-based study (conference paper). *Int J Stroke*. 2017;12(Suppl 3):30-30.
- 2** Bivard A, Levi C, Lin L, Cheng X, Aviv R, Spratt NJ, Lou M, Kleinig T, O'Brien B, Butcher K, Zhang J, Jannes J, Dong Q, Parsons M. Validating a Predictive Model of Acute Advanced Imaging Biomarkers in Ischemic Stroke. *Stroke*. 2017 Mar;48(3):645-650.
- 3** Bladin C, Bagot K, Kim J, Vu M, Cadigan G, Castley H, Evans M, Grimley R, Jude M, Jannes J, Kleinig T, Levi C, Waters S, Wesseldine A, McGowan S, Stirling S and Cadilhac D. Working towards "no stroke untreated": planning for the Australian Telestroke Network. *Int J Stroke*. 2017; 12(3S):42.
- 4** Choy FC, Klarić TS, Koblar SA, Lewis MD. miR-744 and miR-224 Downregulate Npas4 and Affect Lineage Differentiation Potential and Neurite Development During Neural Differentiation of Mouse Embryonic Stem Cells (First Online: 17 May 2016). *Mol Neurobiol*. 2017; 54(5):3528-3541.
- 5** Dowie G, Toner P, Kleinig T, Jannes J, Cheong E. A nurse coordinated, investigation outsourced 'One Stop TIA Clinic' is feasible and economic in a resource-constrained setting. *Int J Stroke*. 2017; 12(3S):48.
- 6** Easton DJ, Aunes M, Albers GW et al., incl. Jannes J, for the SOCRATES Steering Committee and Investigators. Risk for Major Bleeding in Patients Receiving Ticagrelor Compared with Aspirin After TIA or Acute Ischemic Stroke in the SOCRATES Study. *Circulation*. 2017 Dec 5; 136(23):907-916.
- 7** Goldsmith K, Balabanski A, Giarola B, Buxton D, Castle S, McBride K, Brady S, Burrow J, Thrift A, Koblar S et al. Excessive stroke incidence in Aboriginal people in Central Australia: a retrospective population-based study. *Internal Medicine Journal*. 2017;47:7-7.
- 8** Kawano H, Bivard A, Lin L, Ma H, Cheng X, Aviv R, O'Brien B, Butcher K, Lou M, Zhang J, Jannes J, Dong Q,

PUBLICATIONS 2017 cont.

- Levi CR, Parsons MW. Pre-treatment Perfusion CT in Stroke Thrombolysis Can Predict Disability-free Life Stroke. 017 Feb; 48(Suppl 1):AWP248.
- 9 Kawano H, Bivard A, Lin L, Ma H, Cheng X, Aviv R, O'Brien B, Butcher K, Lou M, Zhang J, Jannes J, Dong Q, Levi CR, Parsons MW. Perfusion computed tomography in patients with stroke thrombolysis. *Brain*. 2017;140(3):684-691.
 - 10 Klarić TS, Jaehne EJ, Koblar SA, Baune BT, Lewis MD. Alterations in anxiety and social behaviour in Npas4 deficient mice following photochemically-induced focal cortical stroke. *Behavioural Brain Research*. 2017;316:29–37.
 - 11 Koblar S, Cranwell M, Koblar S, Carnell B, Galletly C. Developing empathy: does experience through simulation improve medical student empathy? *Medical Science Educator*. 2017; <https://doi.org/10.1007/s40670-017-0488-z>. Online ISSN 2156-8650, Springer US.
 - 12 Koblar SA, Nagpal A, Choy FC, Hamilton-Bruce MA, Hillier SL. Regenerative neurology: meeting the need of patients with disability after stroke. *Medical Journal of Australia*. 2017; 206(8):334-336.
 - 13 Li JJ, Hamilton-Bruce MA, Peterson R, Howell S, Koblar SA. Medical Student Perspective of Undergraduate (Honours) Research Training. *ERGO Journal*. 2017; 4(1):23-28.
 - 14 Milton A, Kleinig T, Nagpal A, Young A-M, Kim S, Koblar S, Hamilton-Bruce M, Jannes J. Stroke Unit Access Update (Poster abstract) *Int J Stroke*. 2017; 12(Suppl 3):43.
 - 15 Nagpal A, Choy FC, Howell S, Hillier S, Chan F, Hamilton-Bruce MA, Koblar SA. Safety and effectiveness of stem cell therapies in early-phase clinical trials in stroke: a systematic review and meta-analysis. *Stem Cell Res Ther*. 2017 Aug 30; 8(1):191. doi: 10.1186/s13287-017-0643-x.
 - 16 Nagpal A, Juttner C, Hamilton-Bruce MA, Rolan P, Koblar SA. Stem cell therapy clinical research: A regulatory conundrum for academia. *Adv Drug Deliv Rev*. 2017 Dec 1; 122:105-114. doi: 10.1016/j.addr.2016.10.001.
 - 17 Newbury J, Kleinig T, Leyden J, Arima H, Castle S, Cranefield J, Paterson T, Jannes J, Crotty M, Anderson CS. Stroke Epidemiology in an Australian Rural Cohort (SEARCH). *Int J Stroke*. 2017 Feb;12(2):161-168. doi: 10.1177/1747493016670174.
 - 18 Nottage C, Hamilton-Bruce MA. Research biobanks and privacy disruptions – What needs to change and how? *Int J Stroke*. 2017; 12(Suppl 3):49.
 - 19 Pandos O, Milton A, Nagpal A, Kleinig T, Jannes J, Koblar SA, Hamilton-Bruce MA. Legislative requirements increase availability of access to certified stroke unit care. *Int J Stroke*. 2017; 12(Suppl 3):41.
 - 20 Rannikmäe K, Sivakumaran V, Millar H et al. incl. Koblar S on behalf of the Stroke Genetics Network, METASTROKE Collaboration, and International Stroke Genetics Consortium. COL4A2 is associated with lacunar ischemic stroke and deep ICH – Meta-analyses among 21,500 cases and 40,600 controls. *Neurology*. 2017; 89 (17):1829-1839.
 - 21 Sutton J, Koblar S, Hamilton-Bruce MA, Jannes J, Karnon J, Sutton DA, Milton AG, Kramer S. Advanced management services for transient ischaemic attacks and minor stroke. *Cochrane Database of Systematic Reviews*. 2017; Issue 5. Art. No.: CD012180. DOI: 10.1002/14651858. CD012180.
 - 22 Traylor M, Malik R, Nalls MA, et al. (International Stroke Genetics Consortium incl. Hamilton-Bruce MA). Genetic variation at 16q24.2 is associated with small vessel stroke. *Ann Neurol*. 2017 Mar;81(3):383-394.
 - 23 Tu HT, Chen Z, Swift C, Churilov L, Guo R, Liu X, Jannes J, Mok V, Freedman B, Davis SM, Yan B. Smartphone electrographic monitoring for atrial fibrillation in acute ischemic stroke and transient ischemic attack. *Int J Stroke*. 2017 Mar; 12(7): 786-789.
 - 24 Waters M, Kleinig T, Cheong E, Jannes J. Ischaemic stroke may symptomatically manifest as migraine aura. *Int J Stroke*. 2017; 12(3S):37.

THE UNIVERSITY OF ADELAIDE DISCIPLINE OF PSYCHIATRY / TQEH PSYCHIATRY

PSYCHIATRY, TQEH

- 1 Bastiampillai T, Tonnu O, Tibrewal P, Dhillon R. Why not clozapine for the patient with schizophrenia at risk of suicide? *Asian Journal of Psychiatry*. 2017 Apr;26: 6-7.
- 2 Bastiampillai T, Dalwood J, Dhillon R, Tibrewal P. Why not rapid clozapine dose titration? *Asian Journal of Psychiatry*. 2017 Apr; 26:13.
- 3 Dhillon R, Bastiampillai T, Cao CZ, Eckert TG, Tibrewal P. Aripiprazole and Impulse-Control Disorders: A Recent FDA Warning and a Case Report. *Prim Care Companion CNS Disord*. 2017 Jan 12;19(1).
- 4 Galvez V, Hadzi-Pavlovic D, Waite S, Loo C. Seizure threshold increases can be predicted by EEG quality in right unilateral ultrabrief ECT. *European Archives of Psychiatry & Clinical Neuroscience*. 2017 Dec; 267(8):795-801.
- 5 Low D, Xu J, Tibrewal P, Bastiampillai T, Dhillon R. Parenteral lorazepam's unavailability in Australia and the impact for catatonic patients. *Australian and New Zealand Journal of Psychiatry*. 2017 Feb; 51(2): 198.
- 6 Nguyen B, Du C, Bastiampillai T, Dhillon R, Tibrewal P. Successful clozapine re-challenge following myocarditis. *Australas Psychiatry*. 2017 Aug; 25(4):385-386.
- 7 Tibrewal P, Cheng R, Bastiampillai T, Dhillon R, Okungu A, Campbell J. Lurasidone-Induced Dystonia. *Prim Care Companion CNS Disord*. 2017 Jun 29;19(3).
- 8 Tibrewal P, Bastiampillai T, Kannampuzha C, Hancox J, Dhillon R. Aripiprazole-induced neuroleptic malignant syndrome. *Asian J Psychiatr*. 2017 Jun;27:5-6.

PUBLICATIONS 2017 cont.

- 9 [Tibrewal P](#), [Bastiampillai T](#), [Dhillon R](#), Cheng R, Fonseka HT. Use of zuclopenthixol in the treatment of aggression in Huntington's disease. *Asian J Psychiatr*. 2017 Apr;26:152-153.
- 10 [Tibrewal P](#), [Bastiampillai T](#), [Dhillon R](#), Okungu A, Asokan M. Schizoaffective disorder, catatonia and white matter changes - Revisiting the microglial hypothesis. *Aust N Z J Psychiatry*. 2017 Oct; 51(10):1056-1057.
- 11 [Tibrewal P](#), Cheng R, [Bastiampillai T](#), [Dhillon R](#), Okungu A, Campbell J. Lurasidone-induced dystonia. *Primary Care Companion to the Journal of Clinical Psychiatry*. 2017 Jun 29;19(3).
- 12 [Tibrewal P](#), Loo Y, [Dhillon R](#), [Bastiampillai T](#), Parthasarathy B. Neuropsychiatric aspects of frontal lobe meningioma. *Asian Journal of Psychiatry*. 2017 Dec; 30: 37-38.

THE UNIVERSITY OF ADELAIDE, THE DISCIPLINE OF PSYCHIATRY

- 1 Azmeraw TA, Schubert KO, Hou L, [Clark SR](#) ...[Baune BT](#) (2017) A polygenic score for Schizophrenia and HLA and inflammation genes predict response to lithium in Bipolar Affective Disorder. *Jama Psychiatry*. Nov 9. doi: 10.1001/jamapsychiatry.2017.3433.
- 2 Amare AT, Schubert KO, Klingler-Hoffmann M, Cohen-Woods S, [Baune BT](#). The genetic overlap between mood disorders and cardiometabolic diseases: a systematic review of genome wide and candidate gene studies. *Transl Psychiatry*. 2017 Jan 24;7(1):e1007.
- 3 [Baune BT](#). Does training of cognitive functions help affective remediation? *Aust N Z J Psychiatry*. 2017 Apr;51(4):320-321.
- 4 [Baune BT](#). Taking a look into the future: Do clinical and neurobiological trajectories tell us more than what we already know? *Aust N Z J Psychiatry*. 2017 May;51(5):429-430.
- 5 Cha DS, Carmona NE, Subramaniapillai M, Mansur RB, Lee Y, Hon Lee J, Lee J, Rosenblat JD, Shekotikhina M, Park C, Rong C, Greer TL, Lam R, [Baune BT](#), Harrison J, McIntyre RS. Cognitive impairment as measured by the THINC-integrated tool (THINC-it): Association with psychosocial function in major depressive disorder. *J Affect Disord*. 2017 Jun 23;222:14-20.
- 6 [Clark S](#), Amminger P, Lin A, Pantelis C, Yung A, Wood S, [Baune BT](#), McGorry PD, Nelson B. 193. Probabilistic Modelling of Transition to Psychosis Using Clinical and Cognitive Variables in the Personal Assessment and Crisis Evaluation ("pace 400") Study. *Schizophrenia Bulletin*. 2017 Mar 1;43(suppl_1):S101.
- 7 [Clark SR](#), Warren NS, Kim G, Jankowiak D, Schubert KO, Kisely S, Forrester T, [Baune BT](#), Siskind DJ. Elevated clozapine levels associated with infection: A systematic review. *Schizophr Res*. 2017 Apr 6. pii: S0920-9964(17)30185-8.
- 8 Conell J, Bauer R, Glenn T, Alda M, Arda R, [Baune BT](#) et al. Erratum to: Online information seeking by patients with bipolar disorder: results from an international multisite survey. *Int J Bipolar Disord*. 2017 Dec;5(1):18.
- 9 Culverhouse RC, Saccone NL, Horton AC, Ma Y, Anstey KJ, Banaschewski T, Burmeister M, Cohen-Woods S, Etain B, Fisher HL, Goldman N, Guillaume S, Horwood J, Juhasz G, Lester KJ, Mandelli L, Middeldorp CM, Olié E, Villafuerte S, [Air TM](#), Araya R, Bowes L, Burns R, Byrne EM, Coffey C, Coventry WL, Gawronski KA, Gleit D, Hatzimanolis A, Hottenga JJ, Jaussent I, Jawahar C, Jennen-Steinmetz C, Kramer JR, Lajnef M, Little K, Zu Schwabedissen HM, Nauck M, Nederhof E, Petschner P, Peyrot WJ, Schwahn C, Sinnamon G, Stacey D, Tian Y, Toben C, Van der Auwera S, Wainwright N, Wang JC, Willemsen G, Anderson IM, Arolt V, Åslund C, Bagdy G, [Baune BT](#), Bellivier F, Boomsma DI, Courtet P, Dannlowski U, de Geus EJ, Deakin JF, Easteal S, Eley T, Fergusson DM, Goate AM, Gonda X, Grabe HJ, Holzman C, Johnson EO, Kennedy M, Laucht M, Martin NG, Munafò MR, Nilsson KW, Oldehinkel AJ, Olsson CA, Ormel J, Otte C, Patton GC, Penninx BW, Ritchie K, Sarchiapone M, Scheid JM, Serretti A, Smit JH, Stefanis NC, Surtees PG, Völzke H, Weinstein M, Whooley M, Nurnberger JI Jr, Breslau N, Bierut LJ. Collaborative meta-analysis finds no evidence of a strong interaction between stress and 5-HTTLPR genotype contributing to the development of depression. *Mol Psychiatry*. 2017 Apr 4. doi: 10.1038/mp.2017.44. [Epub ahead of print] PubMed PMID: 28373689.
- 10 Di Biase MA, Cropley VL, [Baune BT](#), Olver J, Amminger GP, Phassouliotis C, Bousman C, McGorry PD, Everall I, Pantelis C, Zalesky A. White matter connectivity disruptions in early and chronic schizophrenia. *Psychol Med*. 2017 May 22:1-14.
- 11 Eyre HA, Siddarth P, van Dyk K, St Cyr N, [Baune BT](#), Barrio JR, Small GW, Lavretsky H. Neural correlates of apathy in late-life depression: a pilot [(18) F]FDNP positron emission tomography study. *Psychogeriatrics*. 2017 May;17(3):186-193.
- 12 Frodl T, Janowitz D, Schmaal L, Tozzi L, Dobrowolny H, Stein DJ, Veltman DJ, Wittfeld K, van Erp TG, Jahanshad N, Block A, Hegenscheid K, Völzke Hatton SN, Hickie IB, Frey EM, Carballo A, Brooks SJ, Vuletic D, Uhlmann A, Veer IM, Walter H, Schnell K, Grotegerd D, Arolt V, Kugel H, Schramm E, Konrad C, Zurowski B, [Baune BT](#), van der Wee NJ, van Tol MJ, Penninx BW, Thompson PM, Hibar DP, Dannlowski U, Grabe HJ. Childhood adversity impacts on brain subcortical structures relevant to depression. *J Psychiatr Res*. 2017 Mar;86:58-65.
- 13 García-González J, Tansey KE, Hauser J, Henigsberg N, Maier W, Mors O, Placentino A, Rietschel M, Souery D, Žagar T, Czerski PM, Jerman B, Buttenschön HN, Schulze TG, Zobel A, Farmer A, Aitchison KJ, Craig I, McGuffin P, Giupponi M, Perroud N, Bondolfi G, Evans D, O'Donovan M, Peters TJ, Wendland JR, Lewis G, Kapur S, Perlis R, Arolt V, Domschke K; Major Depressive Disorder Working Group of the Psychiatric Genomic Consortium, Breen G, Curtis C, Sang-Hyuk L, Kan C, Newhouse S, Patel H, [Baune BT](#), Uher R, Lewis CM, Fabbri C.

PUBLICATIONS 2017 cont.

- Pharmacogenetics of antidepressant response: A polygenic approach. *Prog Neuropsychopharmacol Biol Psychiatry*. 2017 Apr 3;75:128-134.
- 14** GBD 2015 Healthcare Access and Quality Collaborators. Electronic address: cjlm@uw.edu; GBD 2015 Healthcare Access and Quality Collaborators. Healthcare Access and Quality Index based on mortality from causes amenable to personal health care in 195 countries and territories, 1990-2015: a novel analysis from the Global Burden of Disease Study 2015. *Lancet*. 2017 Jul 15; 390(10091):231-266.
- 15** Grzeskowiak LE, Smith B, Roy A, Schubert KO, [Baune BT](#), Dekker GA, Clifton VL. Impact of a history of maternal depression and anxiety on asthma control during pregnancy. *J Asthma*. 2017 Jan 11:1-8.
- 16** Hibar DP, Westlye LT, Doan NT, Jahanshad N, Cheung JW, Ching CRK, Versace A, Bilderbeck AC, Uhlmann A, Mwangi B, Krämer B, Overs B, Hartberg CB, Abé C, Dima D, Grotegerd D, Sprooten E, Bøen E, Jimenez E, Howells FM, Delvecchio G, Temmingh H, Starke J, Almeida JRC, Goikolea JM, Houenou J, Beard LM, Rauer L, Abramovic L, Bonnin M, Ponteduro MF, Keil M, Rive MM, Yao N, Yalin N, Najt P, Rosa PG, Redlich R, Trost S, Hagenaars S, Fears SC, Alonso-Lana S, van Erp TGM, Nickson T, Chaim-Avancini TM, Meier TB, Elvsåshagen T, Haukvik UK, Lee WH, Schene AH, Lloyd AJ, Young AH, Nugent A, Dale AM, Pfennig A, McIntosh AM, Lafer B, [Baune BT](#), et al. Cortical abnormalities in bipolar disorder: an MRI analysis of 6503 individuals from the ENIGMA Bipolar Disorder Working Group. *Mol Psychiatry*. 2017 May 2. doi: 10.1038/mp.2017.73. [Epub ahead of print] PubMed PMID: 28461699.
- 17** Jackson MR, Lee K, Mattiske T, Jaehne EJ, Ozturk E, [Baune BT](#), O'Brien TJ, Jones N, Shoubridge C. Extensive phenotyping of two ARX polyalanine expansion mutation mouse models that span clinical spectrum of intellectual disability and epilepsy. *Neurobiol Dis*. 2017 Jun 8;105:245-256.
- 18** Jukić MM, Opel N, Ström J, Carrillo-Roa T, Miksys S, Novalen M, Renblom A, Sim SC, Peñas-Lledó EM, Courtet P, Llerena A, [Baune BT](#), de Quervain DJ, Papassotiropoulos A, Tyndale RF, Binder EB, Dannlowski U, Ingelman-Sundberg M. Elevated CYP2C19 expression is associated with depressive symptoms and hippocampal homeostasis impairment. *Mol Psychiatry*. 2017 Apr 18. doi: 10.1038/mp.2017.93. [Epub ahead of print] PubMed PMID: 28416806.
- 19** Klarić TS, Jaehne EJ, Koblar SA, [Baune BT](#), Lewis MD. Alterations in anxiety and social behaviour in Npas4 deficient mice following photochemically-induced focal cortical stroke. *Behav Brain Res*. 2017 Jan 1;316:29-37.
- 20** Mavros Y, Gates N, Wilson GC, Jain N, Meiklejohn J, Brodaty H, Wen W, Singh N, [Baune BT](#), Suo C, Baker MK, Foroughi N, Wang Y, Sachdev PS, Valenzuela M, Fiararone Singh MA. Mediation of Cognitive Function Improvements by Strength Gains After Resistance Training in Older Adults with Mild Cognitive Impairment: Outcomes of the Study of Mental and Resistance Training. *J Am Geriatr Soc*. 2017 Mar;65(3):550-559.
- 21** Myles N, Myles H, [Clark SR](#), Bird R, Siskind D. Use of granulocyte-colony stimulating factor to prevent recurrent clozapine-induced neutropenia on drug rechallenge: A systematic review of the literature and clinical recommendations. *Aust N Z J Psychiatry*. 2017 Jul 1:4867417720516.
- 22** Opel N, Redlich R, Kaehler C, Grotegerd D, Dohm K, Heindel W, Kugel H, Thalamuthu A, Koutsouleris N, Arolt V, Teuber A, Wersching H, [Baune BT](#), Berger K, Dannlowski U. Prefrontal gray matter volume mediates genetic risks for obesity. *Mol Psychiatry*. 2017 May;22(5):703-710.
- 23** Parker G, Bassett D, Outhred T, Morris G, Hamilton A, Das P, [Baune BT](#), Berk M, Boyce P, Lyndon B, Mulder R, Singh AB, Malhi GS. Defining melancholia: A core mood disorder. *Bipolar Disord*. 2017 May;19(3):235-237.
- 24** Power RA, Tansey KE, Buttenschøn HN, Cohen-Woods S, Bigdeli T, Hall LS, Kutalik Z, Lee SH, Ripke S, Steinberg S, Teumer A, Viktorin A, Wray NR, Arolt V, [Baune BT](#) et al Genome-wide Association for Major Depression Through Age at Onset Stratification: Major Depressive Disorder Working Group of the Psychiatric Genomics Consortium. *Biol Psychiatry*. 2017 Feb 15;81(4):325-335.
- 25** Schubert KO, [Air T](#), [Clark SR](#), Grzeskowiak LE, Miller E, Dekker GA, [Baune BT](#), Clifton VL. Trajectories of anxiety and health related quality of life during pregnancy. *PLoS One*. 2017 Jul 24;12(7):e0181149.
- 26** Schubert KO, [Clark SR](#), Van LK, Collinson JL, [Baune BT](#). Depressive symptom trajectories in late adolescence and early adulthood: A systematic review. *Aust N Z J Psychiatry*. 2017 May;51(5):477-499.
- 27** Stacey D, Redlich R, Büschel A, Opel N, Grotegerd D, Zaremba D, Dohm K, Bürger C, Meinert SL, Förster K, Repple J, Kaufmann C, Kugel H, Heindel W, Arolt V, Dannlowski U, [Baune BT](#). TNF receptors 1 and 2 exert distinct region-specific effects on striatal and hippocampal grey matter volumes (VBM) in healthy adults. *Genes Brain Behav*. 2017 Mar;16(3):352-360.
- 28** Witt SH, Streit F, Jungkunz M, Frank J, Awasthi S, Reinbold CS, Treutlein J, Degenhardt F, Forstner AJ, Heilmann-Heimbach S, Dietl L, Schwarze CE, Schendel D, Strohmaier J, Abdellaoui A, Adolfsson R, Air TM, Akil H, Alda M, Alliey-Rodriguez N, Andreassen OA, Babadjanova G, Bass NJ, Bauer M, [Baune BT](#), et al. Genome-wide association study of borderline personality disorder reveals genetic overlap with bipolar disorder, major depression and schizophrenia. *Transl Psychiatry*. 2017 Jun 20;7(6):e1155.
- 29** Yu C, [Baune BT](#), Licinio J, Wong ML. A novel strategy for clustering major depression individuals using whole-genome sequencing variant data. *Sci Rep*. 2017 Mar 13;7:44389. doi: 10.1038/srep44389. PubMed PMID: 28287625; PubMed Central PMCID: PMC5347377.

PUBLICATIONS 2017 cont.

- 30 Yu C, [Baune BT](#), Licinio J, Wong ML. Single-nucleotide variant proportion in genes: a new concept to explore major depression based on DNA sequencing data. *J Hum Genet.* 2017 Apr;62(5):577-580.
- 31 Yu C, [Baune BT](#), Licinio J, Wong ML. Whole-genome single nucleotide variant distribution on genomic regions and its relationship to major depression. *Psychiatry Res.* 2017 Jun;252:75-79.
- 32 Yu C, [Baune BT](#), Wong ML, Licinio J. Investigation of copy number variation in subjects with major depression based on whole-genome sequencing data. *J Affect Disord.* 2017 Oct 1;220:38-42.
- 33 Yüksel D, Dietsche B, Forstner AJ, Witt SH, Maier R, Rietschel M, Konrad C, Nöthen MM, Dannlowski U, [Baune BT](#), Kircher T, Krug A. Polygenic risk for depression and the neural correlates of working memory in healthy subjects. *Prog Neuropsychopharmacol Biol Psychiatry.* 2017 Jun 15;79(Pt B):67-76.

RESPIRATORY MEDICINE UNIT AND CLINICAL PRACTICE UNIT, TQEH

- 1 [Carson KV](#), Ameer F, Sayehmiri K, Hnin K, van Agteren JE, Sayehmiri F, Brinn MP, Esterman AJ, Chang AB, [Smith BJ](#). Mass media interventions for preventing smoking in young people. *Cochrane Database Syst Rev.* 2017 Jun 2;6:CD001006.
- 2 [Carson-Chahhoud KV](#), Wakai A, [van Agteren JE](#), [Smith BJ](#), McCabe G, [Brinn MP](#), O'Sullivan R. Simple aspiration versus intercostal tube drainage for primary spontaneous pneumothorax in adults. *Cochrane Database Syst Rev.* 2017 Sep 7;9:CD004479. doi: 10.1002/14651858.CD004479.pub3.
- 3 Fawcett R, Porritt K, Campbell J, [Carson K](#). Experiences of parents and carers in managing asthma in children: a qualitative systematic review protocol. *JBIM Database Of Systematic Reviews And Implementation Reports.* 2017 Mar; 15(3):657-665.
- 4 Gould G, Patten C, Glover M, Kira A, [Jayasinghe H](#). Smoking in pregnancy among indigenous women in high-income countries: A narrative review. *Nicotine & Tobacco Research.* 2017;19(5):506-517.
- 5 Grzeskowiak LE, [Smith B](#), Roy A, Schubert KO, [Baune BT](#), Dekker GA, Clifton VL. Impact of a history of maternal depression and anxiety on asthma control during pregnancy. *J Asthma.* 2017 Jan 11:1-8.
- 6 Osadnik CR, Tee VS, [Carson-Chahhoud KV](#), Picot J, Wedzicha JA, [Smith BJ](#). Non-invasive ventilation for the management of acute hypercapnic respiratory failure due to exacerbation of chronic obstructive pulmonary disease. *Cochrane Database Syst Rev.* 2017; 7, Cd004104.
- 7 [Usmani Z](#), [Carson K](#), Heslop K, Esterman A, De Soyza A, [Smith B](#). Psychological therapies for the treatment of anxiety disorders in chronic obstructive pulmonary disease. *Cochrane Database of Systematic Reviews.* 2017 Mar 21;3:CD010673.
- 8 [Usmani ZA](#), [Carson KV](#), Heslop K, Esterman AJ, De Soyza A, [Smith BJ](#). Psychological therapies for the treatment of anxiety disorders in chronic obstructive pulmonary disease. *Cochrane Database Syst Rev.* 2017 Mar 21;3:CD010673.
- 9 [van Agteren JE](#), Hnin K, [Grosser D](#), [Carson KV](#), [Smith BJ](#). Bronchoscopic lung volume reduction procedures for chronic obstructive pulmonary disease. *Cochrane Database Syst Rev.* 2017 Feb 23;2:CD012158.

RHEUMATOLOGY UNIT, TQEH

- 1 Appleton C, Hawker G, [Hill C](#), Pope J. "Weighing in" on the Framingham Osteoarthritis Study: Measuring biomechanical and metabolic contributions to osteoarthritis. *Arthritis and Rheumatology.* 2017 Jun; 69(6):1127-1130.
- 2 [Black RJ](#), Goodman SM, [Ruediger C](#), [Lester S](#), Mackie SL, [Hill CL](#). A Survey of Glucocorticoid Adverse Effects and Benefits in Rheumatic Diseases: The Patient Perspective. *J Clin Rheumatol.* 2017 Dec;23(8):416-420.
- 3 [Black RJ](#), [Lester S](#), Buchbinder R, Barrett C, Lassere M, March L, [Whittle S](#), [Hill CL](#). Factors associated with oral glucocorticoid use in patients with rheumatoid arthritis: a drug use study from a prospective national biologics registry. *Arthritis Res Ther.* 2017 Nov 15;19(1):253.
- 4 [Black RJ](#), Robson J, Goodman SM, Hoon E, Lai L, Simon LS, Harrison E, O'Neill L, Richards P, Nelsen L, Nebefsky M, Mackie SL, [Hill CL](#). A Patient Reported Outcome Measure for Impact of Glucocorticoid Therapy In Adults with Inflammatory Diseases Is Needed: Report from the OMERACT 2016 Special Interest Group. *J Rheumatol.* 2017 Nov;44(11):1754-1758.
- 5 Boulous D, Ngian G, Rajadurai A, Elford K, Stevens W, Proudman S, Owen C, Roddy J, Nikpour M, Youssef P, [Hill C](#), Sahhar J. Long-term efficacy and tolerability of mycophenolate mofetil therapy in diffuse scleroderma skin disease. *International Journal of Rheumatic Diseases.* 2017;20(4):481-488.
- 6 Brito-Zerón P, Acar-Denizli N, Zeher M, Rasmussen A, Seror R, Theander E, Li X, Baldini C, Gottenberg JE, Danda D, Quartuccio L, Priori R, Hernandez-Molina G, Kruize AA, Valim V, Kvarnstrom M, Sene D, Gerli R, Praprotnik S, Isenberg D, Solans R, [Rischmueller M](#), Kwok SK, Nordmark G, Suzuki Y, Giacomelli R, Devauchelle-Pensec V, Bombardieri M, Hofauer B, Bootsma H, Brun JG, Fraile G, Carsons SE, Gheita TA, Morel J, Vollenveider C, Atzeni F, Retamozo S, Horvath IF, Sivils K, Mandl T, Sandhya P, De Vita S, Sanchez-Guerrero J, van der Heijden E, Trevisani VFM, Wahren-Herlenius M, Mariette X, Ramos-Casals M; EULAR-SS Task Force Big Data Consortium. Influence of geolocation and ethnicity on the phenotypic expression of primary Sjögren's

- syndrome at diagnosis in 8310 patients: a cross-sectional study from the Big Data Sjögren Project Consortium. *Ann Rheum Dis*. 2017 Jun;76(6):1042-1050.
- 7 Delir Haghighi P, Kang YB, Buchbinder R, Burstein F, Whittle S. Investigating Subjective Experience and the Influence of Weather Among Individuals With Fibromyalgia: A Content Analysis of Twitter. *JMIR Public Health Surveill*. 2017 Jan 19;3(1):e4.
- 8 De Smit E, Clarke L, Sanfilippo PG, Merriman TR, Brown MA, Hill CL, Hewitt AW, Giant Cell Arteritis Pathology Network. Geoepidemiology of temporal artery biopsy-positive giant cell arteritis in Australia and New Zealand: is there a seasonal influence? *RMD Open*. 2017 Aug 29;3(2):e000531.
- 9 Fleischmann R, Mysler E, Hall S, Kivitz AJ, Moots RJ, Luo Z, DeMasi R, Soma K, Zhang R, Takiya L, Tatulich S, Mojcić C, Krishnaswami S, Menon S, Smolen JS; ORAL Strategy investigators. Efficacy and safety of tofacitinib monotherapy, tofacitinib with methotrexate, and adalimumab with methotrexate in patients with rheumatoid arthritis (ORAL Strategy): a phase 3b/4, double-blind, head-to-head, randomised controlled trial. *Lancet*. 2017 Jul 29;390(10093):457-468.
- 10 Gill TK, Menz HB, Landorf KB, Arnold JB, Taylor AW, Hill CL. Identification of Clusters of Foot Pain Location in a Community Sample. *Arthritis Care Res (Hoboken)*. 2017 Dec;69(12):1903-1908.
- 11 Goldacre, B., Whittle, S., Ernst, E. & Mendel, J. Authors' reply to Beales. *BMJ*. 2017;356, j1196.
- 12 González-Chica DA, Hill CL, Gill TK, Hay P, Haag D, Stocks N. Individual diseases or clustering of health conditions? Association between multiple chronic diseases and health-related quality of life in adults. *Health Qual Life Outcomes*. 2017 Dec 21;15(1):244.
- 13 Halls S, Sinnathurai P, Hewlett S, Mackie SL, March L, Bartlett SJ, Bingham CO 3rd, Alten R, Campbell I, Hill CL, Holt RJ, Hughes R, Kirwan JR, Leong AL, Leung YY, Lyddiatt A, Neill L, Orbai AM. Stiffness Is the Cardinal Symptom of Inflammatory Musculoskeletal Diseases, Yet Still Variably Measured: Report from the OMERACT 2016 Stiffness Special Interest Group. *J Rheumatol*. 2017 Dec;44(12):1904-1910. doi: 10.3899/jrheum.161073.
- 14 Hill CL, Black RJ, Nossent J, Ruediger C, Nguyen L, Ninan J, Lester S. Risk of Mortality in Patients with Giant Cell Arteritis: A Systematic Review and Meta-Analysis. *Semin Arthritis Rheum*. 2017 Feb;46(4): 513-519.
- 15 Hillock NT, Heard S, Kichenadasse G, Hill CL, Andrews J. Infliximab for ipilimumab-induced colitis: A series of 13 patients. *Asia Pac J Clin Oncol*. 2017 Oct;13(5):e284-e290. doi: 10.1111/ajco.12651.
- 16 Hoon E, Smith K, Black R-J, Burnet S, Hill C, Gill T. Take charge of pain: evaluating a community-targeted self-management education program for people with musculoskeletal pain. *Health Promotion Journal of Australia*. 2017 Mar; 28(1):77-80.
- 17 Hsu VM, Denton CP, Domsic RT, Furst DE, Rischmueller M, Stanislav M, Steen VD, Distler JHW, Korish S, Cooper A, Choi S, Schafer PH, Horan G, Hough DR. Pomalidomide in Patients with Interstitial Lung Disease due to Systemic Sclerosis: A Phase II, Multicenter, Randomized, Double-blind, Placebo-controlled, Parallel-group Study. *J Rheumatol*. 2017 Nov 1. pii: jrheum.161040. doi: 10.3899/jrheum.161040. [Epub ahead of print].
- 18 Khoo T, Otto S, Smith C, Koszyca B, Lester S, Blumbergs P, Limaye V. Curvilinear bodies are associated with adverse effects on muscle function but not with hydroxychloroquine dosing. *Clinical Rheumatology*. 2017 Mar 36(3):689-693.
- 19 Lau A, Lester S, Moraitis S, Ou J, Psaltis AJ, McColl S, Rischmueller M, Wormald PJ, Vreugde S. Tertiary lymphoid organs in recalcitrant chronic rhinosinusitis. *J Allergy Clin Immunol*. 2017 Apr; 139(4):1371-1373.
- 20 Li H, Reksten TR, Ice JA, Kelly JA, Adrianto I, Rasmussen A, Wang S, He B, Grundahl KM, Glenn SB, Miceli-Richard C, Bowman S, Lester S, Eriksson P, Eloranta ML, Brun JG, Gøransson LG, Harboe E, Guthridge JM, Kaufman KM, Kvarnström M, Cunninghame Graham DS, Patel K, Adler AJ, Farris AD, Brennan MT, Chodosh J, Gopalakrishnan R, Weisman MH, Venuturupalli S, Wallace DJ, Hefner KS, Houston GD, Huang AJW, Hughes PJ, Lewis DM, Radfar L, Vista ES, Edgar CE, Rohrer MD, Stone DU, Vyse TJ, Harley JB, Gaffney PM, James JA, Turner S, Alevizos I, Anaya JM, Rhodus NL, Segal BM, Montgomery CG, Scofield RH, Kovats S, Mariette X, Rönnblom L, Witte T, Rischmueller M, Wahren-Herlenius M, Omdal R, Jonsson R, Ng WF; for UK Primary Sjögren's Syndrome Registry, Nordmark G, Lessard CJ, Sivits KL.. Identification of a Sjogren's syndrome susceptibility locus at OAS1 that influences isoform switching, protein expression, and responsiveness to type I interferons. *PLoS Genetics*. 2017 Jun; 13(6):e1006820.
- 21 Li JJ, Appleton SL, Gill TK, Vakulin A, Wittert GA, Antic NA, Taylor AW, Adams RJ, Hill CL. Association of Musculoskeletal Joint Pain With Obstructive Sleep Apnea, Daytime Sleepiness, and Poor Sleep Quality in Men. *Arthritis Care Res (Hoboken)*. 2017 May;69(5):742-747.
- 22 Maundrell A, Lester S, Rischmueller M, Hill C, Cleland L, Blumbergs P, Wiese M, Limaye V. The PTPN22 gene is associated with idiopathic inflammatory myopathy. *Muscle & Nerve*. 2017 Feb; 55(2):270-273.
- 23 McLean JM, Cappelletto J, Clarnette J, Hill CL, Gill T, Mandziak D, Leith J. Normal population reference values for the Oxford and Harris Hip Scores -electronic data collection and its implications for clinical practice. *Hip Int*. 2017 Jul 25;27(4):389-396.
- 24 Mejia Otero C, Assassi S, Hudson M, Mayes MD, Estrada-Y-Martin R, Pedroza C, Mills TW, Walker J, Baron M, Stevens W, Proudman SM, Nikpour M, Mehra S, Wang M, Fritzler MJ; Canadian Scleroderma Research Group; Australian Scleroderma Cohort Study (TQEH contributors Rischmueller M, Lester S); Genetics

- p>versus Environment in Scleroderma Outcome Study. Antifibrillar Antibodies Are Associated with Native North American Ethnicity and Poorer Survival in Systemic Sclerosis.
- J Rheumatol*
- . 2017 Jun;44(6):799-805. doi: 10.3899/jrheum.160574.
- 25** Morrisroe K, Nakayama A, Soon J, Arnold M, Barnsley L, Barrett C, Brooks PM, Hall S, Hanrahan P, Hissaria P, Jones G, Katikireddi VS, Keen H, Laurent R, Nikpour M, Poulsen K, Robinson P, Soden M, Wood N, Cook N, Hill C, Buchbinder R. EVOLVE: The Australian Rheumatology Association's 'top five' list of investigations and interventions doctors and patients should question. *Intern Med J*. 2017 Oct 28. doi: 10.1111/imj.13654. [Epub ahead of print].
- 26** Morrisroe K, Stevens W, Huq M, Prior D, Ngian G-S, Celermajer D, Zochling J, Proudman S, Nikpour M, Hill C, Lester S, Nash P, Ngian G, Rischmueller M, Roddy J, Sahhar J, Strickland G, Thakkar V, Walker J. Survival and quality of life in incident systemic sclerosis-related pulmonary arterial hypertension. *Arthritis Research and Therapy*. 2017 Jun; 19 (1):1-10.
- 27** Morrisroe K, Stevens W, Sahhar J, Rabusa C, Nikpour M, Proudman S, Hill C, Lester S, Rischmueller M, Walker J, Nash P, Ngian G, Roddy J, Strickland G, Thakkar V, Zochling J. Epidemiology and disease characteristics of systemic sclerosis-related pulmonary arterial hypertension: Results from a real-life screening programme. *Arthritis Research and Therapy*. 2017 Mar 7;19(1):42.
- 28** Morrisroe K, Stevens W, Sahhar J, Ngian G, Ferdowski N, Hill C, Proudman S, Nikpour M. Quantifying the direct health care cost of systemic sclerosis: a comprehensive data linkage study. *Medicine (Baltimore)*. 2017 Dec;96(48):e8503.
- 29** Ninan JV, Lester S, Hill CL. Giant cell arteritis: beyond temporal artery biopsy and steroids. *Intern Med J*. 2017 Nov;47(11):1228-1240.
- 30** Nossent J, Lester S, Rischmueller M, Zalewski P. No Zinc Deficiency but a Putative Immunosuppressive Role for Labile Zn in Patients with Systemic Autoimmune Disease. *Curr Rheumatol Rev*. 2017;13(1):59-64.
- 31** Roscioli E, Hamon R, Ruffin RE, Grant J, Hodge S, Zalewski P, Lester S. BIRC3 single nucleotide polymorphism associate with asthma susceptibility and the abundance of eosinophils and neutrophils. *J Asthma*. 2017 Mar;54(2):116-124.
- 32** Roscioli E, Jersmann HP, Lester S, Badiei A, Fon A, Zalewski P, Hodge S. Zinc deficiency as a codeterminant for airway epithelial barrier dysfunction in an ex vivo model of COPD. *Int J Chron Obstruct Pulmon Dis*. 2017 Dec 5;12:3503-3510.
- 33** Roscioli E, Tran HB, Jersmann H, Nguyen PT, Hopkins E, Lester S, Farrow N, Zalewski P, Reynolds PN, Hodge S. The uncoupling of autophagy and zinc homeostasis in airway epithelial cells as a fundamental contributor to COPD. *Am J Physiol Lung Cell Mol Physiol*. 2017 Sep 1;313(3):L453-L465.
- 34** Sharma R, Harris VM, Cavett J, Kurien BT, Liu K, Koelsch KA, Fayaaz A, Chaudhari KS, Radfar L, Lewis D, Stone DU, Kaufman CE, Li S, Segal B, Wallace DJ, Weisman MH, Venuturupalli S, Kelly JA, Pons-Estel B, Jonsson R, Lu X, Gottenberg JE, Anaya JM, Cunninghame-Graham DS, Huang AJW, Brennan MT, Hughes P, Alevizos I, Miceli-Richard C, Keystone EC, Bykerk VP, Hirschfield G, Nordmark G, Bucher SM, Eriksson P, Omdal R, Rhodus NL, Rischmueller M, Rohrer M, Wahren-Herlenius M, Witte T, Alarcón-Riquelme M, Mariette X, Lessard CJ, Harley JB, Ng WF, Rasmussen A, Sivits KL, Scofield RH. Rare X Chromosome Abnormalities in Systemic Lupus Erythematosus and Sjögren's Syndrome. *Arthritis Rheumatol*. 2017 Nov;69(11):2187-2192.
- 35** Van Tuyl LH, Sadlonova M, Hewlett S, Davis B, Flurey C, Goel N, Gossec L, Heegaard Brahe C, Hill C, Hoogland W, Kirwan J, Hetland ML, van Schaardenburg D, Smolen J, Stamm T, Voshaar M, Wells GA, Boers M. The patient perspective on absence of disease activity in rheumatoid arthritis: a survey to identify key domains of patient perceived remission. *Ann Rheum Dis*. 2017 May;76(5):855-861.
- 36** Walsh T, Arnold J, Gill T, Evans A, Yaxley A, Hill C, Shanahan E. Foot pain severity is associated with the ratio of visceral to subcutaneous fat mass, fat-mass index and depression in women. *Rheumatology International*. 2017 Jul;37(7):1175-1182.
- 37** Wechalekar M, Quinn S, Lester S, Metcalf R, Shanahan E, Walker J, Smith M, Hill C, Shanahan E, Proudman S. A treat-to-target strategy preserves work capacity in a rheumatoid arthritis inception cohort treated with combination conventional dmard therapy. *Journal of Clinical Rheumatology*. 2017 Apr;23(3):131-137.
- 38** Wilsdon T, Hill CL. Managing the drug treatment of rheumatoid arthritis. *Australian Prescriber*. 2017 Apr;40(2):51-58.
- 39** Wilsdon T, Whittle S, Thynne T, Mangoni A. Methotrexate for psoriatic arthritis. *Cochrane Database of Systematic Reviews*. 2017 (7), 2017 Jul; Article Number: CD012722 DOI: 10.1002/14651858.CD012722.

THE UNIVERSITY OF ADELAIDE DISCIPLINE OF SURGERY, TQEH

- 1** Allen J, Rey-Conde T, North J, Kruger P, Babidge W, Wysocki A, Ware R, Veerman J, Maddern G. Processes of care in surgical patients who died with hospital-acquired infections in Australian hospitals. *Journal of Hospital Infection*. 2017 Sep 7. pii: S0195-6701(17)30490-5.
- 2** Barbaro A, Kanhere H, Bessell J, Maddern GJ. Laparoscopic extraperitoneal repair versus open inguinal hernia repair: 20-year follow-up of a randomised controlled trial. *Hernia*. 2017 Oct;21(5):723-727.

PUBLICATIONS 2017 cont.

- 3 Beckmann K, O'Callaghan M, Vincent A, Roder D, Millar J, Evans S, McNeil J, Moretti K. Australian validation of the Cancer of the Prostate Risk Assessment Post-Surgical score to predict biochemical recurrence after radical prostatectomy. *ANZ J Surg*. 2017 May 4. doi: 10.1111/ans.13954. [Epub ahead of print]
- 4 Beckmann KR, O'Callaghan ME, Ruseckaite R, Kinnear N, Miller C, Evans S, Roder DM, Moretti K; South Australian Prostate Cancer Clinical Outcomes Collaborative. Prostate cancer outcomes for men who present with symptoms at diagnosis. *BJU Int*. 2017 Jun; 119 (6):862-871.
- 5 Beckmann KR, Vincent AD, O'Callaghan ME, Cohen P, Chang S, Borg M, Evans SM, Roder DM, Moretti KL; South Australia Prostate Cancer Clinical Outcomes Collaborative. Oncological outcomes in an Australian cohort according to the new prostate cancer grading groupings. *BMC Cancer*. 2017 Aug 10;17(1):537.
- 6 Boulton M, Cowled P, Barnes M, Fitridge RA. Fitness plus American Society of Anesthesiologists grade improve outcome prediction after endovascular aneurysm repair. *ANZ J Sur*. 2017;87(9): 682-687.
- 7 Buchholz V, Kiroff G, Trochslar M, Kanhere H. An unexpected diagnosis of primary omental endometrial stromal sarcoma in a patient with acute right abdominal pain: A case report and review of literature. *Int J Surg Case Rep*. 2017;36:8-14.
- 8 Campbell JM, Raymond E, O'Callaghan ME, Vincent AD, Beckmann KR, Roder D, Evans S, McNeil J, Millar J, Zalberg J, Borg M, Moretti KL. Optimum Tools for Predicting Clinical Outcomes in Prostate Cancer Patients Undergoing Radical Prostatectomy: A Systematic Review of Prognostic Accuracy and Validity. *Clin Genitourin Cancer*. 2017 Oct;15(5):e827-e834.
- 9 Campbell JM, O'Callaghan ME, Raymond E, Vincent AD, Beckmann KR, Roder D, Evans S, McNeil J, Millar J, Zalberg J, Borg M, Moretti KL. Tools for Predicting Clinical and Patient-reported Outcomes in Prostate Cancer Patients Undergoing Androgen Deprivation Therapy: A Systematic Review of Prognostic Accuracy and Validity. *Clin Genitourin Cancer*. 2017 Dec;15(6):629-634.e8.
- 10 Canavese M, Ngo DT, Maddern GJ, Hardingham JE, Price TJ, Hauben E. Biology and therapeutic implications of VEGF-A splice isoforms and single-nucleotide polymorphisms in colorectal cancer. *Int J Cancer*. 2017 May 15;140(10):2183-2191.
- 11 Chan C, Wabnitz D, Bassiouni A, Wormald P-J, Vreugde S, Psaltis A. Identification of the bacterial reservoirs for the middle ear using phylogenetic analysis. *JAMA Otolaryngology--Head & Neck Surgery*. 2017 Feb; 143(2):155-161.
- 12 Chan CL, Richter K, Wormald PJ, Psaltis AJ, Vreugde S. *Alloiococcus otitis* forms multispecies biofilm with *Haemophilus influenzae*: effects on antibiotic susceptibility and growth in adverse conditions. *Front Cell Infect Microbiol*. 2017;7:344.
- 13 Chen PG, Murphy J, Alloju LM, Boase S, Wormald PJ. Sinus Penetration of a Pulsating Device Versus the Classic Squeeze Bottle in Cadavers Undergoing Sinus Surgery. *Ann Otol Rhinol Laryngol*. 2017 Jan;126(1):9-13.
- 14 Cooter R. Commentary on: Role of amcrotextured shaped extra full projection cohesive gel implants in primary aesthetic breast augmentation. *Aesthet Surgery Journal*. 2017 Apr 1;37(4):419-420.
- 15 Davis S, Babidge W, Kiermeier A, Aitken R, Maddern G. Perioperative mortality following bariatric surgery in Australia. *Obes Surg*. 2017. doi: 10.1007/s11695-017-3010-1 [Epub ahead of print]
- 16 Davis SS, Babidge WJ, Kiermeier A, Aitken RJ, Maddern GJ. Perioperative mortality following oesophagectomy and pancreaticoduodenectomy in Australia. *World J Surg*. 2017; doi: 10.1007/s00268-017-4204-3 [Epub ahead of print]
- 17 Drilling A, Ooi M, Miljkovic D, James C, Speck P, Vreugde S, Clark J, Wormald P-J. Long-term safety of topical bacteriophage application to the frontal sinus region. *Frontiers in Cellular & Infection Microbiology*. 2017;7:49.
- 18 Dudhwala ZM, Howarth GS, Drew PA, Moore DJ, Cummins AG. Abstract: Intestinal crypt fission and expression of Wnt β -catenin signalling in the small intestine of humans. *J Gastroenterol and Hepatol*. 2017; 32(Suppl 2): 184.
- 19 Dudhwala ZM, Howarth GS, Drew PA, Moore DJ, Cummins AG. Abstract: Intestinal crypt fission and expression of Wnt β -catenin in the small intestine of humans. *Gastroenterology*. 2017; 152(Suppl 1): s170-s171.
- 20 Dudhwala ZM, Howarth GS, Drew PA, Moore DJ, Cummins AG. Abstract: Intestinal crypt fission and expression of Wnt β -catenin signalling in the small intestine of humans. *J Gastroenterol and Hepatol*. 2017; 32(Suppl 2): 184.
- 21 Duncan J, Ma N, Vreugdenburg T, Cameron A, Maddern G. Gadoteric acid-enhanced MRI for the characterization of hepatocellular carcinoma: A systematic review and meta-analysis. *Journal of Magnetic Resonance Imaging*. 2017 Jan; 45(1):281-290.
- 22 Edward JA, Psaltis AJ, Williams RA, Charville GW, Dodd RL, Nayak JV. Endoscopic Resection of Skull Base Teratoma in Klippel-Feil Syndrome through Use of Combined Ultrasonic and Bipolar Diathermy Platforms. *Case Rep Otolaryngol*. 2017;2017:6384586.
- 23 Finlay B, Price T, Hewett P. Neutropenia and thrombocytopenia after cytoreductive surgery and heated intraperitoneal chemotherapy. *Pleura and Peritoneum*. 2017; 2(3): 137-141.
- 24 Fong S, Hodge JC, Foreman A, Krishnan S. Transoral robotic excision of a lingual thyroglossal duct cyst. *J Robot Surg*. 2017 May 23. doi: 10.1007/s11701-017-0713-1. [Epub ahead of print]
- 25 Fong SA, Drilling A, Morales S, Cornet ME, Woodworth BA, Fokkens WJ, Psaltis AJ, Vreugde S, Wormald PJ. Activity of Bacteriophages in Removing Biofilms of

- Pseudomonas aeruginosa Isolates from Chronic Rhinosinusitis Patients. *Front Cell Infect Microbiol.* 2017 Sep 22;7:418.
- 26 Goggin M. Back calculation of prediction error compared with controlled trial prediction error of Goggin nomogram for toric intraocular lens cylinders. *J Cataract Refract Surg.* 2017;43(6):863-864.
- 27 Gostlow H, Marlow N, Babidge W, Maddern G. Systematic Review of Voluntary Participation in Simulation-Based Laparoscopic Skills Training: Motivators and Barriers for Surgical Trainee Attendance. *J Surg Educ.* 2017 Mar - Apr;74(2):306-318.
- 28 Gostlow H, Marlow N, Thomas M, Hewett P, Kiermeier A, Babidge W, Aitken M, Pena G, Maddern G. Non-technical skills of surgical trainees and experienced surgeons. *British Journal of Surgery.* 2017 May;104(6):777-785.
- 29 Gostlow H, Vega CV, Marlow N, Babidge W, Maddern G. Do surgeons react? A retrospective analysis of surgeons' response to harassment of a colleague during simulated operating theatre scenarios. *Ann Surg.* 2017;doi: 10.1097/SLA.0000000000002434 [Epub ahead of print]
- 30 Granger J, Manton N, Hamilton M, Dawson J. Spindle cell haemangioma mimicking a popliteal aneurysm. *ANZ Journal of Surgery.* 2017 Jan; 87(1-2):98-100.
- 31 Gupta A, Stewart S, Cottell K, McCulloch G, Babidge W, Maddern G. Potentially avoidable issues in neurosurgical mortality cases in Australia: identification and improvements. *ANZ Journal of Surgery.* 2017 Jan; 87(1-2):86-91.
- 32 Ha T, Valentine R, Moratti S, Hanton L, Robinson S, Wormald PJ. The efficacy of a novel budesonide chitosan gel on wound healing following endoscopic sinus surgery. *Int Forum Allergy Rhinol.* 2017 Dec 6. doi: 10.1002/alr.22057. [Epub ahead of print]
- 33 Hellings PW, Fokkens WJ, Bachert C, Akdis CA, Bieber T, Agache I, Bernal-Sprekelsen M, Canonica GW, Gevaert P, Joos G, Lund V, Muraro A, Onerci M, Zuberbier T, Pugin B, Seys SF, Bousquet J; ARIA and EPOS working groups including Wormald PJ. Positioning the principles of precision medicine in care pathways for allergic rhinitis and chronic rhinosinusitis - A EUFOREA-ARIA-EPOS-AIRWAYS ICP statement. *Allergy.* 2017; 72(9):1297-1305.
- 34 Hewett P. Data dreaming over four decades. *ANZ Journal of Surgery.* 2017 Jan 87(1-2):5-6.
- 35 Hooper I, Ahem S, Best R, McNeil J, Cooter R. Australian Breast Device Registry: breast device safety transformed. *ANZ J Surg.* 2017 Jan;87(1-2):9-10.
- 36 Huang Y, Chua T, Maddern G, Samra J. Robotic cholecystectomy versus conventional laparoscopic cholecystectomy: A meta-analysis. *Surgery.* 2017 Mar; 161(3):628-636.
- 37 Jukes A, Mascarenhas A, Murphy J, Stepan L, Munoz T, Callejas C, Valentine R, Wormald P-J, Psaltis A. Stress response and communication in surgeons undergoing training in endoscopic management of major vessel hemorrhage: A mixed methods study. *International Forum of Allergy and Rhinology.* 2017 Jun;7(6):576-583.
- 38 Hummel R, Ha NH, Lord A, Trochler MI, Maddern G, Kanhere H. Centralisation of oesophagectomy in Australia: is only caseload critical? *Aust Health Rev.* 2017; doi: 10.1071/AH17095 [Epub ahead of print]
- 39 Jukes A, Miljkovic D, Wormald PJ, Psaltis AJ. Platelet activation by crushed and uncrushed muscle: a flow cytometry analysis. *Int Forum Allergy Rhinol.* 2017 Jun 28. doi: 10.1002/alr.21977. [Epub ahead of print]
- 40 Jukes A, Murphy J, Vreugde S, Psaltis A, Wormald PJ. Nano-hemostats and a Pilot Study of Their Use in a Large Animal Model of Major Vessel Hemorrhage in Endoscopic Skull Base Surgery. *J Neurol Surg B Skull Base.* 2017 Jun;78(3):215-221. doi: 10.1055/s-0036-1597277. Epub 2016 Dec 12.
- 41 Kadam V, Kiroff G. Continuous transversus abdominis plane (TAP) block and intraoperative coeliac plexus block (CPB) for post-operative analgesia following laparotomy: Two case reports. *Anesthesiology and Pain Medicine.* 2017 Feb;7(1):e43091.
- 42 Kaidonis G, Hassall M, Phillips R, Raymond G, Saha N, Wong, Gilhotra J, Liu E, Burdon K, Henderson T, Newland H, Lake S, Craig J. Visual outcomes following vitrectomy for diabetic retinopathy amongst Indigenous and non-Indigenous Australians in South Australia and the Northern Territory. *Clinical and Experimental Ophthalmology.* 2017 Oct 16. doi: 10.1111/ceo.13083. [Epub ahead of print]
- 43 Kandel H, Khadka J, Goggin M, Pesudovs K. Impact of refractive error on quality of life: a qualitative study. *Clin Exp Ophthalmol.* 2017; doi: 10.1111/ceo.12954. [Epub ahead of print]
- 44 Kandel H, Khadka J, Lundström M, Goggin M, Pesudovs K. Questionnaires for Measuring Refractive Surgery Outcomes. *J Refract Surg.* 2017; 33(6):416-424.
- 45 Kiermeier A, Babidge WJ, McCulloch GAJ, Maddern GJ, Watters DA, Aitken RJ. National surgical mortality audit may be associated with reduced mortality after emergency admission. *ANZ J Surg.* 2017; doi: 10.1111/ans.14170 [Epub ahead of print]
- 46 Kim C, Lee J, Chung B, Kim W, Fai N, Hakim L, Umbas R, Ong T, Lim J, Letran J, Chiong E, Wu T, Lojanapiwat B, Turkeri L, Murphy D, Gardiner F, Moretti K, Cooperberg M, Carroll P, Mun S, Hinotsu S, Hirao Y, Ozono S, Horie S, Onozawa M, Kitagawa Y, Kitamura T, Namiki M, Akaza H. Report of the second Asian prostate cancer study. *Prostate Int.* 2017 Sep;5(3):95-103.
- 47 Kirana C, Ruszkiewicz A, Stubbs RS, Hardingham JE, Hewett PJ, Maddern GJ, Hauben E. Soluble HLA-G is a differential prognostic marker in sequential colorectal cancer disease stages. *International Journal of Cancer.* 2017 Jun;140(11):2577-2586.
- 48 Ko C-H, Yue G, Gao S, Luo K, Siu W, Shum W, Shiu H, Lee J, Li G, Leung P, Evdokiou A, Lau C. Evaluation of the combined use of metronomic zoledronic acid and Coriolus versicolor in intratibial breast cancer mouse model. *Journal of Ethnopharmacology.* 2017 May; 204: 77-85.

PUBLICATIONS 2017 cont.

- 49 Kogawa M, Khalid KA, Wijenayaka AR, Ormsby RT, Evdokiou A, Anderson PH, Findlay DM, Atkins GJ. Recombinant sclerostin antagonises effects of ex vivo mechanical loading in trabecular bone and increases osteocyte lacunar size. *Am J Physiol Cell Physiol*. 2017 Oct 4; doi: 10.1152/ajpcell.00175.2017 [Epub ahead of print]
- 50 Kuan KG, Wee MN, Chung WY, Kumar R, Mees ST, Dennison A, Maddern G, Trochsler M. A study of normothermic hemoperfusion of the porcine pancreas and kidney. *Artif Organs*. 2017 May; 41(5):490-495.
- 51 Kuan L, Tiong L, Parkyn R, Walters D, Lai C, Walsh D. Disease recurrence and survival in patients with multifocal breast cancer: a follow-up study with 7-year results. *Anz J Surg*. 2017;doi: 10.1111/ans.13193.
- 52 Kumar L, Cowled P, Boult M, Howell S, Fitridge R. Type II Endoleak after Endovascular Aneurysm Repair: Natural History and Treatment Outcomes. *Ann Vasc Surg*. 2017 May 5. pii: S0890-5096(16)31387-5.
- 53 LaHood BR, Andrew NH, Goggins M. Antibiotic prophylaxis in cataract surgery in the setting of penicillin allergy: A decision-making algorithm. *Surv Ophthalmol*. 2017;62(5):659-669.
- 54 LaHood BR, Moore S. Case report: Corneal collagen crosslinking and pigment dispersion syndrome. *J Cataract Refract Surg*. 2017;43: 424-425.
- 55 LaHood B, Goggins M, Esterman A. Assessing the likely effect of posterior corneal curvature on toric IOL calculation for IOL calculation for IOLs of 2.50D or greater cylinder power. *J Cataract Refract Surg*. 33(11): 730-734.
- 56 Lau A, Lester S, Moraitis S, Ou J, Psaltis AJ, McColl S, Rischmueller M, Wormald PJ, Vreugde S. Tertiary lymphoid organs in recalcitrant chronic rhinosinusitis. *J Allergy Clin Immunol*. 2017 Apr;139(4):1371-1373.e6.
- 57 Leach DA, Buchanan G. Stromal Androgen Receptor in Prostate Cancer Development and Progression. *Cancers (Basel)*. 2017 Jan 22;9(1).
- 58 Leach DA, Panagopoulos V, Nash C, Bevan C, Thomson AA, Selth LA, Buchanan G. Cell-lineage specificity and role of AP-1 in the prostate fibroblast androgen receptor cistrome. *Mol Cell Endocrinol*. 2017 Jan 5;439:261-272.
- 59 Leach DA, Trotta AP, Need EF, Risbridger GP, Taylor RA, Buchanan G. The prognostic value of stromal K506-binding protein 1 and androgen receptor in prostate cancer outcome. *Prostate*. 2017 Feb;77(2):185-195.
- 60 Liapis V, Zysk A, DeNichilo M, Zinonos I, Hay S, Panagopoulos V, Shoubridge A, DeFelice C, Ponomarev V, Ingman W, Atkins GJ, Findlay DM, Zannettino ACW, Evdokiou A. Anticancer efficacy of the hypoxia-activated prodrug evofosfamide is enhanced in combination with proapoptotic receptor agonists against osteosarcoma. *Cancer Med*. 2017 Sep;6(9):2164-2176.
- 61 Lim RSM, Shaw C-K. Are CT and MRI scanning reliable in diagnosing otogenic skull base osteomyelitis in non-immunocompromised elderly patient? A case series and review of the literature. *Int J Radiol & Radiation Therapy*. 2017; 3(5): 00075.
- 62 Liu E, Ng SK, Kahawita S, Andrew NH, Henderson T, Craig JE, Landers J. Ten year all-cause mortality and its association with vision among indigenous Australians within central Australia: the central Australian ocular health study. *Clin Exp Ophthalmol*. 2017; 45(4): 348-356.
- 63 Loch-Wilkinson A, Beath K, Knight R, Wessels W, Magnusson M, Papadopoulos T, Connell T, Lofts J, Locke M, Hopper I, Cooter R, Vickery K, Joshi P, Prince H, Deva A. Breast implant associated anaplastic large cell lymphoma in Australia and New Zealand - high surface area textured implants are associated with increased risk. *Plastic and Reconstructive Surgery*. 2017 Oct;140(4):645-654.
- 64 Lu TC, Moretti K, Beckmann K, Cohen P, O'Callaghan M. ISUP Group 4 – a Homogenous Group of Prostate Cancers? *Pathol Oncol Res*. 2017 Oct 27. doi: 10.1007/s12253-017-0331-2. [Epub ahead of print]
- 65 Maher S, Kaur G, Lima-Marques L, Evdokiou A, Losic D. Engineering of micro- to nanostructured 3D-printed drug releasing titanium implants for enhanced osseointegration and localised delivery of anticancer drugs. *ACS Appl Mater Interfaces*. 2017; 9(35): 29562-29570.
- 66 Masavuli M, Wijesundara DK, Gowans EJ, Grubor-Bauk B. Preclinical development and production of virus-like particles as vaccine candidates for hepatitis C. *Frontiers in Microbiology*. 2017 Dec 5;8:2413.
- 67 Miljkovic D, Ou J, Kirana C, Hulse KE, Hauben E, Psaltis A, Wormald PJ, Vreugde S. Discordant frequencies of tissue-resident and circulating CD180-negative B cells in chronic rhinosinusitis. *Int Forum Allergy Rhinol*. 2017 Jun;7(6):609-614.
- 68 Miljkovic D, Psaltis AJ, Wormald PJ, Vreugde S. Chronic Rhinosinusitis with Polyps Is Characterized by Increased Mucosal and Blood Th17 Effector Cytokine Producing Cells. *Front Physiol*. 2017 Dec 19;8:898.
- 69 Moore J, Price T, Carruthers S, Selva-Nayagam S, Luck A, Thomas M, Hewett P. Prospective randomised trial of neoadjuvant chemotherapy during the "Wait Period" following pre-operative chemoradiotherapy for rectal cancer; *Results of the WAIT trial*. *Colorectal Dis*. 2017; doi: 10.1111/codi.13724 [Epub ahead of print]
- 70 Moretti K, Coombe R. Comorbidity assessment in localized prostate cancer: a systematic review protocol. *JBIR Database System Rev Implement Rep*. 2017 Apr;15(4):942-947.
- 71 Moxon JV, Ng E, Lazzaroni SM, Boult M, Velu R, Fitridge RA, Golledge J. Circulating biomarkers are not associated with endoleaks after endovascular repair of abdominal aortic aneurysms. *J Vasc Surg*. 2017 Aug 23. pii: S0741-5214(17)31778-0.
- 72 Munn Z, Giles K, Aromataris E, Deakin A, Schultz T, Mandel C, Peters MD, Maddern G, Pearson A, Runciman W. Mixed methods study on the use of and attitudes towards safety checklists in interventional radiology. *J Med Imaging Radiat Oncol*. 2017 Jun;doi:10.1111/1754-9485.12633 [Epub ahead of print]

- 73 [Murphy J](#), [Ramezanpour M](#), [Stach N](#), [Dubin G](#), [Psaltis A](#), [Wormald PJ](#), [Vreugde S](#). Staphylococcus Aureus V8 protease disrupts the integrity of the airway epithelial barrier and impairs IL-6 production *in vitro*. *Laryngoscope*. 2017; doi: 10.1002/lary.26949 [Epub ahead of print]
- 74 O'Callaghan M, Shi Z, Kopsaftis T, [Moretti K](#). Prostate cancer outcomes and delays in care. *International Urology and Nephrology*. 2017 Jan;49: 449-455.
- 75 O'Callaghan ME, Raymond E, Campbell JM, Vincent AD, Beckmann K, Roder D, Evans S, McNeil J, Millar J, Zalcborg J, Borg M, [Moretti K](#). Patient-Reported Outcomes After Radiation Therapy in Men With Prostate Cancer: A Systematic Review of Prognostic Tool Accuracy and Validity. *Int J Radiat Oncol Biol Phys*. 2017 Jun 1;98(2):318-337.
- 76 O'Callaghan ME, Raymond E, Campbell J, Vincent AD, Beckmann K, Roder D, Evans S, McNeil J, Millar J, Zalcborg J, Borg M, [Moretti K](#). Tools for predicting patient-reported outcomes in prostate cancer patients undergoing radical prostatectomy: a systematic review of prognostic accuracy and validity. *Prostate Cancer Prostatic Dis*. 2017 Dec;20(4):378-388.
- 77 Oh J, Kuan KG, [Tiong LU](#), [Trochsler MI](#), Jay G, Schmidt TA, Barnett H, [Maddern GJ](#). Recombinant human lubricin for prevention of postoperative intra-abdominal adhesions in a rat model. *Journal of Surgical Research*. 2017 Feb;208:20-25.
- 78 Ong WL, Schouwenburg MG, van Bommel ACM, Stowell C, Allison KH, Benn KE, Browne JP, [Cooter RD](#), Delaney GP, Duhoux FP, Ganz PA, Hancock P, Jagsi R, Knaul FM, Knip AM, Koppert LB, Kuerer HM, McLaughlin S, Mureau MAM, Partridge AH, Reid DP, Sheeran L, Smith TJ, Stoutjesdijk MJ, Vrancken Peeters MJTFD, Wengström Y, Yip CH, Saunders C. A standard set of value-based patient-centered outcomes for breast cancer: the international consortium for health outcomes measurement (ICHOM) Initiative. *Jama Oncology*. 2017 May 1;3(5):677-685.
- 79 [Ou J](#), [Bassiouni A](#), [Drilling A](#), [Psaltis AJ](#), [Vreugde S](#), [Wormald PJ](#). The persistence of intracellular Staphylococcus aureus in the sinuses: a longitudinal study. *Rhinology*. 2017 Dec 1;55(4):305-311.
- 80 [Que S](#), [Ramezanpour M](#), [Paramasivan S](#), [Miljkovic D](#), [Cooksley CM](#), [Bassiouni A](#), [Ou J](#), [Psaltis AJ](#), [Wormald PJ](#), [Vreugde S](#). Increased IL-13 expression is independently associated with neo-osteogenesis in patients with chronic rhinosinusitis. *J Allergy Clin Immunol*. 2017 Nov;140(5) 1444-1448.
- 81 [Palethorpe HM](#), [Drew PA](#), [Smith E](#). Androgen signalling in esophageal adenocarcinoma cell lines *in vitro*. *Digestive Diseases and Sciences*. 2017; 62(12): 3402-3414.
- 82 [Panagopoulos V](#), [Leach D](#), [Zinonos I](#), [Ponomarev V](#), [Licari G](#), [Liapis V](#), [Ingman W](#), [Anderson P](#), [DeNichilo M](#), [Evdokiu A](#). Inflammatory peroxidases promote breast cancer progression in mice via regulation of the tumour microenvironment. *International Journal of Oncology*. 2017 Apr; 50(4):1191-1200.
- 83 [Panagopoulos V](#), [Liapis V](#), [Zinonos I](#), [Hay S](#), [Leach D](#), [Ingman W](#), [DeNichilo M](#), [Atkins G](#), [Findlay D](#), [Zannettino A](#), [Evdokiu A](#). Peroxidase enzymes inhibit osteoclast differentiation and bone resorption. *Molecular and Cellular Endocrinology*. 2017; 440: 8-15.
- 84 [Parameswaran R](#), [Roberts R](#), [Brown W](#), [Aly A](#), [Kiroff G](#), [Epari K](#), [MacCormick A](#), [Thomson I](#), [Thompson S](#). Surgery for gastrointestinal stromal tumours in Australia and New Zealand: results from a bi-national audit. *ANZ Journal of Surgery*. 2017 Apr; 87(4):220-221.
- 85 [Pham CT](#), [Gibb CL](#), [Fitridge RA](#), [Karnon JD](#). Effectiveness of preoperative medical consultations by internal medicine physicians: a systematic review. *BMJ Open*. 2017; 7:e018632.
- 86 [Psaltis AJ](#), [Wormald PJ](#). Therapy of sinonasal microbiome in CRS: a critical approach. *Curr Allergy Asthma Rep*. 2017;17(9): 59.
- 87 [Rajiv S](#), [Drilling A](#), [Bassiouni A](#), [Harding M](#), [James C](#), [Robinson S](#), [Moratti S](#), [Wormald P-J](#). Chitosan dextran gel as an anti adhesion agent in a postlaminectomy spinal sheep model. *Journal of Clinical Neuroscience*. 2017 Jun;40:153-156.
- 88 [Rakhorst H](#), [Badran H](#), [Clarke H](#), [Cooter R](#), [Evans G](#), [Kirschbaum J](#), [Koh K](#), [Lazier C](#), [Murphy R](#), [Nakatsuka T](#), [Piccolo N](#), [Perks G](#). Introducing the international confederation of plastic surgery societies: ICOPLAST. *Plast Reconstr Surg*. 2017 Sep;140(3):627-633.
- 89 [Rakhorst HA](#), [Mureau MAM](#), [Cooter RD](#), [McNeil J](#), [van Hooff M](#), [van der Hulst R](#), [Hommes J](#), [Hoornweg M](#), [Moojen-Zaal L](#), [Liem P](#), [Mathijssen IMJ](#). The new opt-out Dutch National Breast Implant Registry - Lessons learnt from the road to implementation. *J Plast Reconstr Aesthet Surg*. 2017 Oct;70(10):1354-1360.
- 90 [Ramezanpour M](#), [Rayan A](#), [Smith J](#), [Vreugde S](#). The effect of topical treatments for CRS on the sinonasal epithelial barrier. *Rhinology*. 2017 Jun; 55(2):161-169.
- 91 [Ramezanpour M](#), [Murphy J](#), [Smith JLP](#), [Vreugde S](#), [Psaltis AJ](#). *in vitro* safety evaluation of human nasal epithelial cell monolayers exposed to carrageenan sinus wash. *Int Forum Allergy Rhinol*. 2017; 7(12): 1170-1177.
- 92 [Rao Kadam V](#), [Kiroff G](#). Continuous Transversus Abdominis Plane (TAP) Block and Intraoperative Coeliac Plexus Block (CPB) for Post-Operative Analgesia Following Laparotomy: Two Case Reports. *Anesth Pain Med*. 2017 Feb;7(1):e4309.
- 93 [Raymond E](#), [O'Callaghan ME](#), [Campbell J](#), [Vincent AD](#), [Beckmann K](#), [Roder D](#), [Evans S](#), [McNeil J](#), [Millar J](#), [Zalcborg J](#), [Borg M](#), [Moretti K](#). An appraisal of analytical tools used in predicting clinical outcomes following radiation therapy treatment of men with prostate cancer: a systematic review. *Radiat Oncol*. 2017 Mar 21;12(1):56.
- 94 [Richter K](#), [Facal P](#), [Thomas N](#), [Vandecandelaere I](#), [Ramezanpour M](#), [Cooksley C](#), [Prestidge CA](#), [Coenye T](#), [Wormald PJ](#), [Vreugde S](#). Taking the Silver Bullet

PUBLICATIONS 2017 cont.

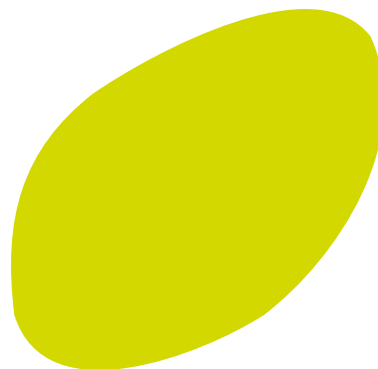
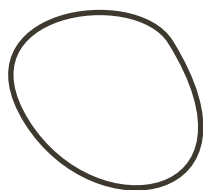
- Colloidal Silver Particles for the Topical Treatment of Biofilm-Related Infections. *ACS Appl Mater Interfaces*. 2017 Jul 5;9(26):21631-21638.
- 95 Richter K, Thomas N, Claeys J, McGuane J, Prestidge C, Coenye T, Wormald PJ, Vreugde S. A topical hydrogel with deferiprone and gallium-protoporphyrin targets bacterial iron metabolism and has antibiofilm activity. *Antimicrobial Agents & Chemotherapy*. 2017 Jun; 61(6).
 - 96 Richter K, Van den Driessche F, Coenye T. Innovative approaches to treat *Staphylococcus aureus* biofilm-related infections. *Essays in Biochemistry*. 2017 Feb; 61(1):61-70.
 - 97 Richter K, Thomas N, Zhang GM, Prestidge CA, Coenye T, Wormald PJ, Vreugde S. Deferiprone and Gallium-Protoporphyrin Have the Capacity to Potentiate the Activity of Antibiotics in *Staphylococcus aureus* Small Colony Variants. *Frontiers In Cellular And Infection Microbiology*. 2017 Jun 22;7:280.
 - 98 Shahangian A, Soler ZM, Baker A, Wise SK, Reredy SK, Patel ZM, Oyesiku NM, DelGaudio JM, Hadjipanayis CG, Woodworth BA, Riley KO, Lee J, Cusimano MD, Govindaraj S, Khan MN, Psaltis A, Wormald PJ, Santoreneos S, Sindwani R, Trosman S, Stokken JK, Woodard TD, Recinos PF, Vandergrift WA 3rd, Boling C, Schlosser RJ. Successful repair of intraoperative cerebrospinal fluid leaks improves outcomes in endoscopic skull base surgery. *Int Forum Allergy Rhinol*. 2017 Jan;7(1):80-86.
 - 99 Smith E, Palethorpe HM, Hayden AL, Young JP, Underwood TJ, Drew PA. Fibroblasts derived from oesophageal adenocarcinoma differ in DNA methylation profile from normal oesophageal fibroblasts. *Scientific Reports*. 2017; 7(1): 3368.
 - 100 Squire T, Buchanan G, Rangiah D, Davis I, Yip D, Chua Y, Rich T, Elsaleh H. Does chronomodulated radiotherapy improve pathological response in locally advanced rectal cancer? *Chronobiology International*. 2017; 34(4):492-503.
 - 101 Stepan L, Shaw C-K, Que S. Temporomandibular disorder in otolaryngology: systematic review. *J Laryngol Otolaryngol*. 2017;131(Suppl S1): S50-S56.
 - 102 Stynes G, Gengenbach T, Kiroff G, Morrison W, Kirkland M. Thiol surface functionalization via continuous phase plasma polymerization of allyl mercaptan, with subsequent maleimide-linked conjugation of collagen. *Journal of Biomedical Materials Research. Part A*. 2017 Jul;105(7):1940-1948.
 - 103 Stynes G, Kiroff G, Page R, Morrison W, Kirkland M. Surface-bound collagen 4 is significantly more stable than collagen 1. *Journal of Biomedical Materials Research. Part A*. 2017 May;105(5):1364-1373.
 - 104 Stynes GD, Kiroff GK, Morrison WA, Page RS, Kirkland MA. Toward a skin-material interface with vacuum-integrated capped macroporous scaffolds. *J Biomed Mater Res B Appl Biomater*. 2017;105(5): 1307-1318.
 - 105 Sultana A, Meng R, Piantadosi C, Brooke-Smith M, Chen J, Dolan P, Maddern G, Price T, Padbury R. Liver resection for colorectal cancer metastases: a comparison of outcomes over time in South Australia. *HPB (Oxford)*. 2017; pii: S1365-182X(17)31102-4.
 - 106 Sun X, Glynn DJ, Hodson LJ, Huo C, Britt K, Thompson EW, Woolford L, Evdokiou A, Pollard JW, Robertson SA, Ingman WV. CCL2-driven inflammation increases mammary gland stromal density and cancer susceptibility in a transgenic mouse model. *Breast Cancer Res*. 2017 Jan 11;19(1):4.
 - 107 Tapia Rico G, Price TJ, Karapetic C, Piantadosi C, Padbury R, Roy A, Maddern G, Moore J, Carruthers S, Roder D, Townsend AR. Brain metastasis in advanced colorectal cancer: results from the South Australian metastatic colorectal cancer (SAmCRC) registry. *Cancer Biol Med*. 2017; 14(4): 371-376.
 - 108 Thomas L, Hall L, Attia J, Holliday E, Markus H, Levi C. Seasonal variation in spontaneous cervical artery dissection: Comparing between UK and Australian sites. *Journal of Stroke and Cerebrovascular Diseases*. 2017;26(1):177-185.
 - 109 Thurston B, Pena GN, Howell S, Cowled P, Fitridge R. Low total psoas area as scored in the clinic setting independently predicts midterm mortality after endovascular aneurysm repair in male patients. *J Vasc Surg*. 2017;pii: S0741-5214(17)31773-1 [Epub ahead of print]
 - 110 Tivey D, Ma N, Duncan J, Atukorale Y, Lambert R, Maddern G. INAHTA impact story: legislative and accreditation requirements for office-based surgery in Australia. *International Journal of Technology Assessment in Health Care*. 2017; 33: 434-441.
 - 111 Tomusange K, Wijesundara D, Gowans E, Grubor-Bauk B. Human rhinovirus-a1 as an expression vector. *Methods in Molecular Biology*. 2017; 1581:181-201.
 - 112 Walsh TP, Ferris LR, Cullen NC, Brown CH, Loughry CJ, McCaffrey NM. The integration of a podiatrist into an orthopaedic department: a cost consequences analysis. *Journal of Foot and Ankle Research*. 2017;10:44.
 - 113 Walsh T, Butterworth P, Urquhart D, Cicuttini F, Landorf K, Wluka A, Shanahan E M, Menz H. Increase in body weight over a two-year period is associated with an increase in midfoot pressure and foot pain. *Journal of Foot & Ankle Research*. 2017;10:31.
 - 114 Wijesundara DK, Ranasinghe C, Grubor-Bauk B, Gowans E. Emerging targets for developing T cell-mediated vaccines for human immunodeficiency virus (HIV)-1. *Frontiers in Microbiology*. 2017; Vol 8: Article 2091.
 - 115 Wijesundara DK, Yu W, Quah BJC, Eldi P, Hayball JD, Diener KR, Voskoboinik I, Gowans EJ, Grubor-Bauk B. Cytolytic DNA vaccine encoding lytic perforin augments the maturation of- and antigen presentation by- dendritic cells in a time-dependent manner. *Scientific Reports*. 2017;7(1):8530.
 - 116 Wormald PJ, Bassiouni A, Callejas CA, Kennedy DW, Citardi MJ, Smith TL, Orlandi RR, Kaschke O, Siow JK, Szczygielski K, Lund V, Fokkens W, Psaltis AJ. The International Classification of the radiological

PUBLICATIONS 2017 cont.

- Complexity (ICC) of frontal recess and frontal sinus. *Int Forum Allergy Rhinol.* 2017 Apr; 7(4):332-337.
- 117 Wong S, Lidums I, Rosty C, Ruskiewicz A, Parry S, Win A, Tomita Y, Vatandoust S, Townsend A, Patel D, Hardingham J, Roder D, Smith E, Drew P, Marker J, Uylaki W, Hewett P, Worthley D, Symonds E, Young G, Price T, Young J. Findings in young adults at colonoscopy from a hospital service database audit. *BMC Gastroenterology.* 2017; 17(1): 5.
 - 118 Zhang G, Zhao Y, Paramasivan S, Richter K, Morales S, Wormald PJ, Vreugde S. Bacteriophage effectively kills multidrug resistant Staphylococcus aureus clinical isolates from chronic rhinosinusitis patients. *Int Forum Allergy Rhinol.* 2017 Dec 14. doi: 10.1002/alr.22046. [Epub ahead of print]
 - 119 Zhao YC, Wormald PJ. Biofilm and Osteitis in Refractory Chronic Rhinosinusitis. *Otolaryngol Clin North Am.* 2017 Feb;50(1):49-60. doi: 10.1016/j.otc.2016.08.005. Review. PubMed PMID: 27888915.
 - 120 Zhao YC, Bassiouni A, Tanjararak K, Vreugde S, Wormald PJ, Psaltis AJ. Role of fungi in chronic rhinosinusitis through ITS sequencing. *Laryngoscope.* 2017; doi: 10.1002/lary.26702 [Epub ahead of print]
 - 121 Zysk A, DeNichilo M, Panagopoulos V, Zinonos I, Liapis V, Hay S, Ingman W, Ponomarev V, Atkins G, Findlay D, Zannettino A, Evdokiou A. Adoptive transfer of ex vivo expanded Vy9V62 T cells in combination with zoledronic acid inhibits cancer growth and limits osteolysis in a murine model of osteolytic breast cancer. *Cancer Letters.* 2017;386:141-150.
- ### Book Chapter
- Mees ST, Maddern G. Chapter 2: Acquisition of specific laparoscopic skills for laparoscopic hepatopancreatobiliary surgery. In: *Laparoscopic Liver, Pancreas, and Biliary Surgery*, Conrad C, Gayet B (eds), 2017 John Wiley & Sons Ltd, pp.17-27.
- ## THERAPEUTICS RESEARCH CENTRE, UNIVERSITY OF SOUTH AUSTRALIA
-
- 1 Alobaid AS, Wallis SC, Jarrett P, Starr T, Stuart J, Lassig-Smith M, Mejia JL, Roberts MS, Roger C, Udy AA, Lipman J, Roberts JA. Population Pharmacokinetics of Piperacillin in Nonobese, Obese, and Morbidly Obese Critically Ill Patients. *Antimicrob Agents Chemother.* 2017 Feb 23;61(3).
 - 2 Andréo-Filho N, Bim AVK, Kaneko TM, Kitice NA, Haridass IN, Abd E, Santos Lopes P, Thakur SS, Parekh HS, Roberts MS, Grice JE, Benson HAE, Leite-Silva VR. Development and Evaluation of Lipid Nanoparticles Containing Natural Botanical Oil for Sun Protection: Characterization and *in vitro* and *in vivo* Human Skin Permeation and Toxicity. *Skin Pharmacol Physiol.* 2017 Nov 4;31(1):1-9.
 - 3 Berling I, Mostafa A, Grice JE, Roberts MS, Isbister GK. Warfarin Poisoning with Delayed Rebound Toxicity. *J Emerg Med.* 2017 Feb;52(2):194-196.
 - 4 Cardon-Dunbar A, Robertson T, Roberts MS, Isbister GK. Pramipexole Overdose Associated with Visual Hallucinations, Agitation and Myoclonus. *J Med Toxicol.* 2017 Dec;13(4):343-346.
 - 5 Chiew AL, Page CB, Clancy D, Mostafa A, Roberts MS, Isbister GK. 2-Methyl-4-chlorophenoxyacetic acid (MCPA) and bromoxynil herbicide ingestion. *Clin Toxicol (Phila).* 2017 Oct; 9:1-4.
 - 6 Gilbert AV, Patel BK, Roberts MS, Williams, DB, Crofton JH, Morris NM, Wallace J, Gilbert AL An audit of medicines information quality in electronically generated discharge summaries – Evidence to meet the Australian national safety and quality health service standards *J Pharm Pract Re.* 2017;47(5), 355-364.
 - 7 Jayaweera D, Islam S, Gunja N, Cowie C, Broska J, Poojara L, Roberts MS, Isbister GK. Chloroform ingestion causing severe gastrointestinal injury, hepatotoxicity and dermatitis confirmed with plasma chloroform concentrations. *Clin Toxicol (Phila).* 2017 Feb;55(2):147-150.
 - 8 Nastiti CMRR, Ponto T, Abd E, Grice JE, Benson HAE, Roberts MS. Topical Nano and Microemulsions for Skin Delivery. *Pharmaceutics.* 2017 Sep 21;9(4).
 - 9 Pastore M, Studier H, Bonder C, Roberts M. Non-invasive metabolic imaging of melanoma progression. *Experimental Dermatology.* 2017 Jul;26(7):607-614.
 - 10 Roberts MS, Mohammed Y, Pastore MN, Namjoshi S, Yousef S, Alinaghi A, Haridass IN, Abd E, Leite-Silva VR, Benson H, Grice JE. Topical and cutaneous delivery using nanosystems. *J Control Release.* 2017 Feb 10;247:86-105.
 - 11 Sime FB, Hahn U, Warner MS, Tiong IS, Roberts MS, Lipman J, Peake SL, Roberts JA. Using Population Pharmacokinetic Modeling and Monte Carlo Simulations To Determine whether Standard Doses of Piperacillin in Piperacillin-Tazobactam Regimens Are Adequate for the Management of Febrile Neutropenia. *Antimicrob Agents Chemother.* 2017 Oct 24;61(11).
 - 12 Wang H, Liang X, Gravot G, Thorling C, Crawford D, Xu Z, Liu X, Roberts M. Visualizing liver anatomy, physiology and pharmacology using multiphoton microscopy. *Journal of Biophotonics.* 2017 Jan; 10(1):46-60.
 - 13 Wang H, Zhang R, Bridle K, Jayachandran A, Thomas J, Zhang W, Yuan J, Xu Z, Crawford D, Liang X, Liu X, Roberts M. Two-photon dual imaging platform for *in vivo* monitoring cellular oxidative stress in liver injury. *Scientific Reports.* 2017;7:45374.
 - 14 Wong L, Wong A, Robertson T, Burns K, Roberts M, Isbister G. Severe hypertension and bradycardia secondary to midodrine overdose. *Journal of Medical Toxicology.* 2017 Mar; 13(1):88-90.
 - 15 Yousef S, Mohammed Y, Namjoshi S, Grice J, Sakran W, Roberts M. Mechanistic evaluation of hydration effects on the human epidermal permeation of salicylate esters. *AAPS Journal.* 2017 Jan;19(1):180-190.

Book Chapters

- 1 Liu X, Wang H, Liang X, Roberts MS. (2017). Hepatic metabolism in liver health and disease. In Pablo Muriel (Ed.) *Liver Pathophysiology: Therapies and Antioxidants*. Ch 31, pp 391-400. Cambridge, United Kingdom: Academic Press.
- 2 Machado ACHR, Lopes PS, Raffier CP, Haridass IN, Roberts MS, Grice JE, Leite-Silva VR, (2017) Skin transport, in *Cosmetic Science and Technology: Theoretical Principles and Applications* Sakamoto K, Lochhead H, Maibach HI, Yamashita Y (Eds), Elsevier, Amsterdam. ISBN 9780128020050. (Published Date: 27th March 2017)
- 3 Machado ACHR, Lopes PS, Raffier CP, Roberts MS, Grice JE, Leite-Silva VR. (2017) Skin penetration: Past, Present and Future, in *Cosmetic Science and Technology: Theoretical Principles and Applications*, eds. Sakamoto, Maibach, Elsevier ISBN 9780128020050 (Published Date: 27th March 2017)
- 4 Grice JE, Moghimi HR, Ryan EM, Zhang Q, I. Haridass I, Mohammed YH, Roberts MS. (2017) Non-formulation parameters that affect penetrant-skin-vehicle interactions and percutaneous absorption. (invited chapter in "Percutaneous Penetration Enhancers: Physical Methods in Penetration Enhancement, Vol. 5", eds. N Dragicevic-Curic & H Maibach, Springer-Verlag, GmbH, Berlin)
- 5 Mohammed YH, Moghimi HR, Yousef SA, Navin C. Chandrasekaran NC, Bibi CR, Sukumar SC, Grice JE, Roberts MS. (2017) Efficacy, safety and targets in topical and transdermal active and excipient delivery (invited chapter in "Percutaneous Penetration Enhancers: Physical Methods in Penetration Enhancement, Vol. 5", eds. N Dragicevic-Curic & H Maibach, Springer-Verlag, GmbH, Berlin)
- 6 Leite-Silva VR, Grice JE, Mohammed YH, Moghimi HR, Roberts MS. (2017) The influence of emollients on dermal and transdermal drug delivery. (invited chapter in "Percutaneous Penetration Enhancers: Physical Methods in Penetration Enhancement, Vol. 5", eds. N Dragicevic-Curic & H Maibach, Springer-Verlag, GmbH, Berlin)



HIGH PROFILE INTERNATIONAL TALKS 2017

CONFERENCE/MEETING	TITLE OF PRESENTATION	SIGNIFICANCE	LOCATION	DATE
RENUKA VISVANATHAN ADELAIDE G-TRAC CENTRE				
International Association of Gerontology and Geriatrics (IAGG) World Congress	Symposium: Trans-Disciplinary Research in Frailty to Achieve Healthy Ageing	Session Chair	San Francisco, USA	27th July
Active Ageing Conference - Healthy Ageing Advisory meeting	Healthy Ageing	Invited Attendee	Bangkok, Thailand	21st September
World Health Organisation - Clinical Consortium on Healthy Ageing	Clinical Consortium on Healthy Ageing	Invited Attendee	Geneva, Switzerland	21st November
Chinese University of Hong Kong Jockey Club Institute of Ageing Conference: Promoting Intrinsic Capacity in Ageing	Hospitals as Healing Environment for Older People	Invited Speaker	Hong Kong, China	4th December
TIM PRICE COLORECTAL CANCER RESEARCH GROUP				
Mumbai Cancer Cooperative	Current concepts in treatment for mCRC	Lecture	Mumbai, India	27th April
AsiaPacific Gastrointestinal Cancer Summit	Does side matter for metastatic colorectal cancer?	Lecture	Singapore	29th April
KIM MORETTI SOUTH AUSTRALIAN PROSTATE CANCER CLINICAL OUTCOMES COLLABORATIVE				
7th Asian Pacific Prostate Society Meeting	Comorbidity in localised prostate cancer	Keynote, invited "State of the Art" Lecture	Chaing Mai, Thailand	13th October
Third Asian Prostate Cancer (A-CaP) Study Meeting	Consensus meeting	Invited Contributor	Chaing Mai, Thailand	14th October
JOHN HOROWITZ CARDIOVASCULAR PATHOPHYSIOLOGY AND THERAPEUTICS GROUP				
Acute Cardiac Care, 10th International Conference	N-acetylcysteine for the limitation of infarct size in STEMI. Is there any benefit at all?	Invited Speaker	Tel Aviv, Israel	16th January
12th International Congress on Innovations in Coronary Artery Disease (ICCAD)	Inter-individual variability in platelet responsiveness to P2Y1S receptor antagonists reflects status of platelet adenylate cyclase pathway	Invited Speaker	Venice, Italy	17th October
CHER-RIN CHONG CARDIOVASCULAR PATHOPHYSIOLOGY AND THERAPEUTICS GROUP				
Acute Cardiac Care, 10th International Conference	Perhexiline sensitizes platelets to nitric oxide in diabetics	Invited Speaker	Tel Aviv, Israel	16th January
THANH HA NGUYEN CARDIOVASCULAR PATHOPHYSIOLOGY AND THERAPEUTICS GROUP				
Division of Cardiovascular Medicine, Keck School of Medicine, University of Southern California	Takotsubo syndrome: hiding in plain sight	Invited Speaker	Los Angeles, USA	16th November
JOHN BELTRAME TRANSLATIONAL VASCULAR FUNCTION RESEARCH COLLABORATIVE				
American College of Cardiology, 66th Annual Scientific Sessions	Angina in the Absence of Obstructive CAD. What do we do with these patients?	Invited Speaker, Panel Session	Washington DC, USA	18th March
Symposium on Ischaemic Heart Disease, Catholic University of Rome	Microvascular Angina	Invited Speaker	Rome, Italy	6th July

HIGH PROFILE INTERNATIONAL TALKS 2017 cont.



CONFERENCE/MEETING	TITLE OF PRESENTATION	SIGNIFICANCE	LOCATION	DATE
JOHN BELTRAME TRANSLATIONAL VASCULAR FUNCTION RESEARCH COLLABORATIVE cont.				
European Society of Cardiology Congress	Coronary Microvascular Disease: What is the Added Value of Invasive Diagnostic Testing?	Invited Speaker	Barcelona, Spain	27th August
American Heart Association Scientific Sessions	Management of Women with MINOCA and ANOCA	Invited Speaker	Anaheim, USA	13th November
American Heart Association Scientific Sessions	Myocardial Infarction with Non-Obstructive CAD (MINOCA): A Practical Approach for Clinicians	Session Chair	Anaheim, USA	14th November
American Heart Association Scientific Sessions	Framework for the Emergency Department Assessment of Patients with Possible Acute Coronary Syndromes	Invited Speaker, Hotline Discussant	Anaheim, USA	14th November
Division of Cardiovascular Medicine, Keck School of Medicine, University of Southern California	Overview and Complexities of Angina in the Absence of Obstructive CAD	Invited Speaker	Los Angeles, USA	16th November
ROBERT FITRIDGE VASCULAR SURGERY RESEARCH GROUP				
Asian Vascular Society	Global Vascular Guideline for the Management of Chronic Limb-Threatening Ischemia (CLTI): Anatomical staging (GLASS) [report on outcomes from an international working group on critical limb-threatening ischaemia]	Plenary Lecture	Kuala Lumpur, Malaysia	27th October

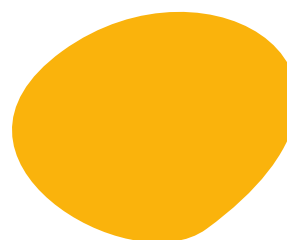
Professor John Beltrame, Translational Vascular Function Research Collaborative.

HIGH PROFILE INTERNATIONAL TALKS 2017 cont.

CONFERENCE/MEETING	TITLE OF PRESENTATION	SIGNIFICANCE	LOCATION	DATE
BENEDETTA SALLUSTIO CLINICAL PHARMACOLOGY RESEARCH GROUP				
International Congress of Therapeutic Drug Monitoring and Clinical Toxicology	Invited presentation as part of Symposium on Biomarkers and TDM of Immunosuppressive Drugs	Invited Speaker	Kyoto, Japan	25th September
SIMON KOBLAR STROKE RESEARCH PROGRAMME				
Stroke Society of Australasia	Cellular and molecular therapies for neurorestoration post-stroke	Plenary Lecture	Queenstown, New Zealand	24th August
ROBERT ADAMS THE HEALTH OBSERVATORY				
Australasian Sleep Association, Sleep DownUnder	Epidemiology of sleep complaints in the community	Invited Speaker	Auckland, New Zealand	27th November
CATHERINE HILL RHEUMATOLOGY RESEARCH GROUP				
Combined Australian Rheumatology Association and New Zealand Rheumatology Association Annual Scientific Meeting	Giant Cell Arteritis	Plenary Lecture	Auckland, New Zealand	23rd May
5th World Congress on Controversies, Debates & Consensus in Bone, Muscle & Joint Diseases	Alternative treatment to symptomatic slow acting drugs in treating symptoms and structural changes	Plenary Lecture	Gold Coast, Australia	31st August
MAUREEN RISCHMUELLER RHEUMATOLOGY RESEARCH GROUP				
5th World Congress on Controversies, Debates and Consensus in Bone, Muscle and Joint Diseases	Practical approach to the extra-articular manifestations of Rheumatoid Arthritis: Sjögren's	Plenary Lecture	Gold Coast, Australia	31st August
MICHAEL ROBERTS THERAPEUTICS RESEARCH CENTRE				
14th European ISSX (International Society for the Study of Xenobiotics) Meeting	A PBPK Model Describing the <i>in vivo</i> distribution of Administered Mesenchymal Stem Cells.	Invited Speaker	Cologne, Germany	27th June
11th Workshop and Conference on Advanced Multiphoton and Advanced Fluorescence Lifetime Imaging Techniques – FLIM 2017. Max Born Institute.	Multiphoton pharmacokinetics	Invited Speaker	Berlin, Germany	30th June
PETER-JOHN WORMALD ENT SURGERY				
Sapporo Hokkaido University, Rhinology Conference	Planning surgery in the frontal recess	Key note speaker	Sapporo, Japan	13-24 January
International Nepalese Rhinology FESS Course	Talks: Planning surgery on the frontal recess; Tips and pearls in frontal drillout surgery; Pathogenesis of chronic sinusitis; Pathogenesis of chronic sinusitis; New topical treatments in CRS; Complications in CRS	Key Note Speaker and invited Honoured Guest	Kathmandu, Nepal	25-31 January
Asia-Oceania Otolaryngology Head and Neck Surgery Meeting	Talks: Anatomy of the paranasal sinuses; Understanding the frontal recess and frontal sinus; The role of the mucosal barrier in CRS	Key Note Speaker	Taipei, Taiwan	17-20 February
University of Pennsylvania Endoscopic Skull Base Meeting & Penn Distinguished Skull Base Professorship and Forum	Management of vascular encased tumors of the skull base	Invited Speaker	Philadelphia, USA	7-11 May

HIGH PROFILE INTERNATIONAL TALKS 2017 cont.

CONFERENCE/MEETING	TITLE OF PRESENTATION	SIGNIFICANCE	LOCATION	DATE
PETER-JOHN WORMALD ENT SURGERY cont.				
Advanced Wessex FESS Course	Talks: New classification of Frontal Sinus cells & surgical approaches; Endoscopic DCR; Managing massive polyposis; 3D anatomy of the sinuses and skull base; 3D anatomy beyond the sinuses	Keynote speaker and Honoured Guest	Winchester, UK	27-30 June
Advanced Indonesian FESS Course	Talks: Frontal sinus masterclass; Managing the difficult frontal sinus; Cutting Edge Rhinology; New topical treatments for recalcitrant CRS; Complications in CRS	Keynote speaker and honoured guest	Jakarta, Indonesia	8-16 July
Singapore Advanced FESS Course	Talks: 3D anatomy of the sinuses and beyond; Update on the pathogenesis of CRS; Managing bleeding in CRS and skull base surgery; Frontal Sinus Masterclass	Keynote Speaker and Honoured Guest	Singapore	11-14 August
American Rhinological Society 63rd Annual Meeting	Managing industry Relationships	Panelist	Chicago, USA	7-8 September
American Academy of Otolaryngology Head and Neck Surgery	Instructional Courses: Endoscopic DCR; Managing tumors of the infratemporal fossa; Biofilms and new topical treatments. Panelist: Endoscopic Potpourri	Presenter & Panelist	Chicago, USA	9-12 September
Masterclass in Advanced Endoscopic Sinus Surgery	Talks: 3D anatomy of the sinuses and beyond; Endoscopic management of infra temporal fossa tumors; Frontal sinus masterclass	Keynote speaker and Honoured Guest	Montreal, Canada	14-16 September
Thailand Advanced Endoscopic Sinus Surgery Course	Talks: Pathophysiology of CRS; Frontal sinus anatomy and planning; Frontal sinus masterclass; Role of the microbiome in CRS; Management of tumors of the skull base	Keynote Speaker and Honoured Guest	Bangkok, Thailand	9-11 November
17th ASEAN Otorhinolaryngology Head and Neck Surgery Congress	Endoscopic Management of Skull Base Malignancies	Keynote Speaker	Yangon, Myanmar	16-18 November
SAM COSTELLO INFLAMMATORY BOWEL DISEASE RESEARCH GROUP				
European Crohn's and Colitis Organisation (ECCO) meeting	Short duration, low intensity pooled faecal microbiota transplantation induces remission in patients with mild-moderately active Ulcerative Colitis: A randomised controlled trial	Invited Presentation - Best Clinical Trial at the ECCO meeting	Barcelona, Spain	18th February



TQEH RESEARCH DAY 2017



For the first time in its 26 years, The Queen Elizabeth Hospital (TQEH) Research Day was held over two days: Thursday 19th and Friday 20th October 2017. The format was changed to allow the poster presentation competition to be held on Thursday morning, and for a new “THRF Showcase” to feature in the afternoon. During the Showcase, each grant and fellowship recipient who benefited from the \$2.7 million in The Hospital Research Foundation (THRF) funding awarded to TQEH based researchers in 2017, presented a short summary of their project to other BHI and TQEH researchers, as well as to significant donors of the THRF.

The long-established purpose of Research Day is to provide an opportunity for students and those “in training” to practice and develop presentation skills under conditions that are typical of most professional society meetings. Students are required to write an abstract and prepare either a 10-minute oral presentation, or a poster and 3 minute mini-oral presentation. Prizes are awarded in a number of categories for the best presentation and competition is fierce!

Our congratulations go to all the students and registrars who participated, and especially to the award winners, who were all outstanding. The quality and scope of the research presented continues to develop and improve each year which is a testament to the students, and to the guidance and support provided by their supervisors and peers. This all adds to the campus’ reputation as a significant and high quality research facility.

On the Friday of TQEH Research Day, students presented in one of five “oral presentation” categories, depending on their level of experience and course of study. At midday, TQEH Research Day’s Plenary Lecture on “The Politics of Ageing” was given by The Honourable Mark Butler, Federal Member for Port Adelaide. He delivered a thought-provoking and refreshingly positive perspective on the ageing of Australia’s baby boomer generation and the political impact that has followed, and discussed the continuing contribution older Australians make to our community.

Research Day is recognised as a significant annual event in the research calendar at TQEH and its continued success would not be possible without the many volunteers who contribute to the successful running of the day. Our gratitude is extended to the chairs of all the sessions, the judges of the abstracts, poster and oral presentations and the members of the Research Day Organising Committee. Special thanks must go to The Hospital Research Foundation for their wonderful support over the years in underwriting the day, as well as sponsoring two of the oral speaker prizes and providing the coffee baristas! Many thanks also go to our other University and Trade sponsors.

LISA LEOPARDI

CHAIR, ORGANISING COMMITTEE

► TQEH RESEARCH DAY 2017

L: **Lisa Leopardi**, Chair - TQEH Research Day Organising Committee.
R: TQEH Research Day Plenary Lecturer, The Honourable Mark Butler MP
with **Professor John Beltrame**.

TQEH RESEARCH DAY 2017 cont.

AWARD WINNERS



RESEARCH DAY AWARD	TRADE / UNIVERSITY SPONSOR VALUE	WINNER	BHI RESEARCH GROUP
Best Lay Description	Pathtech \$350	Maddison Archer	Breast Biology and Cancer Unit
Best Poster/Mini-oral presentation	Southern Cross Science \$500	Alexandra Shoubridge	Breast Cancer Research Unit
Best Oral Presentation: Honours and Summer students	The Hospital Research Foundation \$1,000	Sean Mangion	Therapeutics Research Centre
Best Oral Presentation: Junior Laboratory PhD students	Co-sponsored by ThermoFisher Scientific and Coherent Scientific \$1,000	Sathish Paramasivan	ENT Surgery
Best Oral Presentation: Senior Laboratory PhD students	The University of Adelaide \$1,000	Chris DiFelice	Breast Cancer Research Unit
Best Oral Presentation: Clinical Trainees	The Hospital Research Foundation \$1,000	Fiona Chan	Rheumatology Research Group
Best Oral Presentation: Clinical Higher Degree students	University of South Australia \$1,000	Mian Ooi	ENT Surgery
Ivan de la Lande Award	Not applicable	Sven Surikow	Cardiovascular Pathophysiology and Therapeutics Group

L-R: Alexandra Shoubridge, Maddison Archer, Mian Ooi, Sathish Paramasivan, Anna Nolan - Chief Financial Officer THRF, Professor John Beltrame - CALHN Director of Research, Fiona Chan, Christopher DiFelice and Sean Mangion.

AWARDS 2017



RECIPIENT	AWARD	TYPE	SPONSOR	VALUE
ADELAIDE G-TRAC CENTRE				
Joanne Dollard May	selected to attend Science In Public media and communications workshop	Course	The Hospital Research Foundation and BHI	\$800
Beatriz Martins July	THRF Travel Award, to attend IAGG World Congress	Travel	THRF	\$2,500
Beatriz Martins July	IAGG World Congress Registration Award	Fee subsidy (for voluntary assistance at conference)	IAGG	\$899 US
Joanne Dollard November	THRF Travel Award	Travel	THRF	\$1,189
Joanne Dollard November	Faculty of Health and Medical Sciences, The University of Adelaide	Travel	The University of Adelaide	\$1,000
BREAST BIOLOGY AND CANCER UNIT				
Joe Wrin May	selected to attend Science In Public media and communications workshop	Course	THRF and BHI	\$800
Pallave Dasari July	Superstar of STEM	One of 30 female scientists and technologists selected from around Australia	Science and Technology Australia	
Sarah Bernhardt August	Research Travel Award	Travel	Adelaide Medical School, The University of Adelaide	\$1,000
BREAST CANCER RESEARCH UNIT				
Vasilios (Bill) Panagopoulos June	ASMR Ross Wishart Memorial Award (to person who delivers the most outstanding presentation at the SA Division of ASMR Annual Scientific Meeting)		ASMR (Australian Society for Medical Research)	
Alexandra Shoubridge	The University of Adelaide AMS Research Travel Award			\$2,033
Alexandra Shoubridge	THRF Travel Award			\$3,000

Vasilios (Bill) Panagopoulos, Breast Cancer Research Unit - Joint Winner of the ASMR Ross Wishart Memorial Award.

AWARDS 2017 cont.

RECIPIENT	AWARD	TYPE	SPONSOR	VALUE
CARDIOVASCULAR PATHOPHYSIOLOGY AND THERAPEUTICS GROUP				
Thanh H Nguyen July	Faculty of Health and Medical Sciences Research Travel Award	Travel	The University of Adelaide	\$3,000
Thanh H Nguyen August	European Society of Cardiology Travel Award	Travel	Cardiac Society of Australia and New Zealand (CSANZ)	\$3,000
TRANSLATIONAL VASCULAR FUNCTION RESEARCH COLLABORATIVE				
Rosanna Tavella April	THRF Travel Award	Travel	THRF	\$2,984
Clementine Labroschiano May	selected to attend Science In Public media and communications workshop	Course	THRF and BHI	\$800
Clementine Labroschiano August	Travel Scholarship to attend Cardiac Society of Australia and New Zealand (CSANZ) Annual Scientific Meeting, Perth, Australia	Travel	Cardiac Society of Australia and New Zealand (CSANZ)	\$1,000
Sivabaskari Pasupathy September	Finalist for the Derek Frewin Early Career Researcher Award		The Northern Communities Health Foundation	
Sivabaskari Pasupathy November	THRF Travel Award	Travel	THRF	\$2,195
Clementine Labroschiano November	Adelaide Medical School Travel Award to attend the Health Services Research of Australian and New Zealand conference, Gold Coast	Travel	The University of Adelaide	\$1,092
Clementine Labroschiano November	THRF Travel Award to attend American Heart Association Scientific Sessions, Anaheim, USA	Travel	THRF	\$2,324
CLINICAL PHARMACOLOGY RESEARCH GROUP				
Rong Hu September	► 3MT Finalist , The University of Adelaide			
ENDOCRINOLOGY UNIT				
Emily Meyer, Genevieve Gabb and David Jesudason August	2017 Australia Diabetes Society Annual Scientific Meeting Poster Award		Australia Diabetes Society	\$500
GASTROINTESTINAL HEALTH AND DISEASE				
Zenab Dudhwala May	THRF Travel Award	Travel	THRF	\$2,094
Zenab Dudhwala May	Digestive Disease Week (DDW)	Travel	DDW	\$1,000
RESPIRATORY MEDICINE UNIT AND CLINICAL PRACTICE UNIT				
Zoe Kopsaftis July	European Respiratory Society Congress	Travel	Lung Foundation Australia/A Menarini	\$3,000
Binh Truong October	Asthma Australia Excellence Award		Asthma Australia & Dyson	\$500 +Dyson Vacuum

AWARDS 2017 cont.



RECIPIENT	AWARD	TYPE	SPONSOR	VALUE
RHEUMATOLOGY RESEARCH GROUP				
Carlee Ruediger May	THRF Travel Award	Travel	THRF	\$1,709
Sam Whittle May	Best Clinical Science Free Paper, Australian Rheumatology Association Annual Scientific Meeting		Australian Rheumatology Association	\$3,000
Sam Whittle May	Tom Highton Award for Best Presentation, Annual Scientific Meeting of the New Zealand Rheumatology Association		New Zealand Rheumatology Association	\$1,500
Fiona Chan October	Best Clinical Presentation, Annual South Australian Rheumatology Association Meeting		South Australian Rheumatology Association	\$1,000
PSYCHIATRY RESEARCH GROUP				
Scott Clark May	RANZCP Early Career Psychiatrist Award (presented to fellow, within 5 years of election to Fellowship of the College, or registrar who has contributed the most significant paper published in the past 2 years). ► https://www.nature.com/articles/tp2016170		RANZCP (The Royal Australian and New Zealand College of Psychiatrists)	\$10,000
THERAPEUTICS RESEARCH CENTRE				
Sean Mangion June	ASMR Best Poster presented by an Honours student		ASMR SA Annual Scientific Meeting	

Sean Mangion, Therapeutics Research Centre - Winner of the ASMR Honours Poster Presentation Award.

AWARDS 2017 cont.

RECIPIENT	AWARD	TYPE	SPONSOR	VALUE
VIROLOGY				
Jason Gummow February	Dean's Commendation for Doctoral Thesis Excellence	Academic	The University of Adelaide	
Danushka Wijesundara May	selected to attend Science In Public media and communications workshop	Course	THRF and BHI	\$800
Danushka Wijesundara June	The Westmead Institute for Medical Research Young Achiever Award		Australian Centre for HIV and Hepatitis Virology Research (ACH2), 12th Annual Scientific Meeting	\$500
Makutiro Masavuli June	Domestic Travel Award to attend an Australian Conference	Travel	Australian Centre for HIV and Hepatitis Virology Research (ACH2)	\$1,000
Makutiro Masavuli September	Executive Dean's Award Florey Postgraduate Research Conference		Faculty of Health and Medical Sciences, The University of Adelaide	
Makutiro Masavuli September	Adelaide Medical School Prize, Florey Postgraduate Research Conference		Faculty of Health and Medical Sciences, The University of Adelaide	
VIROLOGY cont.				
Makutiro Masavuli September	THRF Travel Award	Travel	THRF	\$3,000
Branka Grubor-Bauk October	THRF Travel Award	Travel	THRF	\$3,000
Danushka Wijesundara October	THRF Travel Award	Travel	THRF	\$930
Danushka Wijesundara October	Faculty Health & Medical Sciences, The University of Adelaide	Travel	The University of Adelaide	\$3,000
Danushka Wijesundara October	ThermoFisher Travel Award, 20th Annual Upstate New York Immunology Conference	Travel	ThermoFisher	US\$50
Eric Gowans November	THRF Travel Award	Travel	THRF	\$773

AWARDS 2017 cont.



RECIPIENT	AWARD	TYPE	SPONSOR	VALUE
ENT SURGERY				
Katharina Richter April	Finalist, Channel 9 Young Achiever Award - The University of Adelaide - Science and Technology Award		Channel 9 and The University of Adelaide	
Katharina Richter May	Conference Travel Award	Travel	The University of Adelaide	\$1,000
Dijana Miljkovic May	Dean's Commendation for Doctoral Thesis Excellence	Academic	The University of Adelaide	
Katharina Richter June	European Society of Clinical Microbiology and Infectious Diseases Travel Award	Travel	European Society of Clinical Microbiology and Infectious Diseases	\$1,000
Katharina Richter July	Dean's Commendation for Doctoral Thesis Excellence	Academic	The University of Adelaide	
Aden Lau September	THRF Travel Award	Travel	THRF	\$627
Katharina Richter November	SA Fresh Science Ambassador, one of 10 early-career researchers selected from SA	Media training	► Fresh Science	
Katharina Richter November	Best ECR Science Communicator Award		Fresh Science SA, Science in Public	
INFLAMMATORY BOWEL DISEASE RESEARCH GROUP				
Sam Costello February	Best Clinical Trial, European Crohn's and Colitis Organisation (ECCO) meeting, Barcelona Spain		ECCO	\$1,200

Katharina Richter, ENT Surgery - Fresh Science SA Best Early Career Researcher Science Communicator Award.

COMMUNITY ENGAGEMENT 2017

BHI researchers were involved in over 130 community engagement activities during 2017. Many of these were arranged and hosted by The Hospital Research Foundation (THRF). These activities include talks for members of the general public or specific community groups. They were either held out in the community, or at the BHI in which case they were followed by guided tours of the BHI laboratories.

THRF's communications team also liaise with BHI researchers to write articles for THRF and their affiliate newsletters and websites, coordinate media releases with the relevant University and SA Health, and arrange any media opportunities, including a regular radio interview segment on Coast FM.



COMMUNITY ENGAGEMENT 2017



SCIENCE ALIVE! 2017

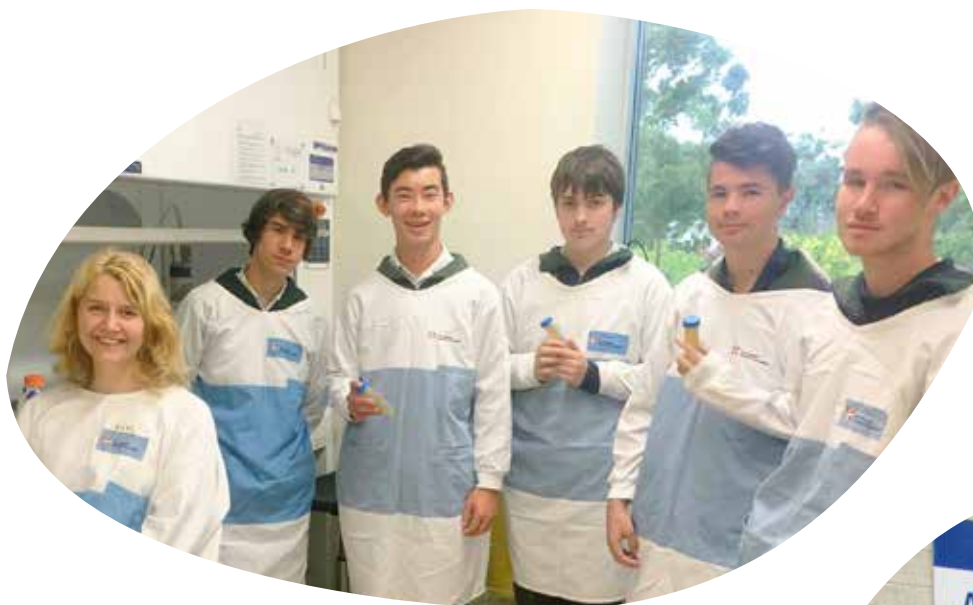
Science Alive! forms part of the South Australian celebrations for National Science Week each August. Around 60 different organisations participated in the 12th Science Alive! which was held at the Adelaide Showground in Wayville. Organisers estimate that more than 30,000 people visited during the 3 day event (4-6 August).

For the 4th consecutive year, the Basil Hetzel Institute set up a hands-on display. Interactive activities at the BHI stand allowed visitors of all ages to use hand-held spirometers to measure the amount of air they are capable of expelling in 1 second (FEV1 or forced expired volume of air in 1 second), and to test their surgical skills on Laparoscopic Box-Trainers on loan from The Royal Australasian College of Surgeons (RACS).

Many thanks to Nicholas Marlow from RACS for arranging for the laparoscopic box-trainers to be made available. It was fantastic to have many of the TQEH surgeons who volunteered at the 2016 event come back and help out again this year. Having surgeons with a working knowledge of the various laparoscopic techniques available to talk with school students and members of the general public is invaluable.

Thanks go to BHI, TQEH staff and students for volunteering at Science Alive! 2017:

BHI RESEARCHERS	TQEH SURGEONS
Ruth Battersby	Jonathan Yong
Ellen Lyrtzis	Lilian Kuan
Ha Nguyen	David Rodda
Zenab Dudhwala	Peter Hewett
Dan Wijesundara	Markus Trochsler
Prue Cowled (photo top)	Simon Wood
Rajan Sundaresan	Martin Bruening
Kathryn Hudson	
Zoe Kopsaftis	
Jo Dollard	
Joe Wrin	
Sarah Bernhardt	
Irene Stafford	
Kati Richter	
Beula Panchatcharam	
Helen Palethorpe	
Rebecca Anderson	



BRIDGING THE GAP – ILLUMINATING THE FACE OF STEM

This project aims to increase the relevance of science taught in high schools by exposing pre-service science teachers to business and industry settings in South Australia. This will help to inform their teaching methods with high school students. The project is a research collaboration between Flinders University, the State Government, and high schools.

Three teaching students attended the BHI on 4th October and met with Dr Chandra Kirana, Liver Metastasis Research Group, and Daniel Badger, Nuclear Medicine TQEH. On their second visit to the BHI the students attended part of TQEH Research Day on 19th October. As part of this project, they find a research 'problem' that scientists are working on, think about this problem and how it 'could' be solved (without actually solving it) and then devise a unit plan and lesson plans around the issue, which can then be taught on the next teaching placement.

WORK EXPERIENCE HIGH SCHOOL STUDENTS

In addition to community engagement activities, many BHI researchers also host work experience students. In 2017 year 10/11 students from Wilderness School, Westminster School, Glenunga International High School, Saint Peters Girls College, Saint Aloysius College, Scotch College, Portside Christian College, Pulteney Grammar School and St Columba's College chose to undertake their work experience placement at the BHI.

Visiting school students help **Katharina Richter** (far left) prepare silver nanoparticles. The students then tested the antibacterial properties of these nanoparticles in their own experiments back at school.



Twenty year 11 Biology students from Tyndale Christian School worked with BHI researchers to develop research projects and present their findings.

Related programs that enabled high school students to experience life as a researcher included one arranged by Dr Kristin Carson-Chahhoud (Respiratory Medicine Unit & Clinical Practice Unit). Seven STEMM interns (Science Technology Engineering Mathematics in Medicine) completed a two-week summer internship, and worked with BHI researchers and a print and design company to develop a health intervention for the iSNAP project (interactive smoking, nutrition, alcohol and physical activity).

A similar program, **The University of Adelaide's G-TRAC Medical Placement Program** provided two Prince Alfred College year 11 students with the opportunity to explore the Geriatric branch of medicine during two weeks in April. This included spending time at the G-TRAC Centre in the Resthaven Nursing Home as well as with researchers based at the BHI, TQEH.

► <http://www.basilhetzelinstitute.com.au/latest-news/bhi-winning-news/>

Prince Alfred College students Kevin Ho (left) and Jason Charlwood, spent two weeks at the BHI, TQEH as part of the **G-TRAC Medical Placement Program**.



COMMUNITY ENGAGEMENT ACTIVITIES 2017

NAME OF INDIVIDUAL	TOPIC OR TITLE	DELIVERED TO	ACTIVITY
AGED AND EXTENDED CARE SERVICES			
Beatriz Martins 20-01-17	Preparing Australia for an Ageing Population	General Public	► online article - THRF website
Clare McNally 02-02-17	Oral health, general health and operative risk in hospitalised older patients	U3A Flinders University	THRF talk
Renuka Visvanathan 01-04-17	Frailty and Healthy Ageing	General Public	G-TRAC Newsletter, Autumn 2017 News
Renuka Visvanathan 01-04-17		General Public	CRE Frailty and Healthy Ageing Newsletter, Autumn 2017 News
Tsung Woo 05-04-17	Healthy Bones for Healthy Ageing	G-TRAC Consumer Lecture Series: Let's MOVE It! Get moving for better health	Talk
Kareeann Khaw 05-04-17	Keep Moving to Improve your Health	G-TRAC Consumer Lecture Series: Let's MOVE It! Get moving for better health	Talk
Beatriz Martins 06-04-17	Reducing the impact of frailty on our ageing population	General Public	Radio - Coast FM
Kareeann Khaw 12-05-17	Advances in Alzheimers	U3A Adelaide Hills	THRF talk
Beatriz Martins 01-02-17	Preparing Australia for an Ageing Population	General Public	► THRF Newsletter, edition 1
Beatriz Martins 23-05-17	Frailty and Healthy Ageing	Greenwith Community Centre	THRF Talk

Dr Beatriz Martins, Adelaide G-TRAC Centre gives a talk on Healthy Ageing to members of the University of the Third Age (U3A) Flinders University.

COMMUNITY ENGAGEMENT 2017 cont.

NAME OF INDIVIDUAL	TOPIC OR TITLE	DELIVERED TO	ACTIVITY
AGED AND EXTENDED CARE SERVICES cont.			
Kareeann Khaw 15-06-17	Healthy Ageing	General Public	THRF Talk & BHI Tour
Danielle Taylor 24-07-17	Helping Your Community Age Healthily	General Public	► online article - THRF website
Thanuja De Silva 27-07-17	Don't Fall for Falls- Falls in Older Adults- A Clinician's Perspective	G-TRAC Consumer Lecture Series: Balancing Benefits and Falls Risk	Talk
Ivanka Hendrix 27-07-17	Medications and Falls	G-TRAC Consumer Lecture Series: Balancing Benefits and Falls Risk	Talk
Danielle Taylor 01-08-17	Helping Your Community Age Healthily	General Public	► THRF Newsletter, edition 2
Renuka Visvanathan 08-09-17	Frailty and Healthy Ageing	General Public	G-TRAC Newsletter, Spring 2017 News
Kareeann Khaw 08-09-17	Frailty and Healthy Ageing	U3A Flinders University	THRF Talk
Clare McNally, Sally Ahip, Mark Thompson, Danielle Taylor, Solomon Yu, Kandiah Umapathysivam, Kareeann Khaw, Joanne Dollard, James Smyth, Beatriz Martins, Thanuja De Silva, Bavand Bikdeli 08-09-17	Frailty and Healthy Ageing	General Public	Centre for Research Excellence (CRE) in Frailty and Healthy Ageing Research Showcase
Fin Cai 19-10-17	Rheumatology in the older person- it's more than just osteoarthritis!	G-TRAC Consumer Lecture Series: Mobility & Movement	Talk
Anupam Datta Gupta 19-10-17	Walking after a stroke	G-TRAC Consumer Lecture Series: Mobility & Movement	Talk
Danielle Taylor 02-11-17	Helping Your Community Age Healthily	General Public	Radio - Coast FM
Renuka Visvanathan 01-12-17	Frailty and Healthy Ageing Showcase	General Public	CRE Frailty and Health Ageing Newsletter, Spring 2017 News
BREAST BIOLOGY AND CANCER UNIT			
Wendy Ingman 24-01-17	Density research edges closer to breast cancer prevention	General Public	► Radio - ABC news
Wendy Ingman 24-01-17	Density research edges closer to breast cancer prevention	General Public	► online article - ABCR website
Wendy Ingman 24-01-17	Density research edges closer to breast cancer prevention	General Public	► online article - THRF website
Wendy Ingman 30-01-17	Density research edges closer to breast cancer prevention	ABC Radio National Health Report	► Radio - ABC radio national
Wendy Ingman 14-02-17	Breast Cancer Research	General Public	Mother's Day Classic Launch

COMMUNITY ENGAGEMENT 2017 cont.

NAME OF INDIVIDUAL	TOPIC OR TITLE	DELIVERED TO	ACTIVITY
BREAST BIOLOGY AND CANCER UNIT cont.			
Wendy Ingman 23-02-17	Breast Density Research	General Public	► Radio - Deutsche Welle radio, Germany
Wendy Ingman 27-02-17	Life saving advice from the Adelaide Fringe	General Public	► TV - Channel 10 news
Wendy Ingman 18-03-17	Breast Cancer Research	General Public	Fundraiser for Mother's Day Classic
Joe Wrin 03-05-17		General Public	► online article - ABCR website
Wendy Ingman 05-06-17		General Public	ABCR Newsletter, edition 1
Joe Wrin 05-06-17		General Public	ABCR Newsletter, edition 1
Pallave Dasari 03-07-17	Superstar of STEM	General Public	► The Advertiser
Wendy Ingman 20-10-17		General Public	► online article - ABCR website
Wendy Ingman 20-10-17		General Public	► online article - ABCR website
Joe Wrin & Wendy Ingman 03-11-17		General Public	► online article - THRF website
Joe Wrin & Wendy Ingman 03-11-17		General Public	► online article - THRF website
Maddison Archer 06-11-17		General Public	► online article - ABCR website
Chris DiFelice 07-11-17		General Public	► online article - ABCR website
Pallave Dasari 13-11-17	The Breast	General Public	► Radio - ABC radio Adelaide
BREAST CANCER RESEARCH UNIT			
Alexandra Shoubridge 20-01-17		General Public	► online article - THRF website
Namfon (Bee) Pantarat 20-04-17		General Public	► online article - ABCR website
Namfon (Bee) Pantarat 20-04-17		General Public	► online article - THRF website
Vasilios (Bill) Panagopoulos 08-05-17		General Public	► online article - ABCR website
Vasilios (Bill) Panagopoulos 08-05-17		General Public	► online article - THRF website
Andreas Evdokiou 15-05-17	Australian-first cancer facility flagged for Adelaide in 2020	General Public	► online article - Neos Kosmos
Andreas Evdokiou 31-05-17	Bone regeneration following cancer related bone loss	General Public	TV - Channel 9 news

COMMUNITY ENGAGEMENT 2017 cont.



NAME OF INDIVIDUAL	TOPIC OR TITLE	DELIVERED TO	ACTIVITY
BREAST CANCER RESEARCH UNIT cont.			
Namfon (Bee) Pantarat 01-06-17	Adoptive cell therapy: harnessing the body's immune cells to fight cancer	U3A Flinders University	THRF Talk
Namfon (Bee) Pantarat 05-06-17		General Public	ABCR Newsletter, edition 1
Vasilios (Bill) Panagopoulos 05-06-17		General Public	ABCR Newsletter, edition 1
Alexandra Shoubridge 01-02-17		General Public	THRF Newsletter, edition 1
Namfon (Bee) Pantarat 01-08-17		General Public	THRF Newsletter, edition 2
Irene Zinonos 25-06-17		Ladies Auxiliary of the Cyprus Community	THRF Talk
Alexandra Shoubridge 06-07-17	Osteoporosis	U3A Flinders University	THRF Talk
Irene Zinonos 03-10-17		Ladies Auxiliary of the Cyprus Community	► online article - THRF website
Irene Zinonos 01-11-17		General Public	► online article - APC website
Irene Zinonos 01-10-17		General Public	THRF Newsletter, edition 3
Andreas Evdokiou 03-11-17		General Public	► online article - ABCR website
Andreas Evdokiou 03-11-17		General Public	► online article - THRF website
Alexandra Shoubridge 04-12-17		General Public	► online article - THRF website

Professor Andreas Evdokiou (far left) and **Dr Irene Zinonos** (back far left), Breast Cancer Research Unit, spoke at a fundraising event organised by the Ladies Auxillary of the Cyprus Community of SA.

COMMUNITY ENGAGEMENT 2017 cont.

NAME OF INDIVIDUAL	TOPIC OR TITLE	DELIVERED TO	ACTIVITY
COLORECTAL CANCER RESEARCH GROUP			
Jennifer Hardingham 08-03-17	Pre-clinical assessment of novel anti-tumour agents for colorectal or breast cancer	General Public	THRF talk
Jennifer Hardingham & Amanda Townsend 04-09-17	New hope for metastatic breast cancer	General Public	► online article - THRF website
Jennifer Hardingham & Amanda Townsend 13-09-17	New hope for metastatic breast cancer	General Public	► online article - ABCR website
Jennifer Hardingham 01-10-17		General Public	THRF Newsletter, edition 3
Tim Price 27-09-17	Advances in chemotherapy	South Australian Gastric and Oesophageal Cancer Support Group	Talk
Helen Palethorpe 20-11-17	Blocking angiogenesis with novel aquaporin inhibitors	talk with THRF donor	
LIVER METASTASIS RESEARCH GROUP			
Chandra Kirana 02-03-17	Colorectal Cancer and Liver Metastasis	U3A Flinders University	THRF talk
Ehud Hauben & Chandra Kirana 17-07-17	Australian-First Research to Develop Metastatic Bowel Cancer Therapy	General Public	► online article - THRF website
Ehud Hauben & Chandra Kirana 01-08-17		General Public	THRF Newsletter, edition 2
SOUTH AUSTRALIAN PROSTATE CANCER CLINICAL OUTCOMES COLLABORATIVE (PCCOC)			
Martin Borg 01-03-17		General Public	► online article - APC website
CARDIOVASCULAR PATHOPHYSIOLOGY & THERAPEUTICS GROUP			
Doan Ngo 01-01-17		General Public	AHR Newsletter, edition 1
Sven Surikow 01-01-17		General Public	AHR Newsletter, edition 1
Sven Surikow 30-01-17	Research to fix a broken heart	General Public	► online article - AHR website
Doan Ngo 01-02-17		General Public	THRF Newsletter, edition 1
Yuliy Chirkov 08-03-17	Improving treatments for cardiac patients	General Public	► online article - AHR website
Bahador Assadi-Khansari & Doan Ngo 10-03-17	Vital research continuing for heart failure risk	General Public	► online article - AHR website
Doan Ngo 04-05-17	Cardiovascular Disease	General Public	THRF Talk & BHI Tour
John Horowitz 08-07-17	Heart attacks don't just happen to old, unfit men. Women also need to be aware of the dangers	General Public	► The Advertiser

COMMUNITY ENGAGEMENT 2017 cont.

NAME OF INDIVIDUAL	TOPIC OR TITLE	DELIVERED TO	ACTIVITY
CARDIOVASCULAR PATHOPHYSIOLOGY & THERAPEUTICS GROUP cont.			
Doan Ngo 01-08-17		General Public	AHR Newsletter, edition 2
Thanh H Nguyen, Cher-Rin Chong & John Horowitz 01-08-17	<ol style="list-style-type: none"> 1. The good, the bad and the ugly: medications in Takotsubo Syndrome? 2. Current diagnostic tests for TTS. 3. Is TTS a benign condition? 	General Public, UK	Second International patient forum on Takotsubo Syndrome. Royal Brompton Hospital, United Kingdom.
CLINICAL PHARMACOLOGY RESEARCH GROUP			
Benedetta Sallustio 12-04-17	A potential link between heart disease and cancer	General Public	► online article - AHR website
Benedetta Sallustio 18-12-17	Spotlight on Associate Professor Benedetta Sallustio	General Public	► online article - The University of Adelaide
TRANSLATIONAL VASCULAR FUNCTION RESEARCH COLLABORATIVE			
Rosanna Tavella 01-01-17		General Public	AHR Newsletter, edition 1
John Beltrame 01-01-17		General Public	AHR Newsletter, edition 1
Rosanna Tavella 20-01-17		General Public	► online article - THRF website
Rosanna Tavella 30-01-17		General Public	► online article - AHR website
Rosanna Tavella 01-02-17		General Public	THRF Newsletter, edition 1
John Beltrame 01-02-17		General Public	THRF Newsletter, edition 1
Rosanna Tavella 08-02-17	Heart disease in men	General Public	Radio - Ballarat Community Radio, 99.9 Voice FM
Clementine Labroschiano 04-05-17	Returning to hospital after a heart attack	U3A Flinders University	THRF Talk
Sivabaskari (Tharshy) Pasupathy 18-05-17	Cardiovascular Disease	Brownhill Creek Probus Club	THRF Talk & BHI Tour
Rosanna Tavella 04-06-17	Insights from the Coronary Angiogram Database of South Australia (CADOSA)	Pan-Arcadian Group (or O Kolokotronis)	THRF Talk
John Beltrame 19-06-17		General Public	► online article - AHR website
Rosanna Tavella 21-06-17		General Public	► online article - THRF website
John Beltrame 06-07-17	Adelaide doctors lead world-first trial in preventing heart attacks and chest pain	General Public	► TV - Channel 9 News
John Beltrame 08-07-17	Heart attacks don't just happen to old, unfit men. Women also need to be aware of the dangers	General Public	► The Advertiser

COMMUNITY ENGAGEMENT 2017 cont.

NAME OF INDIVIDUAL	TOPIC OR TITLE	DELIVERED TO	ACTIVITY
TRANSLATIONAL VASCULAR FUNCTION RESEARCH COLLABORATIVE cont.			
John Beltrame 01-08-17		General Public	AHR Newsletter, edition 2
John Beltrame 01-08-17		General Public	THRF Newsletter, edition 2
Rosanna Tavella 29-08-17		General Public	► online article - AHR website
Rosanna Tavella 26-10-17		Basil Hetzel Society Luncheon, THRF	THRF donors
VASCULAR SURGERY RESEARCH GROUP			
Ben Thurston 01-03-17		General Public	► online article - THRF website
Prue Cowled 27-07-17		General Public	► online article - THRF website
STROKE RESEARCH PROGRAMME			
Anne Hamilton-Bruce 22-05-17	Stem Cell Therapy for Stroke - Stroke Research Programme	Voice Interests and Education of Women (VIEW)	THRF Talk
Austin Milton and Anjali Nagpal 03-08-17	Stroke Research Programme	Indonesian delegation from pharmaceutical and herbal sectors of industry	talk
Anne Hamilton-Bruce 05-10-17	Stroke and the Stroke Research Programme	U3A Flinders University	THRF Talk
THE HEALTH OBSERVATORY			
Robert Adams 10-02-17	Sleep Health Survey findings	General Public	Radio Interview
Robert Adams 10-02-17	Sleep Health survey findings	General Public	Television news interview
Robert Adams 28-02-17		General Public	► online article - THRF website
Sarah Appleton 12-06-17	Sleep Health	General Public	Council of the Ageing, Mens Health Week presentation
Robert Adams 06-07-17	Sleep Health and sickness absenteeism survey findings	General Public	Radio Interview
Robert Adams (Mark Mackay) 01-10-17		General Public	► THRF Newsletter, edition 3
GASTROENTEROLOGY AND HEPATOLOGY			
Zenab Dudhwala 07-09-17	Short Bowel Syndrome	General Public	Radio - Coast FM
Zenab Dudhwala 30-10-17		General Public	► THRF website
HEALTH PERFORMANCE AND POLICY RESEARCH UNIT			
Clementine Labroschiano 04-05-17	Returning to hospital after a heart attack	U3A Flinders	THRF Talk

COMMUNITY ENGAGEMENT 2017 cont.

NAME OF INDIVIDUAL	TOPIC OR TITLE	DELIVERED TO	ACTIVITY
HEALTH PERFORMANCE AND POLICY RESEARCH UNIT <small>cont.</small>			
Isuru Ranasinghe 09-05-17		General Public	► online article - AHR website
Isuru Ranasinghe 01-08-17		General Public	AHR Newsletter, edition 2
PSYCHIATRY RESEARCH GROUP			
Scott Clark July-August edition	Predicting a first psychotic episode	Australasian Science Magazine	► Feature article
RHEUMATOLOGY RESEARCH GROUP			
Catherine Hill 01-02-17	Providing hope for arthritis sufferers	General Public	THRF Newsletter, edition 1
Maureen Rischmueller & Sarah Downie-Doyle 01-02-17	New treatment for psoriatic arthritis changes a life	General Public	THRF Newsletter, edition 1
Simon Burnet 05-07-17	Burden of Arthritis in South Australia	Arthritis SA Parliamentary Breakfast	Talk
Sue Lester 27-07-17	Arthritis Research	General Public	THRF Talk & BHI Tour
Catherine Hill 04-09-17	Potential game changer for hand osteoarthritis	General Public	► online article - THRF website
Sam Whittle 22-10-17	Fibromyalgia	Arthritis SA Public Forum	Talk
Rachel Black 12-12-17	Glucocorticoid adverse events	General Public	► online article - Healio Rheumatology
SURGICAL SCIENCE RESEARCH GROUP			
Guy Maddern 01-02-17		General Public	► THRF Newsletter, edition 1
VIROLOGY GROUP			
Branka Grubor-Bauk & Eric Gowans 20-01-17		General Public	► THRF website
Eric Gowans 01-02-17		General Public	THRF Newsletter, edition 1
Branka Grubor-Bauk 01-02-17		General Public	THRF Newsletter, edition 1
Eric Gowans, Branka Grubor-Bauk & Danushka Wijesundara 01-03-17		General Public	► THRF website
Danushka Wijesundara 03-08-17	Progress Towards an HIV Vaccine: Where Do We Stand?	U3A Ascot Park	THRF Talk
Ashish Shrestha 04-09-17		General Public	► THRF website
Ashish Shrestha 19-09-17	Hepatitis E virus and blood supply safety, DNA vaccines-hepatitis C virus and Zika virus	U3A Port Adelaide	THRF Talk & BHI Tour

COMMUNITY ENGAGEMENT 2017 cont.



NAME OF INDIVIDUAL	TOPIC OR TITLE	DELIVERED TO	ACTIVITY
VIROLOGY GROUP cont.			
Ashish Shrestha 01-10-17		General Public	THRF Newsletter, edition 3
Branka Grubor-Bauk 27-11-17	Adelaide researchers collaborate to beat Zika virus	General Public	► THRF website
ENT SURGERY			
PJ Wormald 01-02-17		General Public	► THRF Newsletter, edition 1
Katharina Richter 26-02-17	Novel therapies to fight antibiotic resistant bacteria	General Public	THRF talk - fundraising event by Greek Orthodox Church, Norwood
Katharina Richter 02-03-17	Antibiotic resistance	General Public	Radio - Coast FM
Katharina Richter 29-03-17	Solving the mystery of chronic rhinosinusitis	General Public	► THRF website
Katharina Richter & Nicky Thomas 15-17 May 2017	Organisers of Pint of Science Festival - Adelaide	General Public	► Community Science Festival
Sarah Vreugde 01-06-17		General Public	Radio - Coast FM
PJ Wormald & Sarah Vreugde 10-06-17	Adelaide researchers aim to prevent back pain using prawn shells	General Public	► The Advertiser

Dr Ashish Shrestha, Virology Group, taking members of the general public on a tour of the BHI laboratories.

COMMUNITY ENGAGEMENT 2017 cont.



NAME OF INDIVIDUAL	TOPIC OR TITLE	DELIVERED TO	ACTIVITY
ENT SURGERY cont.			
PJ Wormald & Sarah Vreugde 13-07-17	Innovative gel to treat chronic back pain	General Public	► THRF website
PJ Wormald 01-08-17		General Public	THRF Newsletter, edition 2
Sarah Vreugde 01-08-17		General Public	THRF Newsletter, edition 2
INFLAMMATORY BOWEL DISEASE RESEARCH GROUP			
Sam Costello 06-06-17	SBS Insight: Gut Feeling	General Public	► TV - SBS Insight
Sam Costello 11-07-17	Ask your Doctor: Series 1, Episode 9 Gut	General Public	► TV - ABC series
Sam Costello 26-10-17		Basil Hetzel Society Luncheon, THRF	THRF donors
BASIL HETZEL INSTITUTE			
Kathryn Hudson 04-05-17	The BHI and THRF	General Public	Radio - Coast FM
Many BHI, TQEH staff (listed on page 128) 4-6 August 2017	Science Alive! 2017	General Public	► Science Festival

Associate Professor Sarah Vreugde with David Hearn of Coast FM.

SUPPORT STRUCTURES 2017



The Basil Hetzel Institute (BHI) Policy Committee provides strategic advice for the running of the BHI and optimises the available support for research programs across The Queen Elizabeth Hospital (TQEH).

The Committee is comprised of senior representatives from:

- the two universities with whom the hospital is affiliated, The University of Adelaide and the University of South Australia
- The University of Adelaide academic heads of departments at TQEH (Medicine and Surgery)
- Chair, BHI Strategic Research Directions Working Group
- BHI Facility Manager and
- TQEH scientific community

MEMBERS, DECEMBER 2017

Prof Guy Maddern
 Prof John Beltrame
 Prof Alastair Burt (proxy Prof Andrew Zannettino)
 Prof Michael Roberts (proxy Dr Lorraine Mackenzie)
 Dr Prue Cowled
 Dr Peter Zalewski
 Dr Dan Wijesundara
 Dr Chandra Kirana
 A/Prof Anne Hamilton-Bruce
 Mr Paul Flynn
 Prof Eric Gowans
 Ms Kathryn Hudson
 Dr Rebecca Anderson
 Executive Support: Ms Gwenda Graves

BHI MANAGEMENT COMMITTEE

THE INSTITUTE LEVEL	REPRESENTATIVE
Ground Level	Ms Leonie Baker
Level 1	A/Prof Sarah Vreugde Dr Chandra Kirana Dr Dan Wijesundara (ECR position)
Level 2	Dr Rosanna Tavella Ms Irene Stafford
Surgical Suite	Mr Matthew Smith
External Representative	Dr Tony Cambareri
Postgraduate Representatives	Ground floor Ms Agathe Daria Jadcak (July 2015 – June 2017) Level 1 Ms Alexandra Shoubridge (July 2016 – June 2017) Mr Christopher DiFelice (July 2017 – June 2018) Ms Maddison Archer (July 2017 – June 2018) Level 2 Ms Zenab Dudhwala (July 2016 – June 2018)
Chair	Dr Lorraine Mackenzie (first half of 2017) & Level 2 representative Dr Rosanna Tavella (Aug 2017 – June 2020)
BHI Facility Manager	Ms Kathryn Hudson
Executive Support	Ms Gwenda Graves

BHI Management Committee 2017.

Several sub-committees assist The Institute (BHI) Policy Committee as required, notably the:

- **TQEH Research Days Organising Committee**, chaired by Lisa Leopardi, and also supported by co-chair, Dr Prue Cowled, both from The University of Adelaide Discipline of Surgery, in the planning and running of the inaugural 2 day Research Days event in 2017.
- **Scholarship Selection Committee**, chaired by Professor Maddern, in awarding a range of scholarships funded by THRF.
- **BHI Management Committee**, in managing the Basil Hetzel Institute. Dr Lorraine Mackenzie chaired January to June 2017 and Dr Rosanna Tavella assumed the chairing role from August 2017.
- **The BHI Strategic Research Directions Group** provides a forum for BHI researchers to interact and discuss Institute issues and initiatives as well as focus on academic issues such as teaching and postgraduate student recruitment and completions. It reports to The Institute (BHI) Policy Committee, and provided recommendations to The Hospital Research Foundation on the 2017 funding framework. All TQEH researchers at Associate Professor level, Postgraduate coordinators, Heads of departments, and Chief Investigators on Category 1 grants are eligible to attend each forum, as well as a postdoctoral representative. Professor Eric Gowans has chaired the group since 2012, with Executive Support provided.

Professor Guy Maddern was reappointed for a five- year term to the position of Director of Research (April 2015- 31 March 2020). This leadership position has been critical to furthering the aims of research excellence and enhancing the research reputation of TQEH.

TQEH Research Secretariat undertakes a range of activities to assist the Director of Research in supporting, fostering and administering quality research activity across TQEH. Rebecca Anderson, BHI Communications Officer, joined the team in January 2015.

SEMINARS

Three regular seminar programs were held in 2017, including:

- **Postgraduate Research seminars** which provided all BHI based higher degree students an opportunity annually to brief staff and students on the progress of their research. Mr Roy Sneddon, Faculty of Health and Medical Sciences, The University of Adelaide, coordinated this program; Dr Prue Cowled chaired the sessions.
- **Invited external speaker research seminars**, held weekly between April and the end of October 2017. The Research Secretariat coordinated this program;
- **Staff seminars**, coordinated by Dr Chandra Kirana and Dr Bill Panagopoulos, provided new and existing staff an opportunity to brief other BHI staff and students about their research.

RESEARCH TRAINING

The BHI Policy Committee aims to support the research capacity within basic and clinical areas through its strategy of providing scholarships at postgraduate, honours and vacation levels.

Promotion

In 2017 research training opportunities and scholarship support were actively promoted through the BHI website with links to key university research training sites.

Vacation Research Scholarships

Over the 2017-2018 summer vacation, 12 undergraduate placements provided scholars with the opportunity to gain valuable research experience in a clinical/laboratory environment. These placements were funded by individual departments.

Honours Research Scholarships

Honours Scholarships continued to be offered at TQEH in 2017 and will continue to be supported through The Hospital Research Foundation.

Higher Research Degree Scholarships

In 2017 over eighty scholars undertook research towards Higher Degrees at TQEH, with five students supported with The Hospital Research Foundation (THRF) Scholarships. Responsibility for the selection and award of THRF Honours and Postgraduate scholarships lies with the BHI Scholarship Selection Committee. The Committee draws representatives from clinical academic and scientist streams, with both The University of Adelaide and University of South Australia represented. Scholarships provide stipends that match the Research Training Program Scholarship (RTPS) rate. Other higher degree students at TQEH had scholarship support from a range of funding bodies, including NHMRC, The University of Adelaide and University of South Australia (International scholarships, RTPS, and University of Adelaide Faculty of Health and Medical Sciences 'Divisional' scholarships).

STATISTICAL SUPPORT SERVICE, TQEH

The Statistical Support Service, jointly funded by the BHI and the Faculty of Health Sciences at The University of Adelaide, provided 15 hours per week of statistical assistance to staff and students at the BHI and TQEH more generally. In 2017 the Statistical Service was provided by Dr Stuart Howell of the Data, Design and Statistics Service, Adelaide Health Technology Assessment (AHTA), School of Public Health at The University of Adelaide.

The range of services has included advice to research staff and postgraduate students about:

- Design of health-related research
- Statistical aspects of research programs
- Preparing data for analysis
- Data analysis
- Manuscript preparation
- Analysis of data from research programs based at the BHI and TQEH.

TQEH/LMH/MH HUMAN RESEARCH ETHICS COMMITTEE REPORT 2017



The Human Research Ethics Committee (HREC) has continued to have the support of Heather O'Dea (photo, left) as the Executive Officer. Heather works with both the The Queen Elizabeth Hospital (TQEH), Lyell McEwin Hospital (LMH), Modbury Hospital (MH), Human Research Ethics Committee (HREC) as well as the Royal Adelaide Hospital (RAH) HREC.

During 2017 Heather's training of Dominic How resulted in him being appointed to a higher position at Flinders Medical Centre and as a consequence there has been restructure in the HREC administration, so that Lisa Barrie (photo, right) is working with Heather in supporting the full submissions coming to the HREC. Jan-Louise Durand has acted as an alternate legal member for the HREC, and continues to have a lead role in reviewing low and negligible risk applications with the support of Eloise Spooner.

In addition, Jan-Louise has taken on a role in the reorganisation of the RAH HREC and TQEH/LMH/MH HREC into a single HREC commencing in 2018. A Chair for the new Central Adelaide Local Health Network (CALHN) HREC, Ian Tindall, has been appointed and will commence work in January. The full arrangements for meeting times and the site of meetings is to be determined. It is hoped that the membership of both previous TQEH/LMH/MH HREC and the RAH REC will continue to be involved in the CALHN HREC. The best way to manage the number of applications is yet to be sorted and there will be some flexibility in the arrangements of meetings taking into account the needs of valued members of the HREC.

The TQEH/LMH/MH HREC has only functioned effectively because of the excellent work that is undertaken by the Scientific Review Subcommittee and the HREC membership. My personal thanks go to the membership of both committees and to Heather for the involvement, organisation and contributions made in 2017.

During 2017 new members were appointed: Dr Priscilla Dunk-West who has brought social science expertise to the HREC; Dr Carlee Ruediger who has brought clinical trial experience to the HREC. The HREC has been fortunate in having support from alternate members covering occasional absences of an HREC member which has enabled the HREC to fulfil NHMRC requirements for a HREC quorum. Alternates attending meetings in 2017 have been: John McPhail; Jan-Louise Durand; Kerry Poulis; Chi Nguyen; Rev Nicholas Rundle; and Rev John Cullen – my thanks to each for their help.

YEAR	FULL HREC SUBMISSIONS	LNR/AUDIT/QA SUBMISSIONS	AMENDMENTS
2013	57	70	N/A
2014	39	73	N/A
2015	35	74	187
2016	41	75+	120+
2017	36	62	136

The pattern of The Queen Elizabeth Hospital (TQEH), Lyell McEwin Hospital (LMH), Modbury Hospital (MH) HREC workload over the last 5 years is shown in the table above.

During 2017 the HREC lost the services of: Dr Kareeann Khaw (1 year) as she progressed from trainee to consultant; Rev Jeff May (5 years) as NALHN reorganised pastoral care services; and Cassandra Ryan (10 years) as nursing professional. My thanks to each for their service.

The Scientific Review Subcommittee (SRS) has provided the HREC with guidance about what needs to be considered from the scientific perspective within those research topics which have involved sponsored clinical trials or investigator led studies. This Subcommittee's input allows the HREC to function efficiently and with the reassurance that the submissions the HREC reviews are scientifically valid and of high quality. My thanks go to the SRS members for their reviews and discussion.

I would like to pass on my personal thanks to the administrative staff including Heather O'Dea, Jan-Louise Durand, and Lisa Barrie who have provided outstanding support in the conduct of HREC activities.

During 2017 there has been the completion of the Ethics course (run by Praxis) by a number of members. This Ethics training for the membership remains integral to the HREC achieving high performance standards. There has been the opportunity for researchers to continue to meet with the Chair and other members of the administrative staff to discuss the submission of protocols. The HREC continues to find that face to face meetings overcome some of the difficulties of miscommunication which can happen by email. An education role for junior researchers new to research and ethics remains an important function of an HREC.

Without the dedicated membership of the HREC and SRS, research would be significantly hampered at TQEH, LMH and MH. There will be a continuing need with a single CALHN HREC for involvement of clinicians from CALHN as well as the involvement from other professional groups and the community to enable the requirements of the NH&MRC to be met and enable HREC accreditation.

I wish the researchers at TQEH/LMH/MH the best of success in their research endeavours, and I am sure that with the researchers' involvement and advice, the new CALHN HREC structure will develop and meet their needs. In turn the outcomes from ethical health research will positively impact on the health and well-being of our community.

RICHARD RUFFIN

CHAIR TQEH/LMH/MH HREC 2017

Message from the Chair

THRF Board Members

THRF Grants and Fellowships

BHI Research Equipment

THRF Corporate and Community Support

THRF Fundraising and Events

THRF Community Engagement



A man with short brown hair and a light beard, wearing a white lab coat with a blue stripe and a green shirt underneath, is smiling at the camera. He is wearing blue gloves and is standing next to a large piece of laboratory equipment. On the equipment, there is a red rack with test tubes and a blue cap. The background is a blurred laboratory setting.

**BECAUSE OF YOU,
WE CAN BRING HOPE
FOR BETTER CARE,
TREATMENTS AND
CURES.**

For over 50 years, The Hospital Research Foundation has supported world-leading medical research that translates into the prevention of disease, the relief of suffering, improved patient care and the restoration of health and wellness for all in our community.

Vasilios (Bill) Panagopoulos, Breast Cancer Research Unit. *Previous page:* **Sarah Bernhardt**, Breast Biology & Cancer Unit.

“2017 was The Hospital Research Foundation’s (THRF) most successful year since its establishment in 1965, creating more impact through world-class medical research and patient care and delivering outcomes that benefit and improve our local communities.”



Having served on THRF’s Board for four years and appointed Chair in November 2017, I feel immensely proud of the researchers we support and the outcomes they achieve. But this is only possible because of you, the donors and ticket buyers in our lottery who are integral to our success.

In 2017, THRF continued to expand across South Australia, driving towards our organisational strategic objectives. Underpinning this has been the strength of our commercial activities, led by the Hospital Research Home Lotteries. Not only does the success of the Lotteries mean that we have a sustainable income stream to support and promote the outcomes of medical research, it also means that the growing support we receive in donations from the community to THRF and our charitable affiliates are directed solely to the cause: finding cures, improving care.

THRF’s Board and its dedicated team led by Chief Executive Paul Flynn have continued to guide the organisation’s future growth, making 2017 a record year. At the end of its 2016/17 financial year, the organisation reported a contribution of \$9.6million into research and patient care in South Australia and another \$2.4million into its research reserve for future research commitments. This outstanding achievement is only made possible thanks to the ongoing support of all our stakeholders.

In October 2017 we expanded our activity into the Northern Adelaide Local Health Network with a new partnership with the Lyell McEwin Hospital. We also expanded further across the Central Adelaide Local Health Network, establishing a physical presence at the new Royal Adelaide Hospital (RAH) and providing \$1.6million in funding to establish the RAH’s own purpose-built Clinical Trials Centre.

This expansion has been essential to ensuring we can deliver more lifesaving impact to more people, but

importantly it also strengthens and complements our existing support of translational ‘bench to bedside’ research at the Basil Hetzel Institute for Translational Health Research (BHI) and The Queen Elizabeth Hospital. In fact, 2017 saw our largest grant round at the BHI to date, awarding \$2.7million to researchers through development and project grants as well as early-career and mid-career fellowships.

This funding also included the inaugural ‘The Basil Hetzel Translational Grant’, in memory of Dr Basil Hetzel, awarded to a world-first research project developing a new treatment for chronic pain following an ‘unexplained heart attack’.

Looking forward to 2018, we anticipate a year that will deliver even more hope and that will deliver greatly improved health and wellbeing outcomes for South Australians through our ongoing support of evidence based patient care and treatment advancements.

To the researchers, donors and ticket buyers in our lottery, thank you for your ongoing support of our foundation and for making an impact on our community. You are part of an exciting future and it’s only just beginning.

With your support – we can save more lives.

DR STEPHEN RODDA

CHAIR

THE HOSPITAL RESEARCH FOUNDATION



DR STEPHEN RODDA
CHAIR – APPOINTED
NOVEMBER 2017

Dr Stephen Rodda (Chair) is Chief Executive of UniSA Ventures Pty Ltd, the technology commercialisation and investment management arm of the University of South Australia. He was educated at the University of Adelaide gaining a first class honours degree, a PhD in Biochemistry and was awarded the University Medal. Subsequently he was awarded the prestigious CJ Martin and Arthritis Foundation fellowships for post-doctoral training at Harvard University.

Dr Rodda has a combined 16 years of experience in the areas of scientific research, research management, technology commercialisation, investment management and corporate governance. Dr Rodda holds an MBA, is a Fellow of the Australian Institute of Company Directors and has undertaken the Advanced Management Program (AMP) at the Harvard Business School.



JOHN MACPHAIL
DEPUTY CHAIR

John Macphail (Deputy Chair) is a partner of Lynch Meyer Lawyers, a leading Adelaide law firm providing a range of services for small-to-medium enterprises, large corporations and not-for-profit organisations. John has more than 30 years' experience working in commercial law in firms in London, Sydney, Melbourne, and Adelaide as an intellectual property and technology law specialist.

He is a past President of the Copyright Society of Australia, and taught part-time as a postgraduate university law lecturer and professional examiner on intellectual property subjects. As a practising lawyer he advises clients working in a wide range of industries, particularly medical and healthcare, biotechnology, wine, retail, sports, education and research, marketing and sponsorship, and ITC.



MS MELINDA OLEARY
CHAIR – RETIRED FROM THRF
BOARD IN NOVEMBER 2017

Melinda Oleary is co-founder, and consultant with Nova Aerospace, which employs 450 staff across Australia and internationally in Singapore, the United Kingdom and Europe. Prior to joining Nova Aerospace, Melinda held senior positions in several recruitment firms including State Operations Manager for Select Staff and General Manager for both Manpower Services and Kelly Services.

Melinda has considerable experience both in Business and Human Resources in both small and medium size businesses. Melinda is also a professional Company Director, holding the current positions of Chair of The Hospital Research Foundation and a Director on the South Australian Lifetime Support Authority in addition to her membership on the South Australian Training and Skills Commission.

She is a former board member with 'Time for Kids' and a volunteer Carer with this Not for Profit organisation.



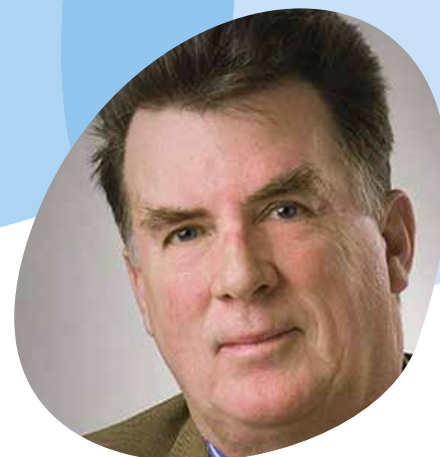
PROFESSOR JOHN BELTRAME

Leading cardiologist Professor John Beltrame brings a medical perspective to the board. He has degrees in both science and medicine, and is a Fellow of the Royal Australasian College of Physicians, the European Society of Cardiology, the American College of Cardiology, the American Heart Association and the Cardiac Society of Australia and New Zealand. He is the Michell Professor of Medicine and the Director of Research for the Central Adelaide Local Health Network'.



PROFESSOR PETER HEWETT

Professor Peter Hewett is a Clinical Professor of Surgery with the Adelaide University Discipline of Surgery and is Head of Colorectal Surgery at The Queen Elizabeth Hospital. He has published more than 130 articles in peer reviewed journals and has held three NHMRC grants. Prof Hewett has developed and is the coordinator of the Adelaide University Masters Course in Minimally Invasive Surgery. He is chairman of Colorectal Surgery which is a busy 8 surgeon private colorectal practice based in North Adelaide.



KEN MILNE

Ken Milne is the Director of Milne Architects Pty Ltd and adds a different aspect to the board. He received a Diploma of Architecture at the University of South Australia and is a Fellow of the Royal Australian Institute of Architects. He is a Past President and former Chapter Councillor of the Royal Australian Institute of Architects, he was National Chair of RAIA Public Affairs Committee & Awards Director. He was also a Board member & Deputy Chair of the Rostrevor College for 10 years overseeing the formulation & introduction of the College Master Plan.



LUCIANA LARKIN

Luciana Larkin is the lead partner of Tregloans, an established and respected Chartered Accountancy practice. As a sharp and strategic thinker, she applies her expertise in financial, complex tax & business transactions to deliver effective outcomes. Luciana brings this professional expertise and strong focus on accountability & governance to the THRF Board together with experience as a trusted advisor to numerous other Corporate Boards and not-for-profit bodies.



JOHN WOODWARD

John Woodward has more than 25 years' experience in technology related change programs, projects and consulting services across industries including the health, water, energy, and entertainment sectors. John is Non-Executive Director at Statewide Super, an Elected Member (Councillor) with West Torrens City Council, and lectures at the University of Adelaide (Masters of Project Management).

John holds an MBA specialising in technology management, is a graduate of the Australian Institute of Company Directors and Australian Institute of Superannuation Trustees. He is also certified Project Management Professional through the Project Management Institute. John joined the Board of The Hospital Research Foundation in 2013.



MARYLOU BISHOP

For the last 26 years MaryLou Bishop has run a surgical devices company selling highly technical operating room equipment into our largest hospitals across SA, WA and NT. MaryLou has a strong understanding of the medical world and the health industry. In 2014 MaryLou was elected a councillor to The Town of Walkerville. For spiritual and artistic nurturing MaryLou has become involved in the philanthropic Chairman's Circle which supports The Adelaide Festival of Arts. She joined the Board of The Hospital Research Foundation in 2014.



VALERIE TIMMS

Valerie Timms has more than 18 years experience in Adelaide's competitive real estate industry. After only two years, Valerie was the number one sales person for a large franchise group and went on to run her own award winning office for nine years. Six years ago she created her own independent real estate company – Timms Real Estate. Valerie is a skilled salesperson, coach and mentor within the property sector and is dedicated to serving the community and helping others achieve business success.



AIR-VICE MARSHAL BRENT ESPELAND AM

PASSED AWAY 29 SEPTEMBER, 2017
VALE AIR-VICE MARSHAL ESPELAND

Air-Vice Marshal Brent Espeland AM enjoyed a career in the Royal Australian Air Force spanning 36 years. He was an experienced commander, having held unit and formation command twice as well as having tenure as the Air Officer Commanding Training Command and Deputy Chief of Air Force.

His final military service position was on secondment to the Department of the Prime Minister and Cabinet. Once retired, he was National President of the Australian Flying Corps and Royal Australian Air Force Association, past National President and South Australian President of the Royal United Services Institute of Australia, a Director of the Sir Richard Williams Foundation, a member of the Department of Veterans Affairs Round Table, a member of the Air Force Heritage Advisory Committee and was especially pleased to serve as a member of the National Council of the Australian Air Force Cadets.

He was also actively involved as a founding and steering group member of the Alliance of Defence Service Organisations. More recently, following the merger of The Repat Foundation with THRF he became Chair of the Board of Governors and a Board Member of those respective organisations. In June 2016 he was appointed Chair of the Veterans' Advisory Council to the South Australian Government.

Brent was a major contributor to the fabric of our community and is sorely missed.



BRIGADIER ALISON CREAGH CSC
RETIRED

Alison Creagh is the Executive Director Spirit of Anzac Centenary Experience. She is also a Member of the Australian War Memorial Council, a Non-Executive Director of The Hospital Research Foundation and The Repat Foundation and a Committee Member of the Australian Peacekeeping Memorial Project.

Alison was educated at Canberra Girls Grammar School, and joined the Australian Regular Army in 1985 graduating from the Officer Cadet School Portsea. Alison retired from the Army in 2015 as a Brigadier after a 30 year career and remains a member of the Australian Army Reserve.

During her career in the Army Alison held numerous appointments from Lieutenant to Brigadier in a range of roles including operations, capability development, acquisition, personnel management, public affairs, strategic communication and event management. She commanded the Defence Force School of Signals, responsible for delivering Information and Communication Technology training to the Australian Defence

Force, and the independent 145th Signal Squadron. She served on operations in Cambodia, East Timor, Iraq and Afghanistan. Alison was awarded the Conspicuous Service Cross, the NATO Meritorious Service Medal and a Chief of the Defence Force Commendation for significant contributions to roles during her career.

Alison has a Master in Management Studies (Project Management) and a Master in Defence Studies from the University of New South Wales, and Graduate Diplomas in Strategic Studies and Communications and Information Systems. She was awarded a CEW /WLIA scholarship in 2014 to attend the Women's Leadership Forum at Harvard Business School.



PAUL FLYNN
CHIEF EXECUTIVE

Paul Flynn came to The Hospital Research Foundation team in 2009 to take on the role of Chief Executive Officer. Paul is an innovative and entrepreneurial Executive who has earned a stellar reputation for achievement during a multifaceted career in both the Finance and Not for Profit sectors. He has been acknowledged for his contribution by being a previous recipient of the Ernst & Young Social Entrepreneur of the Year in SA/NT and was also previously awarded the Equity Trustees Australian CEO Award for Innovation.

Paul is passionate about the opportunity to help medical and scientific researchers in their important voyage of discovery which will benefit all Australians. In November 2017, Paul was appointed as an independent Director of Medvet Sciences Pty Ltd, the medical research support and commercialisation arm of the Central Adelaide Local Health Network in SA Health.

THRF GRANTS AND FELLOWSHIPS

“Our ability to enhance the health and wellbeing of our family, friends and the broader community through the provision of improved treatments and care informed by the latest research outcomes continues to grow.”



Each year The Hospital Research Foundation (THRF) proudly provides financial support to vital medical and clinical research teams and individuals whose endeavours translate into improved treatments and healthcare outcomes for the Australian community. In 2017, THRF were delighted to announce the recipients of our largest Grant Funding Round to date at the Basil Hetzel Institute for Translational Health Research (BHI) and The Queen Elizabeth Hospital (TQEH).

The applications we received this year were of an outstanding quality and I congratulate the recipients of our Translational Grant, Development Grants, Fellowships and Project Grants. This is the first year we have announced a Translational Grant, in honour of Dr Basil Hetzel AC, one of our nation's most cherished pioneers of medical research.

It is Dr Hetzel's legacy, paired with the ongoing support of our community that provides the encouragement to our researchers to continue to find new treatments and ultimately cures for the heartbreaking diseases affecting our loved ones.

Our ability to enhance the health and wellbeing of our family, friends and the broader community through the provision of improved treatments and care informed by the latest research outcomes continues to grow. We thank our donors, supporters, partners and researchers for making this possible and a priority in your lives.

PAUL FLYNN
THRF CHIEF EXECUTIVE



This is the first year we have announced a Translational Grant, in honour of Dr Basil Hetzel AC, one of our nation's most cherished pioneers of medical research.

The Basil Hetzel Translational Grant

This grant is designed to support high community impact, “shovel ready” projects that have a high likelihood of translating into improved therapy, care or cure within three years from the start of the grant.



POTENTIAL MECHANISMS AND TREATMENT OF POST-INFARCT ANGINA IN PATIENTS WITH MYOCARDIAL INFARCTION WITH NON-OBSTRUCTIVE CORONARY ARTERIES (MINOCA)

\$750,000

Professor John Beltrame, Associate Professor Christopher Zeitz and **Professor Bertil Lindahl** were the successful recipients of our inaugural translational grant for \$750,000 with a research project that will impact the lives of those living with chest pain following a Myocardial Infarction with Non Obstructive Coronary Arteries (MINOCA).

In the majority of heart attacks, a completely or severely blocked artery is the culprit, which can be diagnosed by a coronary angiogram procedure. However, it has been shown that about 11 per cent of heart attacks have occurred even with fully open arteries or with minimal blockages.

This condition is called MINOCA and there is limited knowledge about the heart attack cause and how these people can be treated. This research project will trial a new treatment for these patients who experience debilitating chest pain after MINOCA.

This study is using established clinical registries - CADOSA in South Australia together with Prof Lindahl's collaboration, the SWEDEHEART registry in Sweden. This partnership is the first international collaborative clinical trial in MINOCA and the first clinical trial to assess treatments for patients with MINOCA.

Professor John Beltrame, Translational Vascular Function Research Collaborative.

Development Grants

THRF's Development Grants support researchers to undertake health and medical research at the proof-of-concept stage that specifically drives towards a commercial outcome within a foreseeable timeframe.



A NOVEL FORMULATION TO PREVENT EPIDURAL ADHESIONS POST-LAMINECTOMY

\$200,000

Professor Peter-John Wormald, Associate Professor Sarah Vreugde and Professor Clive Prestidge secured a THRF Development Grant to provide relief for patients undergoing back surgery, a common procedure in Australia.

When a person undergoes back surgery, there is often adhesion formation following it. This is a big problem because these adhesions bind to the nerves that come out of the canal and that causes the patient to suffer from more pain than they were having pre-surgery. Professor Wormald and the team have developed a new treatment to prevent these adhesions from forming and this grant will allow them to progress their research to patients in a clinical trial.

Professor Peter-John Wormald, ENT Surgery.



THE PROTECTIVE EFFICACY OF A CYTOLYTIC DNA VACCINE FOR HCV: A STEP TOWARDS HUMAN CLINICAL TRIALS

\$200,000

Professor Eric Gowans, Dr Danushka Wijesundara and Professor Guy Maddern also received a 2017 THRF Development Grant.

This grant enables the team to progress the development of a new DNA vaccine for Hepatitis C (HCV), which affects over 175 million people worldwide. In Australia, there are approximately 230,000 HCV infected individuals and approximately 10,000 new infections each year, estimated to cost \$252M per annum in health care costs.

Dr Danushka Wijesundara and Professor Eric Gowans, Virology Group.

Fellowships

In 2017, THRF was delighted to award Fellowships to three outstanding researchers to conduct life-changing research at the BHI.



INEQUALITIES IN NEIGHBOURHOOD ACCESSIBILITY: IMPLICATIONS FOR FRAILTY AND HEALTHY AGEING

\$420,000 (July 2017 - June 30 2020)

Dr Danielle Taylor, THRF's 2017 Mid-Career Fellow is funded for three years to conduct research that will lead to people in our community living longer, healthier and more fulfilling lives. Dr Taylor has joined Professor Renuka Visvanathan's research group and her research complements research work being undertaken as part of the NHMRC Centre of Research Excellence in Frailty and Healthy Ageing.

This research aims to understand the influence of environmental factors, as enablers or barriers to healthy ageing. It will have a focus on the role geographic access and locational disadvantage plays in facilitating or impeding high functional ability. It will also develop an enhanced area level frailty risk index, incorporating geographic demographic information and accessibility measures of relevance to frailty. This can be used as a planning tool for the equitable and effective provision of health services.



TARGETED INHIBITION OF INFLAMMATORY PEROXIDASES, A NEW THERAPEUTIC STRATEGY AGAINST BREAST CANCER AND METASTATIC DISEASE

\$240,000 (July 2017 - June 30 2019)

Dr Vasilios (Bill) Panagopoulos, one of THRF's two Early-Career Fellows, is supported by THRF to continue his potentially lifesaving breast cancer research for the next two years

During his PhD, under the supervision of Professor Andreas Evdokiou and Dr Mark deNichilo, Dr Panagopoulos made an important discovery, demonstrating for the first time that a group of proteins called peroxidases promotes breast cancer spread and metastasis.

His research will now test a specific peroxidase blocker currently being investigated in other settings, which has not been previously contemplated for cancer therapy.



THE DEVELOPMENT OF A NOVEL CYTOLYTIC DNA VACCINE WHICH ELICITS CELLULAR IMMUNITY TO CONSERVED VIRAL PROTEINS

\$240,000 (July 2017 - June 30 2019)

Dr Ashish Shrestha, THRF's second Early-Career Fellow, relocated from the University of Queensland to the Virology Group at the BHI.

Dr Shrestha was awarded his PhD from the University of Queensland in September 2016 and his research and expertise include medical microbiology, public health and health services. His research will firstly develop a universal Hepatitis C vaccine to target the most common HCV genotypes and examine the ability of the vaccine to help prevent Zika virus.

Project Grants

THRF's Project Grants support early stage research or knowledge creation. In 2017, THRF awarded five Project Grants to the following research teams.



THE AUSTRALIAN ARTHRITIS AND AUTOIMMUNE BIOBANK COLLABORATIVE (A3BC)

\$233,118 (July 2017 - June 2020)

Professor Catherine Hill, Associate Professor Maureen Rischmueller and Professor Lyn March were successful recipients of a THRF Project Grant to support the Australian Arthritis and Autoimmune Biobank Collaborative (A3BC) following the Rheumatology Research Group at the BHI being selected as the South Australian node for A3BC. This collaboration will enable high quality musculoskeletal disease research, resulting in better patient outcomes for the community.

BREAKING IMMUNE TOLERANCE IN TRIPLE NEGATIVE BREAST CANCER

\$125,000 (July 2017 - June 2018)

Associate Professor Wendy Ingman, Professor Andreas Evdokiou and Mr Joseph Wrin are conducting a research project to develop a new approach to breaking tolerance in triple negative cancer, a very aggressive subtype of breast cancer which is notoriously difficult to treat. Triple negative breast cancers make up 15 per cent of all breast cancer diagnoses. Development of a new treatment could be used in conjunction with existing treatments such as chemotherapy or radiotherapy.

Mr Joseph Wrin and Associate Professor Wendy Ingman.
Breast Biology and Cancer Unit

Project Grants cont.



USING OUR OWN CANCER FIGHTING T CELLS TO TREAT INCOMPLETELY RESECTED OR INOPERABLE TUMOURS

\$125,000 (July 2017 – June 2018)

Professor Andreas Evdokiou, Professor Andrew Zannettino and Dr Anton Blencowe are now undertaking new research using our own cancer fighting T cells to treat incompletely resected or inoperable tumours. The aim of this project is to harness our body's natural defence system to prevent cancer from coming back after it has been surgically removed or to treat those difficult to remove cancers.

The team have developed a simple, cost effective, safe, and non-invasive injectable gel system of delivering the patient's own cancer fighting T cells directly to the tumour site where they seek out and kill cancer cells in their tracks while leaving normal cells unharmed. The results of this approach will provide justification to move quickly towards clinical application.



DEVELOPMENT OF TARGETED NANOPARTICLES AS PREVENTATIVE THERAPY FOR LIVER METASTASIS

\$125,000 (July 2017 – June 2018)

Dr Ehud Hauben, Professor Nicolas Voelcker and Professor Guy Maddern's project grant is building on previous research on prognostic biomarkers and potential therapeutic targets for prevention of liver metastasis. Now, in collaboration with the Monash Institute of Pharmaceutical Sciences, the research team at the BHI aims to develop a novel preventative therapy against liver metastasis. Approximately 50 per cent of bowel cancer patients will be diagnosed with liver metastasis and the majority are not suitable for surgery. This project will be the first in Australia to focus exclusively on the development of a new therapeutic strategy for colorectal liver metastasis.



IDENTIFICATION OF CAUSES OF ACCESS BLOCK FOR SHORT-STAY AND LONG-STAY PATIENTS AT TQEH, AND USE OF SIMULATION TO FORMULATE WAIT-REDUCTION STRATEGIES

\$72,000 (July 2017 – June 2018)

Dr Mark Mackay, Professor Robert Adams and Professor Nigel Bean are building on considerable overseas modelling in health system redesign and on previous local simulation modelling by Dr Mackay and Prof Adams at the RAH and TQEH. They aim to identify the main causes of waiting times for short-stay and long-stay services at TQEH and subsequently propose specific and appropriate wait-reduction strategies for these services. This research will prove, at the local level, the benefits of using modelling and simulation to improve patient flow to significantly improve patient outcomes in hospitals.



Advanced medical equipment is essential to providing Basil Hetzel Institute (BHI) researchers with the best possible tools to conduct their lifesaving research. Having access to state-of-the-art equipment enables researchers to translate their work into treatments as quickly as possible and to improve the health and wellbeing of our community.

THRF is proud to fund vital equipment that will assist in finding treatments and cures for life-threatening diseases such as all cancers and chronic diseases along with many other health conditions.

IN 2017 THRF SUPPORTED THE PURCHASE OF THE FOLLOWING EQUIPMENT:

- \$41,475 for an **Anaerobic Chamber** at the BHI to help Dr Sam Costello set up Australia's first public stool bank as part of BiomeBank, assisting in faecal transplantation for patients living with severe and debilitating gut conditions.
- \$15,500 for a **high-speed centrifuge** replacing the original one to enable researchers to conduct their lifesaving work with the most up-to-date technology.
- \$25,150 for an **InBody 570 Analyser** to allow the Healthy Ageing research group at the BHI and TQEH to conduct body composition analysis to help with their studies into sarcopenia, physical activity and frailty.

- \$20,000 for a **Flexible Arm VivaScope 2500**, enhancing imaging capabilities at the BHI. This new technology will strengthen the work on cancer diagnostics and the development of innovative cancer therapies, two important fields of research in which Professor Michael Roberts has collaborations with Associate Professor Claudine Bonder from the Centre for Cancer Biology and Dr Warren Weightman at TQEH.
- \$7,381 for **FlowJo Software** that will allow three separate groups at the BHI to access and use this technology including the Haematology and Medical Oncology group for solid tumour research, the Virology Group for their research into HIV, HCV and Zika vaccine developments and the ENT Surgery group for their chronic rhinosinusitis research. The software is a laser technology that can analyse the physical and chemical characteristics of cell particles in fluids.



Zelalem Mekonnen, Virology Group.

THRF CORPORATE AND COMMUNITY SUPPORT

“We think it’s so important to keep making improvements to the quality of life for patients during their journey of treatment.”

DIRECTORS OF G-FRESH



Finding a Cure Together

The beginning of 2017 saw an exciting partnership form between THRF’s charitable affiliate Australian Breast Cancer Research (ABCR) and the passionate team behind Australian business G-Fresh!

In February G-Fresh launched the new pink packaging of their popular herbs, spices and seasonings and donated part proceeds from each sale to vital breast cancer research through ABCR.

“We want to find a cure for this horrible disease. While recognising that this is a big dream, we’re excited to work with ABCR in the prevention, detection and management of breast cancer in Australian women,” said Peter, Simon and Theo, Directors of G-Fresh.

“We think it’s so important to keep making improvements to the quality of life for patients during their journey of treatment.

“Throughout our journey, we’ve always supported various charities. We’re now in a position to support

a much larger cause. We decided to support an initiative, which has touched many members of our team.”

THRF is grateful for the support from G-Fresh and look forward to an ongoing partnership with the passionate team that will benefit researchers at the BHI.

A Continuing Partnership to Beat Breast Cancer

Once again in October 2017 for Breast Cancer Awareness Month, THRF was grateful to continue its partnership through charitable affiliate Australian Breast Cancer Research (ABCR) with Australian lingerie brand Intimo.

For each sale made at bra fittings throughout October, Intimo donated 10 per cent of funds to ABCR. We are grateful for this continued partnership and ongoing support Intimo provides as we work towards saving the lives of those suffering from breast cancer.

Ongoing Support from Drakes Supermarkets

THRF was grateful to be a recipient of \$22,268 for health and medical research thanks to the invaluable support of Drakes Supermarkets, their suppliers and the South Australian community.

This incredible amount was raised through the annual sale of Drakes Supermarkets Charity Show Bags. Drakes Supermarkets CEO Roger Drake and wife Wendy have been producing this show bag for 18 years, an incredible effort throughout the years thanks to the continuous generosity of South Australian local suppliers.

Paul Fynn, CEO THRF with Roger and Wendy Drake accepting a cheque for THRF at the annual Drake’s Morning Tea.



Rallying Around the World for Prostate Cancer Research

Participating in an adventure rally of a lifetime, four mates from Queensland and Nuneaton in England, Dave Taylor, Ray Hobbs, Ryan Watts and Gavin Fulleylove spent two months driving over 17,000 kilometres for the Mongol Rally, raising \$1,400 for prostate cancer research through THRF's charitable affiliate Australian Prostate Cancer (APC).

Beginning in London and finishing in Russia, the rules of the rally only permitted participants to take a small vehicle, with the men travelling in a 15-year-old Daihatsu Terios. Having no support along the journey, it took the four men six weeks to complete the rally, choosing to donate the funds they raised for their efforts towards prostate cancer research, each of them knowing at least one person who has been affected by the heartbreaking disease.

"Choosing to donate to prostate cancer research through APC gave the rally meaning to us. Knowing we were doing something good for others whilst partaking in this adventure motivated us when we faced challenges along the way," Dave said.

"I think research is vitally important in reducing the effects of diseases such as prostate cancer."

Dave and his mates at the finish line of the Mongol Rally.



Pink Ladies Day for ABCR!

Losing his beloved wife Dianne to breast cancer in 2016 at the young age of 46, Tom Lane transformed the Gawler Central Sporting Club's inaugural 2017 Ladies Day event to a Pink High Tea to raise vital funds for breast cancer research. He raised an incredible \$5,500 for THRF's charitable affiliate Australian Breast Cancer Research (ABCR)!

Dianne was first diagnosed with breast cancer at 30-years-old in 2001, and was given the all clear, until 2016 when she visited the doctor after suffering from persistent headaches. Sadly, Dianne and Tom found out the cancer was back and had spread to her brain. She passed away only 11 weeks later.

Determined to see research bring an end to the devastation this heartbreaking disease brings, in memory of his wife Dianne and for the many other women battling breast cancer in the community, Tom hosted his High Tea on Saturday 29 July 2017.

"It was a day to highlight women in sport and women in our community," Tom said.

"There are also some people at South Gawler and Gawler Central still going through issues with cancer."

Ladies on the day wore pink and were treated to a glass of bubbles on arrival along with delicious food, a guest speaker and market stalls and raffles – all going towards breast cancer research at the BHI through ABCR.

R-L: Tom Lane with Gawler Central president Andrew Pike and Janet Hewett. Photo taken by Barossa & Light Herald.



Mercer SuperCycle – A Ride Like No Other

Riding for an important cause, the annual Mercer SuperCycle had another successful year in 2017, with 51 riders completing the cycling challenge through some of the best parts of South Australia, raising money for country cancer patients.

All funds raised through Mercer SuperCycle go directly towards building family-style accommodation for country cancer patients and their families through THRF's Under our Roof project. An incredible \$405,000 was raised through their efforts in 2017, bringing a total of over \$2million raised by Mercer SuperCycle since its inception six years ago.

Travelling away from home and normal support networks for treatment is often a patient's second biggest stressor after a cancer diagnosis. THRF's Under Our Roof project provides much needed accommodation to country cancer patients and their families to stay together while receiving treatment at Adelaide hospitals. The two homes, Mercer House and Bendigo Bank House are proudly named after two major sponsors of Mercer SuperCycle.

The homes provide a welcoming, warm and safe environment for families to stay in at a crucial time

– each home has two living areas, two bathrooms and can sleep up to six people. They also are free of charge to patients covered by the Country Health South Australia's PATS scheme, or at a low cost to patient's ineligible for this scheme. This removes the financial burden for patients and their families at this difficult time in their lives.

In 2017 the current Under Our Roof homes were occupied for 84 per cent of the year, seeing patients and their families travel from 13 different country towns.

Helping patients and their families is the main motivation for the riders, as third time SuperCyclist Stephen Brough from Mercer describes SuperCycle as a great way to “help others and make a difference to people's lives in a meaningful way.”

“Knowing the work that you've done on the bike has a direct benefit to cancer patients is a great feeling and meeting those living in rural areas and talking about what we are doing helps you get through the long days. The whole experience from the moment you start training to the time you ride into Adelaide will not be forgotten,” Stephen said.

This event would not be possible without our Major Event sponsors. Thank you to Mercer and Bendigo Bank, to all our riders, support crew members, donors and the incredible SuperCycle Inc. Board for their tireless efforts to ensure this major fundraising event runs smoothly each year.



Newman's Own Foundation Grant for Under Our Roof

THRF is proud to have breast cancer thriver Jenni Eyles as one of our wonderful Ambassadors, volunteering her time to be a passionate advocate for our cause.

Running her own successful blog called Styling Curvy, Jenni was nominated as one of six influential bloggers in Australia by Newman's Own Foundation, the independent foundation created by the late actor and philanthropist Paul Newman.

As part of this exciting achievement, Jenni was asked to nominate a charity of her choice to receive a US\$100,000 grant from Newman's Own Foundation. We are thrilled Jenni chose to direct the funds to our Under Our Roof project, which provides comfortable accommodation for country cancer patients travelling to Adelaide for treatment.

For Jenni, she is excited to witness the impact this grant will have on the lives of other families.

"As a proud Ambassador for THRF it was a no brainer, they do great work that equates to real changes and better outcomes for patients," Jenni said.

"I'm looking forward to seeing how this money will create a positive impact where it's needed."

Felicity with husband Simon and son Jesse in the Under Our Roof home she and her family stayed in.

Paul Flynn, CEO THRF and Jenni outside the Bendigo Bank Under Our Roof home.

The Longest Table

It was a record year for THRF's annual cancer fundraiser The Longest Table (TLT) with more hosts than ever before raising vital funds for cancer research. We were overwhelmed with the number of hosts participating to [#forkcancer](#) across the country. In an incredible effort from over 220 hosts, TLT raised over \$230,000 for cancer research!

In 2017 TLT also welcomed over 20 Participating Venues on board from across Adelaide where hosts could choose to hold their dinner if they didn't want to host at home.

We were blown away by the passion of so many of our hosts, with many sharing their stories about the impact cancer has on their lives. One of our top fundraisers, Rebecca De Cicco, hosted her Longest Table for her dad who is battling Multiple Myeloma.

"The Longest Table was a way for me to share my dad's story and to draw and raise awareness for Multiple Myeloma, as it is so rare and generally not spoken about. It enabled me to bring together family and friends to discuss something we all needed to know more about, while supporting my father through this tough time. To me, a future free of cancer means I can share my life longer with those I love and create beautiful memories with them for as long as possible."

Thank you to all the wonderful hosts who held their Longest Tables this year, and thank you to the BHI for hosting a lunch and raising vital funds for cancer research.

We are proud to say 100 per cent of the funds raised go towards researchers at the BHI and across South Australia who are dedicated to saving lives from cancer by improving treatments and finding cures for this heartbreaking disease.

Rebecca and her family are determined to [#forkcancer](#).

The Hospital Research Home Lottery

2017 was the biggest year yet for the Hospital Research Home Lottery. For the first time we held three lotteries with each selling out in record time!

We were blown away by the community's support and thanks to the public were able to fund even more lifesaving medical research to save lives and improve patient care in South Australia.



SOMERTON PARK

We kicked off 2017 with a bang, launching the first Hospital Research Home Lottery of the year with a Grand Prize worth \$1.8million.

The prize included a stunning Scott Salisbury Homes house in Somerton Park, only minutes from the foreshore, along with a Porsche Macans and \$250,000 in cash!

Selling out in just a few weeks, the winners of the Grand Prize Lyle and Jade Wansbury (Ticket Number 015086) were excited to receive the keys to their brand new home and car – truly setting them up for life!

This lottery offered a 1 in 12 chance of winning 7,404 prizes!



TENNYSON

In April 2017 we launched our second lottery offering up our biggest Grand Prize yet – a stunning Tennyson home, fully refurbished and renovated by Scott Salisbury Homes, a Mercedes-Benz GLC 250 Coupe and \$500,000!

Selling out once again in only two weeks, the winner of this stunning beachside home Cyrus Santos (Ticket Number 097955) and wife Merridy along with their two daughters couldn't wait to move into their dream home!

This was our first lottery to offer up not only the biggest cash prize yet, but also a 1 in 10 chance to win 10,545 prizes!



MALVERN

Our third lottery in October 2017 was our biggest Grand Prize to date – a luxury home in Malvern built by Scott Salisbury Homes, plus a Range Rover Sport SE and \$1 million!

With a 1 in 10 chance of winning over 11,600 prizes, this lottery had more prizes than ever before!

Anthony Vinci (Ticket Number 020297) and his lovely family couldn't believe they won the Grand Prize and were extremely thrilled when they received the life-changing phone call.

THRF's community awareness program provides an invaluable opportunity for researchers and clinicians to engage with our donor community and showcase how their funds are supporting vital research.



The program also gives local community groups the exciting opportunity to hear and see first hand the world-class research that is happening in Adelaide. Aside from being involved in speaking engagements, researchers also can showcase their research through hosting public tours for donors at the BHI.

In 2017, THRF hosted 23 speaking engagements, our researchers visiting local groups including the University of the 3rd Age Flinders, Adelaide Hills and Port Adelaide, VIEW (Voice, Interests and Educations of Women), Greenwith Community Centre, Pan Arcadian, Prospect Ladies Probus Club, Lions Club of West Beach, Brown Hill Creek Probus Club and Tea Tree Gully Probus Club.

In 2017 these community groups heard from many talented researchers about various diseases and health concerns that may affect themselves or a loved one. The topics covered were:

- Adoptive Cell Therapy: Harnessing Body's Immune Cells to Fight Cancer
- Advances in Alzheimer's
- Arthritis
- Breast Cancer
- Cardiovascular Disease
- Colorectal Cancer Liver Metastasis

- Diabetes
- Frailty and Environment
- Healthy Ageing
- New Novel Bone Repair Treatments (osteoporosis and related fractures)
- Oral Health
- Prostate Cancer
- Returning to hospital after a heart attack
- Stroke (research, risk and prevention)
- The Hospital Research Foundation
- Virology: Progress towards a HIV Vaccine

THRF's annual BHI tours invite the public to come behind the scenes to see where the world-class medical research takes place. In 2017 guests were treated to a variety of research topics, hosted by BHI researchers themselves, including frailty, arthritis, breast cancer and diabetes.

Information on upcoming public tours or community group presentations is available on our website:

► hospitalresearch.com.au

Susan Lester, Rheumatology Research Group (front centre), shows people through the BHI laboratories.

A THANK YOU TO OUR LOYAL SUPPORTERS – BASIL HETZEL SOCIETY LUNCHEON



On Thursday 3 November 2017, THRF hosted an annual lunch for a group of our valued supporters who are dedicated to raising vital funds for medical research.

The Basil Hetzel Society Luncheon, hosted for the first time at the Glenelg Golf Club, is a great way to thank our supporters for their continuous support and vital contributions towards lifesaving medical research at the BHI, improving the lives of everyday people.

Providing exciting developments in research was an exceptional panel who shared with our guests where their donations are going and most importantly, the impact our supporters are making towards medical research each time they donate.

Our panel included researchers from the BHI, including Dr Rosanna Tavella, Clinical Data Manager from the Translational Vascular Function Research Collaborative Group and Dr Sam Costello from the Gastroenterology Group.

We would like to thank our loyal supporters who have been connected to THRF for many years and congratulate them on their contribution towards medical research to ultimately save lives and improve patient care.



Media Appearances

In 2017 research developments from the BHI were featured in the media on a number of occasions, making national and even international news!



In collaboration with The University of Adelaide in January 2017, THRF coordinated a media announcement following Associate Professor Wendy Ingman's publication demonstrating that inflammation is a driver of breast density and associated with breast cancer risk. This exciting research outcome was then featured on **ABC 891, FIVEaa, Radio National**, including the **Radio National Health Report, 2MCE Radio** and gained international exposure on **Deutsche Welle**, Germany's international broadcaster. This was broadcast on their technology radio programme, **Spectrum**, broadcast globally and heard in Australia via ABC Radio National on Sunday afternoon. The story also featured in print in **The Advertiser** on January 24 2017, the **ABC News 24 Health Report TV** and also received a number of online outcomes. This included **ABC Online, The Lead South Australia, SBS World News Australia, Science Daily, Women's Fitness** and **News.com.au**, which was then syndicated on all News Limited platforms.

In February 2017, THRF coordinated Dr Rosanna Tavella to feature on a lengthy segment on **Ballarat Community Radio**, an opportunity for us to share the work we coordinate in this field in regional Victoria.

In May 2017, THRF also drove a **Channel 9 News** story about research undertaken by Professor Andreas Evdokiou and his group at the BHI. This research is looking at ways to regenerate growth in bones after cancer related bone loss. Jenni Eyles, one of our wonderful THRF ambassadors, is now living with Osteoporosis as a result of breast cancer and was interviewed for the story.



In June 2017, **The Advertiser** showcased Professor Peter-John Wormald's revolutionary research on the idea of developing a gel to treat chronic pain after back surgery after they received a THRF Development Grant. Prof Wormald and colleague Associate Professor Sarah Vreugde have discovered this same gel they now use to treat nasal inflammation following surgery can be used to prevent scarring following routine back surgery.

Channel 9 News featured a story in July 2017 on Professor John Beltrame and Associate Professor Christopher Zeitz's research on patients living with chest pain following an 'unexplained heart attack.' This study is supported by THRF's inaugural Basil Hetzel Translational Grant and is a world-first in examining the role of microscopic blood vessels in these unexplained heart attacks.

Coast FM Radio

Our ongoing monthly segment with community radio station **Coast FM 88.7** is a great opportunity for researchers to share their work with esteemed presenter **David Hearn**. The following BHI staff and students had the opportunity to experience discussing their work with local media:

Katharina Richter and Dr Nicky Thomas, Dr Beatriz Martins, Kathryn Hudson, Associate Professor Sarah Vreugde, Zenab Dudhwala and Dr Danielle Taylor.

L: **Kathryn Hudson** with Coast FM presenter David Hearn.

R: **Professor Andreas Evdokiou** and PhD student **Alexandra Shoubridge** being interviewed for Channel 9 News.



Professional Membership

THRF has been a longstanding member of Brand SA and is proud to help showcase the state's growth and success in the field of translational medical research and innovation in treatments and delivery of patient care.

THRF is also proud to be a nominated charity partner of both the American Chamber of Commerce (AMCHAM) and the Australia Israeli Chamber of Commerce (AICC). These affiliations give THRF the opportunity to engage and build positive relationships with the South Australian corporate community and showcase the health benefits and outcomes made possible through local media.

Sponsorships

Each year THRF is delighted to sponsor a range of activities and projects at the BHI that significantly extend educational endeavour or have a direct benefit to the community.

In May of this year THRF was pleased to support the 'Pint of Science' Festival which was coordinated by BHI researcher Katharina Richter. With varying themes over the three nights, several scientists were given the opportunity to present their latest discoveries to a live audience.

THRF also provided sponsorship for the Australian Society for Medical Research (ASMR) Gala Dinner and purchased a table for BHI researchers to attend on the evening.

In November 2017, THRF was thrilled to support Dr Branka Grubor-Bauk to coordinate a Zika Virus Meeting at the BHI, an opportunity for Adelaide scientists to establish collaborations with each other and exchange ideas.

In addition to the above sponsorship, THRF continues to provide career and research skills training support for staff and postgraduate students. In 2017 this included sponsoring two BHI researchers to attend a one-day Media and Communications training workshop run by "Science in Public". Additional support from the BHI allowed two more researchers to attend. Postgraduate students Clementine Labrosciano, Joe Wrin, and postdoctoral researchers Dan Wijesundara and Joanne Dollard, all found this a very worthwhile day and have participated in media and community engagement opportunities with increased confidence since then.

As well as continuing to provide funding for researchers to print their conference posters, BHI researchers are now able to apply for THRF Travel Awards to enable them to present their research results at national or international conferences (see **Awards**, for details of individuals who received these awards in 2017).

Finally, as the major sponsor, THRF maintains its invaluable support of TQEH Research Day which is held every October (see **TQEH Research Day** section for more information).

BHI researchers attending the ASMR Gala Dinner, thanks to sponsorship from THRF.





The Institute

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**the hospital
research foundation**

finding cures improving care

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