



Research Annual Report 2017



Townsville Hospital and Health Service Research Annual Report 2017

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Grant and funding amounts also include grants received by Townsville Hospital and Health Service staff in collaboration with others and where Townsville Hospital and Health Service may not be the administering institution.

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Message from the Health Service Chief Executive

The Townsville Hospital and Health Service has a long and proud track record of fostering, encouraging and funding local health research.

This research has led to breakthrough changes in the way we care for our community and has also contributed in attracting world-class clinicians and researchers to our region.

In the past 12 months we have continued that proud research tradition and have celebrated key milestones that will continue to position us as the tertiary health and knowledge hub of Northern Australia.

The \$5 million Townsville Institute of Clinical Research is now operational and provides a modern, state-of-the-art facility where researchers can study and conduct cutting edge health research.

We also signed a memorandum of understanding with James Cook University which commits our two organisations to collaborate to develop a co-located North Queensland Academic Health Hub Alliance.

The North Queensland Academic Health Hub Alliance would work to further enhance

the co-located university and hospital at Douglas as a world class teaching and learning centre with a focus on research and innovation as well as expanding the availability of tertiary and secondary public health services to the community.

Our Study Education Research Trust Account (SERTA) program has provided funding for education and research in the Townsville HHS for more than 20 years.

In the latest round of funding includes research that explores the barriers stroke survivors have in maintaining rehab in their homes, research to identify and respond better to sepsis in children and research exploring how exercise can benefit patients at risk of dementia.

We know that demand for health services is increasing year on year and a strong research focus is important to find new and innovative ways to meet the challenge of increased demand.

Kieran Keyes

Health Service Chief Executive
Townsville Hospital and Health Service



Message from the Director of Clinical Research

Nurturing research enquiry takes time and considerable energy but there are plenty of rewards. The contribution of Townsville HHS clinical researchers to increasing healthcare knowledge is growing year upon year.

Our shared aim is to provide high-quality care to our patients knowing that the evidence for it is firm and it is cost effective. Pursuing and applying the results of clinical trials is cost-saving and therefore a crucial priority for healthcare. That's what research contributes to.

The Townsville HHS Board is funding a clear research agenda that benefits our regions health. The grants provided by the Study, Education and Research Trust Account are being used to complete high quality research. When these grants are awarded they go to researchers who prove that their projects are scientifically robust and line up with the organisation's strategic priorities. This is growing the expertise in numerous forms of research that is making

the health service a better place to work. New research begets new researchers and these people are going to want to stay in a hospital like ours to build an exciting career for themselves. It's a great cycle that injects energy and delivers rewards that enthuses more health scientists with new ideas all testing what they don't know.

Wernher von Braun the father of rocket science said that 'research is what I'm doing when I don't know what I'm doing'. This Townsville HHS Research Report for 2017 goes a long way to show how much more we do know at the end of another exciting year's discoveries.

Professor Damon Eisen

Professor of Medicine, James Cook University and Director Clinical Research, Townsville Hospital and Health Service



Message from the Townsville Research Education, Support & Administration (TRESA) Unit Manager and Research Governance Officer

Research at Townsville Hospital and Health Service continues to go from strength to strength. In 2017, one hundred and five studies were authorised to commence at Townsville Hospital and Health Service. This number is slowly increasing each year, supported by internal competitive research grant funding from the Study, Education and Research Trust Account (SERTA). In 2017 eleven research studies received SERTA funding totalling \$290,689. We are fortunate to have a Board committed to research which will enable internal research grant funding rounds to continue to be offered annually.

Over fifty researchers, including many of the previous SERTA research grant recipients, presented at the annual Townsville Hospital and Health Service research showcase. Guest speakers at the showcase included Professor David McGiffin Director of Cardiothoracic Surgery at the Alfred Hospital, Professor Cate Nagle the new Townsville Hospital and Health Service Professor of Nursing and Midwifery and Dr Rosalie Boyce.

Prizes were awarded to:

- Maria Shilova for the presentation Angiosomes of the foot and their anatomical variation
- Sonja Brennan for the presentation A non-invasive method to detect glomerulomegaly in premature infants
- Stephen Perks for the presentation Extended Duration Infusion Temperatures in the Tropics: 2 (EDITT2)
- Lisan Yip for the presentation Physical activity and physical performance in patients with peripheral artery disease.

Researchers are now looking forward to the move to the dedicated research space at Townsville Hospital in mid-2018. As well as providing a dedicated clinical trials area the bringing together of researchers in one space will enhance collaboration across disciplines and provide a more conducive environment for conducting research.

Sue Jenkins-March

Manager, Townsville Research Education, Support & Administration and Research Governance Officer Townsville HHS



Message from the Human Research Ethics Committee Chair

The ethical justification for undertaking research is that the efforts of participants, who may be exposed to risk and burdens, will not be in vain. The efforts of research participants should contribute in some way for the greater good. Usually this occurs when the outcomes of research are made available, for example, via publications and presentations, so that practices can be adapted in response to the new evidence.

During 2017, in the health setting, the national and international focus has been on making sure that outcomes of research studies are made available so that the knowledge can contribute to improve the health care provided to patients, or can contribute to improve some other aspect of health service delivery such as staff satisfaction or maximizing the effectiveness of processes.

The Human Research Ethics Committee at Townsville Hospital and Health Service expects that outcomes will be shared- and in recent times the Committee has

been very pleased to read about all of the publications and presentations of research that the Committee has approved.

Congratulations to the Townsville Hospital and Health Service, and all of the researchers whose projects we have been involved in. We're excited to see and hear about the changes at a local level when outcomes influence practice, and contribute to better outcomes for patients, staff, and the hospital and health service in general.

Associate Professor Nikola Stepanov

Chair, Townsville HHS Human Research Ethics Committee

Message from Tropical Australian Academic Health Centre (TAAHC)

The Tropical Australian Academic Health Centre is a partnership between James Cook University (JCU), the Australian Institute of Tropical Health and Medicine (AITHM), the Northern Queensland Primary Healthcare Network (NQPHN) and the five Health and Hospital Systems (HHSs) from Mackay north – Mackay, Townsville, Cairns and Hinterland, North West, and Torres and Cape.

The partnership aims to foster research with four main priorities, all key to improving the health of tropical North Queensland populations:

- Service delivery to rural, remote, and indigenous populations for both chronic and emergency care
- Innovative health workforce models
- Chronic disease with high regional prevalence
- Infectious diseases and biosecurity.

Late in 2016, Townsville HHS on behalf of the partnership submitted a bid to the National Health and Medical Research Council (NHMRC) for national recognition as one of its newly-designated Centres for Innovation in Regional Health (CIRH). Although not successful in that first round, the submission was shortlisted and the

partnership encouraged to resubmit in the next round (at the end of 2018) when its structure and activities were more established.

Throughout 2017, TAAHC undertook to formalize its legal and governance arrangements, and to finalise those arrangements in 2018. The institutional partners decided that TAAHC would be structured as a company with a constitution and procedures aimed at fostering collaborative research projects between the partners, developing and improving research capacity in the health system throughout the region, and providing opportunities for staff to enhance their research skills and activity.

Townsville HHS research already includes significant collaboration with other TAAHC partners, to the benefit of both the research and the participating researchers. The Townsville Hospital researchers, research managers and leaders continue to be key contributors to the development of TAAHC.

Emeritus Professor Rhondda Jones

Director of Research Development, Division of Tropical Health & Medicine James Cook University

Townsville Health Research Showcase

Townsville Hospital and Health Service and James Cook University were proud to join again to host the 2017 Townsville Research Health Showcase.

The annual showcase is a unique opportunity to demonstrate health research taking place across the Health Service and Academic campus with an emphasis on collaborative research which harnesses the collective power of both institutions. It provides an excellent opportunity for staff who may have the beginning of an idea for research to meet people who can help turn their dream into a reality.

Workshops on research methodology, statistics, writing for publication and health economics for research were conducting in the mornings, followed by plenary speeches from special guests and abstract presentations in the afternoons. Sessions were well attended, and the Research Networking Dinner was a sold-out affair.

49

Abstracts presented

31

Posters submitted

100

**Attendees at Research
Networking Dinner**



Plenary Speakers

Professor David McGiffin Director of Cardiothoracic Surgery and Transplantation at the Alfred Hospital research interests are primarily outcomes analysis in cardiac surgery and transplantation. Other areas of interest include homograft aortic valves and research into biomechanics and myocardial oxidative stress associated with chronic mitral regurgitation.

Dr Rosalie Boyce PhD - a recognised authority on the management and organisation of the allied health professions. Rosalie's research career spans two decades investigating how professions and organisations are reshaping themselves in the face of significant health workforce reform agendas.

Professor Cate Nagle – A recent arrival at Townsville HHS, Cate's past program of research encompassed acute and public health with a particular focus on safety and quality of care, understanding and enhancing the patient's experience of care and workforce development.

Research Networking Dinner

The 2017 Research Networking Dinner was a sold-out event at the C-Bar Restaurant on the Strand. The dinner serves as a rare opportunity for multi-disciplinary researchers and research support staff from all areas of the health service and university to get together in a social setting. The guest speaker for the dinner was Dr Nikola Stepanov – Integrity Commissioner for Queensland Parliament who is a leading figure in the Australian Health Ethics.

Indigenous Health Service Group

Understanding unique communication vital in Indigenous Research

The 2017 Townsville Health Research Showcase was an opportunity to enhance researchers understanding of communication with people who are Aboriginal or Torres Strait Islander in relation to research projects.

Townsville Hospital and Health Service cultural practice coordinator Trevor Prior led a team initiative to present on the topic of effective communication for Aboriginal and Torres Strait Islander people and said Indigenous people had their own unique form of communication and understanding "This is really important for researchers to understand when researching Indigenous health as well as involving Indigenous people in their research." The session highlighted the importance of building relationships and making a connection with patients before approaching them about research studies.

The Indigenous Health Service Group also presented on Developing a Health Profile on Palm Island, Preventable Hospital Admissions, and Research Protocols involving Aboriginal and Torres Strait Islanders.

2017 Study Education Research Trust Account Grants (SERTA)

The Study, Education, Research Trust Account (SERTA) is the source of funding for research at Townsville Hospital and Health Service. This trust account is maintained by private practice income from specialist Senior and Visiting Medical Officers.

SERTA funds are used for research grants and opportunities for staff development.

Research grant funding is decided since assessment of research merit, by an external review panel and the degree of organisational objective alignment, which is assessed by the Townsville HHS Research Trust Fund Advisory Committee (RTFAC). The decision regarding successful research grant funding is made by the Townsville Health Service Chief

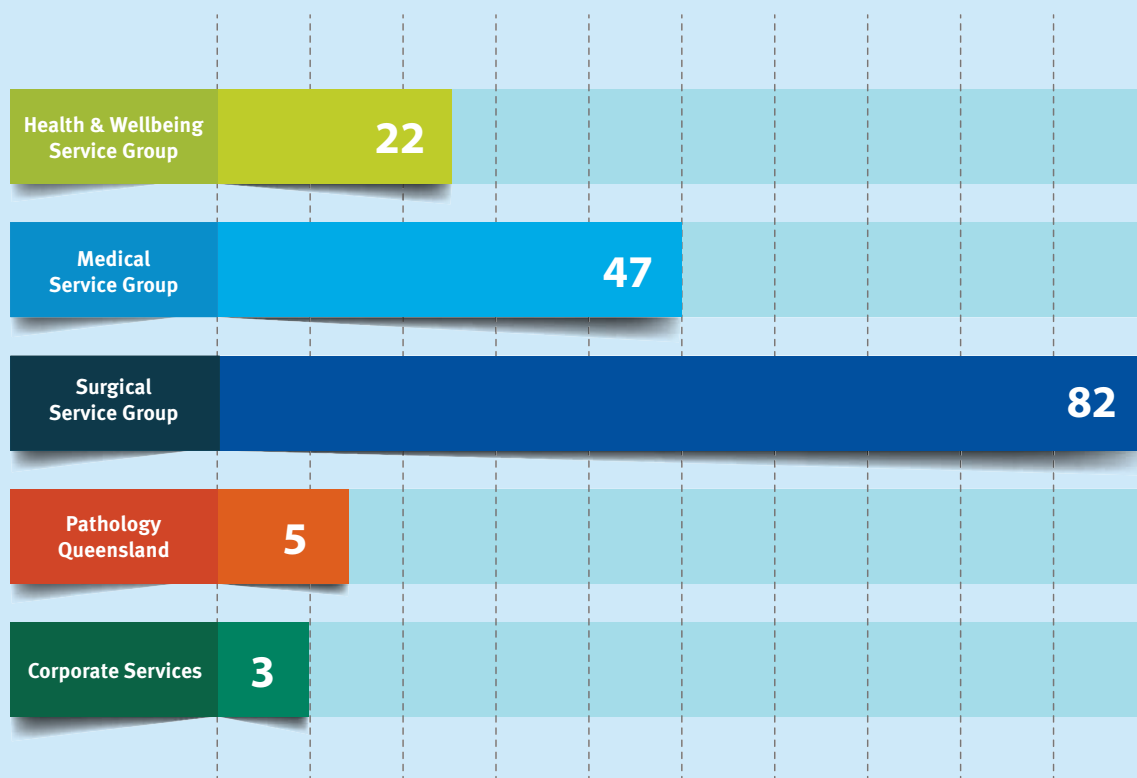
Executive, on the recommendation of the RTFAC. Applications for funding for professional development activities are assessed by the Chair of the RTFAC. A very generous amount of SERTA grant funding is awarded each year. In 2017, the amount for research grant funding was \$320,000 and professional development funding was \$29,708.

The recent renovation of the Townsville Institute for Clinical Research Centre has been funded by SERTA resources.

High quality research could not be undertaken at Townsville HHS without SERTA. Use of SERTA funds is making Townsville HHS a more interesting workplace and helping to attract high-quality clinical staff.

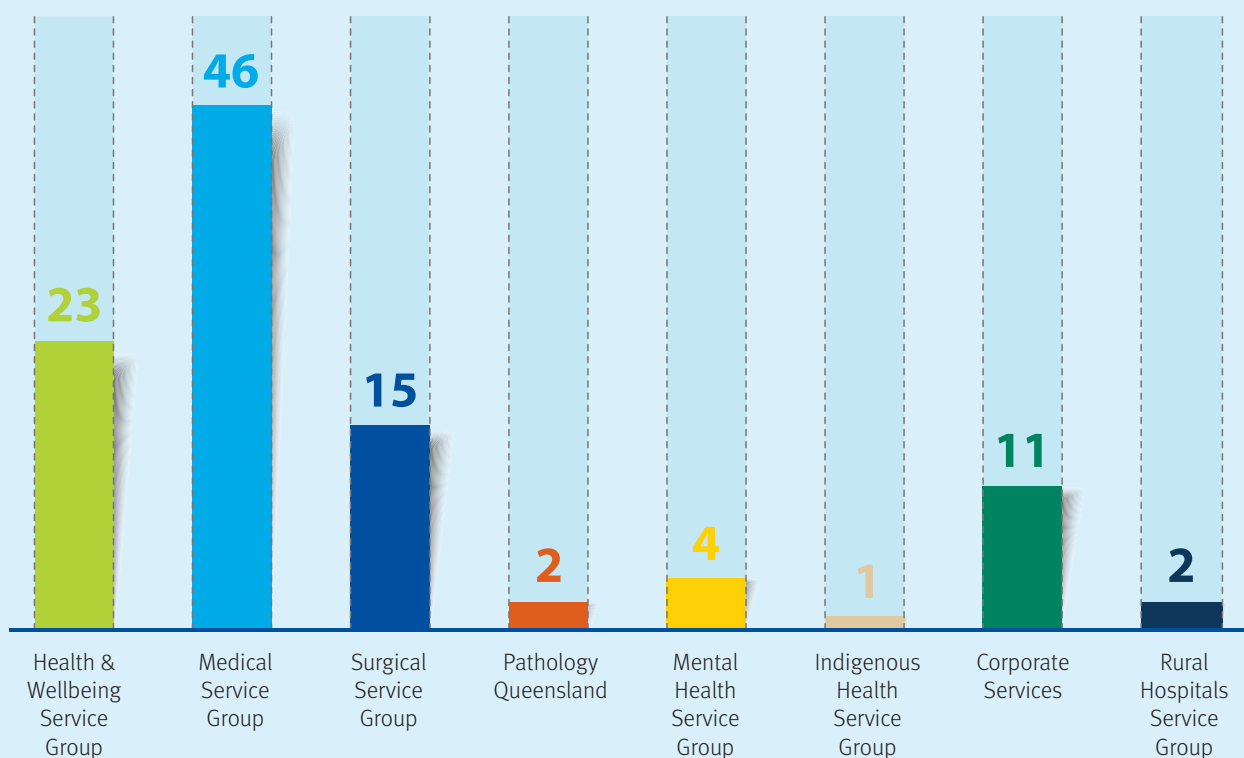
Investigators	Collaborating Institutes	Project Title	Amount
Tejas Pratap Singh	James Cook University	Presentation and outcomes of Indigenous Australians with peripheral artery disease.	\$40,000
Amy Brown	James Cook University	Health Technology Assessment of the Clrity Autoscan system: Motion correction and margin reduction in the radiation therapy treatment of prostate cancer	\$11,290
Julia Peters	Emergency Medicine Research Children's Emergency Department, Starship Children's Hospital, Auckland, New Zealand Royal Children's Hospital, Melbourne Murdoch Childrens Research Institute	Knowledge Translation in Australasian Paediatric Acute Care Settings: A multi-centred, cluster-randomised controlled trial comparing a tailored, theory informed Knowledge Translation intervention versus passive dissemination of a bronchiolitis guideline (PREDICT KT study)	\$18,323
Damon Eisen	Orthopaedic Research Institute of Queensland Burns Trauma and Critical Care Research Centre, University of Queensland	Measuring aspirin penetration into synovial fluid to assess its potential for prevention of prosthetic joint infection	\$39,450
Matt Bryant	James Cook University	What are the barriers to Referral to a Pain Management Clinic for Indigenous People? (Qualitative Phase)	\$4,000
Kaushik Hazratwala	Orthopaedic Research Institute of Queensland College of Medicine & Dentistry at James Cook University	The effect of a novel front-line drug therapy (ALM) on reducing adhesions following joint arthroplasty in a rat model of arthrofibrosis	\$19,870
Debra Phillips	Lady Cilento Children's Hospital BurnsNQ	Evaluation of an OT-led paediatric burns telehealth review clinic	\$47,153
Andrew Cartwright	James Cook University	Evaluation of the benefits of incorporating a trained assistant in Computed Tomography (CT)	\$29,768
Yoga Kandasamy	James Cook University	Discovering the Faecal Microbiome Associated with Pre-Term Birth	\$27,584
Guan Koh	James Cook University - Singapore KK Women's and Children's Hospital, Singapore Duke-NUS University, Singapore	Bowel Sounds Sensor (BoSS) Project Phase 1 in term newborn babies	\$43,598

Total Publications - **Total 159**



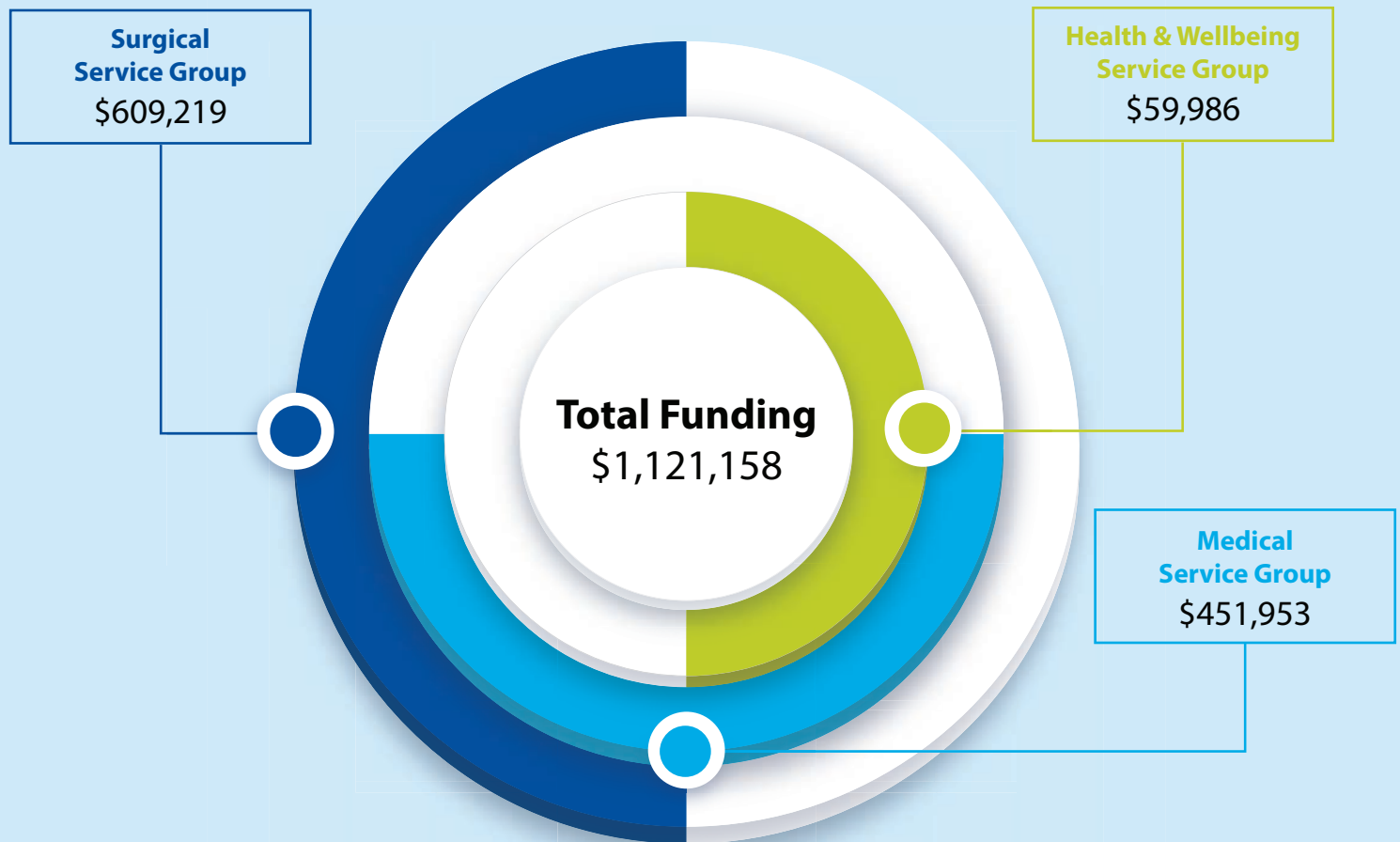
Data as at 31 December 2017

RGO Approved Studies - **Total 104**



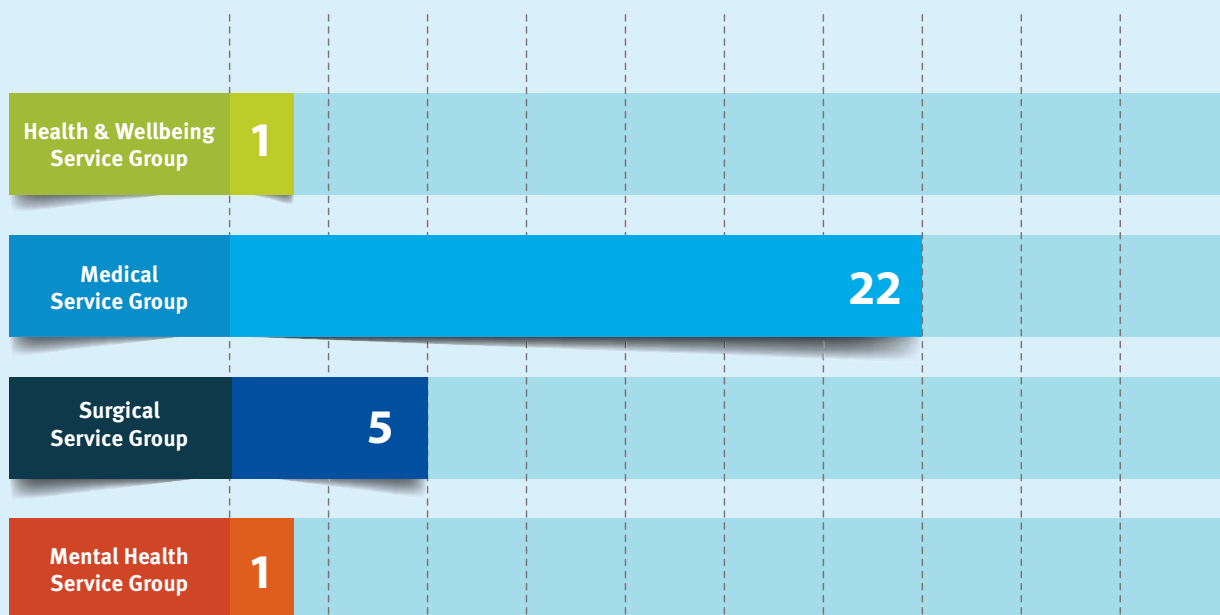
Data as at 31 December 2017

Reported Funding - **Total \$1,121,158**



Data as at 31 December 2017

Externally Funded Authorised Studies - **Total 29**



Data as at 31 December 2017





Health & Wellbeing Service Group

Vicki Carson, Service Group Director

2017 was a big year for the Health and Wellbeing Service group, with over 20 separate research publications and more than 20 research projects approved. The service group prides itself on delivering and supporting services that are best practice and continues to encourage clinicians to undertake activities and projects to further expand the depth of research in their fields.

Health and Wellbeing Service Group continues to collaborate with our research partners James Cook University and we wish to acknowledge the significant contribution that Allied Health research has made to the Townsville HHS – through organisational change, a new Allied Health Services Division has been established which will enable Allied Health professions to continue to flourish.

Health & Wellbeing Service Group Key Researchers



Dr Yoga Kandasamy

Neonatal Services

Research Team:

Ms Deanne August
Ms Sonja Brennan
Ms Helena McInnes
Ms Jessica Bowron
Dr David Watson
Dr Jacqueline Smith
Ms Michelle Evans
Ms Barbara Monk

Research Collaborations:

Dr Donna Rudd (JCU)
Dr Meegan Kilcullen (JCU)
Dr Robin Ray (JCU)
Dr Karen New (UQ)
Prof Roger Smith (U.Newcastle)
Prof Eugenie Lumbers (U.Newcastle)
Prof Ian Wright (U Wollongong).
Prof Yogesan (CSIRO)

Dr Kandasamy works as a Senior Neonatal Paediatrician.

He graduated with a medical degree from University of Malaya, Malaysia in 1995. He obtained a Masters degree in Clinical Epidemiology and a PhD from the University of Newcastle, NSW. In 2014, Dr Kandasamy received a National Health and Medical Research Council New Investigator Project grant to carry out research into the effects of prematurity and low birth weight on retinal and renal development. Dr Kandasamy's area of research is in neonatal medicine, specifically effects of prematurity on development of the kidney and retina, and neonatal health in Indigenous babies.

Publications:

GOWDA, H., NORTON, R., WHITE, A. & KANDASAMY, Y. 2017. Late Onset Neonatal Sepsis – A 10 Year Review from North Queensland, Australia. *Paediatric Infectious Disease Journal*.

KANDASAMY, Y., HARTLEY, L. & SMITH, R. 2017. Retinal microvascular plasticity in a premature neonate. *Journal of Developmental Origins of Health and Disease*, 1-3.

KANDASAMY, Y., HARTLEY, L., RUDD, D., SMITH, R., 2017. The association between systemic vascular endothelial growth factor and retinopathy of prematurity in premature infants: a systematic review. *The British Journal of Ophthalmology* 21-24.

BRENNAN, S. & KANDASAMY, Y. 2017. Ultrasound Imaging of the Renal Parenchyma of Premature Neonates for the Assessment of Renal Growth and Glomerulomegaly. *Ultrasound in Medicine and Biology*

BRENNAN, S., WATSON, D., RUDD, D., SCHNEIDER, M. & KANDASAMY, Y. 2017. Evaluation of fetal kidney growth using ultrasound: A systematic review. *European Journal of Radiology*, 96, 55-64.

VU, H. D., DICKINSON, C. & KANDASAMY, Y. 2017. Sex Difference in Mortality for Premature and Low Birth Weight Neonates: A Systematic Review. *American Journal of Perinatology*.



Dr Venkatesh Aithal

Audiology

Research Team:

Dr Sreedevi Aithal - Principal Investigator

Associate Prof Joseph Kei – Investigator

Associate Prof Carlie Driscoll – Investigator

Dr Shane Anderson – Investigator

Katrina Robert - Investigator

Joshua Myers - Investigator

Melissa Forrester - Investigator

Research Collaborations:

School of Health and Rehabilitation Sciences (SHRS), University of Queensland

Department of Ears Nose and Throat, Townsville Hospital

Health and Wellbeing Service group

Research Grants:

Grant Name: Tele-audiology project

Grant Application Title: Townsville HHS Tele-audiology pilot project

Grant Amount: \$19,986

Venkatesh Aithal is a consultant clinical audiologist and head of Audiology Department, The Townsville HHS, Queensland.

Venkatesh is an active researcher and has led the audiology service at The Townsville Hospital (TTH) and Community Health, Kirwan for 14 years. He has successfully obtained various research grants with a total in excess of \$550,000 in the last 10 years. His team recently received a grant (\$215,000) from the New Technology Funding and Evaluation Program on wideband absorbance for 2014-16. He has actively collaborated with the Hearing Research Unit, School of Health and Rehabilitation Sciences, University of Queensland for the last 8 years. Venkatesh recently completed his PhD on identification of middle ear pathology in infants using an innovative technology called sweep frequency impedance (SFI) technique for the first time in Australia.

Publications:

AITHAL, S., AITHAL, V. & KEI, J. 2017. Effect of ear canal pressure and age on wideband absorbance in young infants. *International Journal of Audiology*, 1-10

AITHAL S, KEI J, AITHAL V, ET AL 2017. Normative study of wideband acoustic immittance measures in newborn infants. *Journal of Speech Language and Hearing Research*, 1417-1426.

AITHAL, V., KEI, J., DRISCOLL, C., MURAKOSHI, M., WADA, H., 2017. Sweep frequency impedance measures in young infants: developmental characteristics from birth to 6 months. *International Journal of Audiology*, 154-163

AITHAL, V., KEI, J., DRISCOLL, C., MURAKOSHI, M., WADA, H., 2017. Predictive accuracy of sweep frequency impedance technology in identifying conductive conditions in newborns. *Journal of the American Academy of Audiology*. 106-117

Health & Wellbeing Service Group Research Grants

Investigators	Grant Title	Grant body/scheme	Amount
Tim McNabb	Improving outpatient patient experience and reducing operational costs through the use of Internet of things (IOT) technology	Study Education Research Trust Account	\$40,000

Health & Wellbeing Service Group Research Publications

1. KILCULLEN, M. & IRELAND, S. 2017. Palliative care in the neonatal unit: Neonatal nursing staff perceptions of facilitators and barriers in a regional tertiary nursery. *BMC Palliative Care*, 16.
2. NUGENT, R., DE COSTA, C. & VANGAVETI, V. 2017. Caesarean risk in obese women at term: A retrospective cohort analysis. *Australian and New Zealand Journal of Obstetrics and Gynaecology*.
3. HARAN, S., CRANE, N., KAZI, S., AXFORD-HAINES, L. & WHITE, A. 2017. Effect of secondary penicillin prophylaxis on valvular changes in patients with rheumatic heart disease in Far North Queensland. *Australian Journal of Rural Health*.
4. GOWDA, H., NORTON, R., WHITE, A. & KANDASAMY, Y. 2017. Late Onset Neonatal Sepsis – A 10 Year Review from North Queensland, Australia. *Pediatric Infectious Disease Journal*.
5. AITHAL, S., AITHAL, V. & KEI, J. 2017. Effect of ear canal pressure and age on wideband absorbance in young infants. *International Journal of Audiology*, 1-10
6. AITHAL, S., KEI, J., AITHAL, V., MYERS, J. 2017. Normative study of wideband acoustic immittance measures in newborn infants. *Journal of Speech Language and Hearing Research*, 1417-1426.
7. AITHAL, V., KEI, J., DRISCOLL, C., MURAKOSHI, M., WADA, H., 2017. Sweep frequency impedance measures in young infants: developmental characteristics from birth to 6 months. *International Journal of Audiology*, 154-163
8. AITHAL, V., KEI, J., DRISCOLL, C., MURAKOSHI, M., WADA, H., 2017. Predictive accuracy of sweep frequency impedance technology in identifying conductive

- conditions in newborns. *Journal of the American Academy of Audiology*. 106-117
9. VU, H. D., DICKINSON, C. & KANDASAMY, Y. 2017. Sex Difference in Mortality for Premature and Low Birth Weight Neonates: A Systematic Review. *American Journal of Perinatology*.
 10. STOCKWELL-SMITH, G., MOYLE, W., MARSHALL, AP., ARGO, A., BROWN, L., HOWE, S., LAYTON, K., NAIDOO, O., SANTOSO, Y., SOLEIL-MOUDI KY-JOH, E., GREALISH, L. 2017. Hospital discharge processes involving older adults living with dementia: An integrated literature review. *Journal of Clinical Nursing*.
 11. RANE, A., IYER, J., ANANTHRAM, H. & CURRIE, T. 2017. Can We Deliver Better? *Journal of Obstetrics and Gynecology of India*, 1-5.
 12. PAIN, T., KINGSTON, G., ASKERN, J., SMITH, R., PHILLIPS, S. & BELL, L. 2017. How are allied health notes used for inpatient care and clinical decision-making? A qualitative exploration of the views of doctors, nurses and allied health professionals. *Health Information Management Journal*, 46, 23-31.
 13. ALCOCK, G., LILEY, H. G., COOKE, L. & GRAY, P. H. 2017. Prevention of neonatal late-onset sepsis: A randomised controlled trial. *BMC Pediatrics*, 17.
 14. KANDASAMY, Y., HARTLEY, L. & SMITH, R. 2017. Retinal microvascular plasticity in a premature neonate. *Journal of Developmental Origins of Health and Disease*, 1-3.
 15. KANDASAMY, Y., HARTLEY, L., RUDD, D. & SMITH, R. 2017. The lack of association between vascular endothelial growth factor and retinopathy of prematurity in an observational study. *Journal of Maternal-Fetal and Neonatal Medicine*, 1-7.
 16. AUGUST, D. & KANDASAMY, Y. 2017. The effects of antenatal glucocorticoid exposure on fetal and neonatal skin maturation. *Journal of Perinatal Medicine*, 45, 969-975.
 17. AUGUST, D. L., NEW, K., RAY, R. A. & KANDASAMY, Y. 2017. Frequency, location and risk factors of neonatal skin injuries from mechanical forces of pressure, friction, shear and stripping: A systematic literature review. *Journal of Neonatal Nursing*.
 18. DEACON, S., MORAN, N., LASKEY-GILBOY, B., DE JONGE, M., ROTHERY, S., AHNON, K., WHITING, M., EMETO, T. I. & PAIN, T. 2017. Dietetic intervention for inpatients on fluid-only diets helps to achieve nutritional requirements. *Nutrition and Dietetics*.
 19. KOLLER-SMITH, L. I. M., SHAH, P. S., YE, X. Y., SJÖRS, G., WANG, Y. A., CHOW, S. S. W., DARLOW, B. A., LEE, S. K., HÅKANSON, S., LUI, K., MARSHALL, P., CRAVEN, P., SIMMER, K., STACK, J., KNIGHT, D., WATKINS, A., RAMSDEN, A., TAN, K., BAWDEN, K., DOWNE, L., SINGDE, V., STEWART, M., BERRY, A., HUNT, R., KILBURN, C., DARGAVILLE, P., PARADISIS, M., EVANS, N., REID, S., CARTWRIGHT, D., KUSCHEL, C., DOYLE, L., NUMA, A., KECSKES, Z., BADAWI, N., KOH, G., RESNICK, S., TRACY, M., TARNOW-MORDI, W., ANDERSEN, C.,

- AUSTIN, N., DARLOW, B., BROADBENT, R., CORBAN, J., MILDENHALL, L., BATTIN, M., BOURCHIER, D., RICHARDSON, V., HASLAM, R., RAJADURAI, V. S., KAJETANOWICZ, A., SYNNE, A., ROUVINEZ-BOUALI, N., PIEDBOEUF, B., BERTELLE, V., BULLEID, B., YEE, W., SHIVANANDA, S., LEE, K. S., SESHIA, M., BARRINGTON, K., LEFEBVRE, F., MCMILLAN, D., ANDREWS, W., KOVACS, L., DOW, K., DA SILVA, O., RILEY, P., SHAH, P., PELIOWSKI, A., AZIZ, K., CIESLAK, Z., KALAPESI, Z., SANKARAN, K., FAUCHER, D., ALVARO, R., CANNING, R., OJAH, C., MONTERROSA, L., DUNN, M., SOROKAN, T., HARRISON, A., NWAESEI, C., ADIE, M., HÅKANSSON, S., SEGERDAHL, N., MORAD, T., MORÉN, S., STENBERG, Å., SIMONSSON, C., STIGSSON, L., CHRISTENSEN, J. L., ÅMASN, L., INGEMANSON, F., ÖSTERDAL, L., ELLSTRÖM, K. G., ABRAHAMSSON, T., HEIMDAHL, I., HÄGG, T., HEDLUND, A., et al. 2017. Comparing very low birth weight versus very low gestation cohort methods for outcome analysis of high risk preterm infants. *BMC Paediatrics*, 17.
20. PATEL, A. & KANDASAMY, Y. 2017. Outcome of premature neonates born in a tertiary neonatal intensive care unit in Nairobi, Kenya. *Journal of Pediatric and Neonatal Individualized Medicine*, 6.
21. TOLSON, A., LOWRIE, D., CHAND, A. & MARSH, J. 2017. Occupational disruption among people with haematological cancer during treatment isolation. *International Journal of Therapy and Rehabilitation*, 24, 394-402.
22. KANDASAMY, Y., HARTLEY, L., RUDD, D., SMITH, R., 2017. The association between systemic vascular endothelial growth factor and retinopathy of prematurity in premature infants: a systematic review. *The British Journal of Ophthalmology* 21-24.

Biggest obstacles overcome in your research journey?

More of a challenge than an obstacle, it can be challenging to balance full-time clinical work with research. The hospital is kind to my research and the support is there, I have been fortunate to get funding.

- Dr Yoga Kandasamy



Health & Wellbeing Service Group RGO Approved Research

Investigators	Department	Grant Title	Funding Source
Dr Donna Rudd	Neonatal ICU	Neonatal Microbiome Project	
Dr Meegan Kilcullen	Neonatology	The role of telemedicine in providing Family Centred Care for premature babies and their families from regional remote Queensland	
Prof Guan Koh	Neonatology (recruitment from various departments)	A randomised controlled trial comparing prophylactic oral dextrose gel with placebo in newborn babies at risk of neonatal hypoglycemia.	Health Research Council of New Zealand
Dr Jessica Little	Obstetrics & Gynaecology	Bishop's Score as A Predictor of Successful Induction of Labour In Obese Women: A Retrospective Cohort Study	
Dr David Watson	Obstetrics & Gynaecology	Closing the gap in the stillbirth rate: understanding the issues and challenges in gaining permission for autopsy	
Ingrid Nylander	Obstetrics & Gynaecology	A staff survey in regard to Occupational Health and Safety issues while caring for overweight ladies during their pregnancy journey	
Prof Ajay Rane	Obstetrics & Gynaecology	Evaluating ease of use and acceptability of a perineal measuring device (Episiometer) in ensuring correct angle and length of mediolateral episiotomy	
Helen Buschel	Paediatric Surgery – Paediatric Outreach	The Epidemiology and Short-Term Outcomes of Paediatric Burns in the North Queensland Population During 2016: A Retrospective Study	
Dr Anne Miller	Paediatrics	Rates of overweight and obesity in kids accessing care at The Townsville Hospital	
Shreyansi Sharma	Paediatrics - Obstetrics & Gynaecology	Female genital mutilation: knowledge, attitudes and perceptions of medical professionals in a regional setting	
Mrs Nina Meloncelli	Obstetrics & Gynaecology (Townsville HHS and Ayr Hospital)	Examining the management of gestational diabetes mellitus	
Miss Audrey Heng	Townsville Sexual Health Service	Clinician and patient perspectives regarding transgender health care: A North Queensland focus	

Investigators	Department	Grant Title	Funding Source
Janelle McAlpine	Obstetrics & Gynaecology	Development, validation and application of a cross cultural digital data collection tool to identify nutrition profiles, their determinants and associations with reproductive outcomes in women	
Miss Diane Quach	Women & Children's Clinic Townsville Hospital and Health Service	Women's decision-making around epidurals in labour: a Townsville perspective	
Ms Kerry Marnane	Acute Stroke Unit, Rehabilitation Unit, Physiotherapy Department, Allied Health Department, Medical Service Group, Health Information Management Services	Building efficient and equitable pathways to and through rehabilitation in stroke: A qualitative exploration	
Prof Lisa Nissen	Allied Health	Allied Health Prescribing Evaluation Project-Appropriateness of Podiatric Prescribing	
Katharine Clifford	North Ward Dialysis Unit	Let's get active at North Ward Dialysis Unit	
Dr Adrienne Young	Nutrition and Dietetics	Introducing a Systematized, Interdisciplinary Malnutrition Program Implementation and Evaluation – The SIMPLE Approach to managing inpatient malnutrition	
Ms Debra Phillips	Occupational Therapy	Evaluation of an Occupational Therapy led Paediatric Burns Telehealth Review Clinic: exploring the experience of family/carers and clinicians	
Mrs Sarah Jackson	Occupational Therapy - Performance and Reporting Unit	Stroke survivors' perspective on their recovery journey: the rural and remote northwest Queensland experience	
Ms Joanna Hargreaves	Physiotherapy	Development of a clinical educator survey tool for determining clinical placement quality - validity and reliability testing of the CPQS-E tool (Clinical Placement Quality Survey - Educator)	
Susan Stoikov	Physiotherapy	Perceptions of physiotherapists on the contribution of physiotherapy students to the delivery of health services and the transition from student to new graduate.	
Frances Cochrane	Speech Pathology	Speech pathology services for Aboriginal and Torres Strait Islander adults with acquired neurogenic communication disorders - Study 1 (retrospective chart audit)	





Medical Service Group

Stephen Eaton, Service Group Director

During 2017, the staff across the Medical Service Group continued their involvement in clinical research which has been well established for several years. This research initiative is growing and includes original research, involvement in multi-centre clinical trials and large multi-centre drug therapy trials.

The list of publications is long and varied and includes publications in major clinical journals. These reflect the dedication and commitment to improving health care provision and are a testament to the significant work undertaken by the teams involved.

Grant funding to support research had been received from many bodies including Townsville HHS SERTA, the Emergency Medicine Foundation, JCU amongst others. Again, the commitment to apply for and secure funding is acknowledged and recognised.

In summary, the Medical Service Group continues to support the profile of research and the involvement of staff in undertaking research, recognising its critical role in improving patient outcomes and experience.



Emergency Medicine Research

Research Team:

Hannah Makrides, Investigator
 Luke Lawton, Investigator
 Karthik Velusamy, Investigator
 Leonie Jones, Clinical Research Co-ordinator
 Nicole Chapman, Clinical Research Co-ordinator
 Vinay Gangathimmaiah, Director of Emergency Medicine Research

Research Collaborations:

Gold Coast Hospital and Health Service Emergency Department
 Cairns and Hinterland Hospital and Health Service Emergency Department
 Mackay Hospital and Health Service Emergency Department
 Mount Isa Hospital Emergency Department North West Hospital and Health Service
 James Cook University Townsville
 Retrieval Services Queensland
 Royal Brisbane and Women's Hospital Emergency Department, Metro North Hospital and Health Service
 University of Queensland
 PREDICT: Paediatric Research in Emergency Departments International Collaborative
 PERN: Paediatric Emergency Research Networks (USA Collaboration)
 EMF: Emergency Medicine Foundation The HALT-IT trial: Tranexamic Acid for the Treatment of Gastrointestinal Bleeding, an International Trial

In 2010, a group of senior ED clinicians and researchers made a successful bid for a Queensland Emergency Medicine Research Fund (QEMRF) Research Capacity Building Grant.

This was matched by the Private Practice Trust Fund (PPTF) and in total delivered \$420,000 in research funding to the ED. The Capacity Building Grant was championed by Dr Peter Aitken, an eminent staff specialist with a widely recognised body of work in emergency medicine, clinical education, disaster health and aeromedical retrievals. Dr Aitken worked with a keen group of clinicians with developing track records in research, including the ED's Director of Research, Dr Jeremy Furyk. Collectively their interests include: paediatric emergency medicine, diving and hyperbaric medicine and clinical trials.

In 2012, TTH Emergency Department (ED) was admitted to the Paediatric Research in Emergency Department International Collaborative (PREDICT) Network which is an intentional group consisting of selected tertiary children's hospital EDs. PREDICT aims to provide leadership; infrastructure for multi-centre research; and facilitate collaboration between institutions, health care providers, and researchers in Paediatric Emergency Medicine. In 2014 the PREDICT Network was awarded a National Health and Medical Research Council Centre for Research Excellence grant. TTH ED has supported numerous PREDICT studies in paediatric emergency medicine. Several trials have also been locally developed and implemented throughout Australia and New Zealand.



Professor Usman Malabu

Endocrinology and Diabetes

Research Team:

Professor Usman Malabu, Head, Translational Research in Diabetes and Endocrinology [TREAD]

Associate Professor Kunwarjit Sangla, Director Endocrinology and Diabetes

Dr Vasant Shenoy, Director of Physician Training –Obstetric Medicine

Dr Parul Nigam, Obstetric Medicine and Telehealth

Dr Venkat N Vangaveti, Senior Research Officer, James Cook University

Dr Oliver Hayes, Clinical Research Fellow, The Townsville Hospital (TTH)

Mr Kelvin Robertson, Clinical Trials Pharmacist, TTH

Ms Asha Kiran Clinical Research Officer TTH

Ms Robyn Chadwick Clinical Nurse Consultant –Diabetes

Mrs Julie Goodall Telepodiatric Research Staff TTH

Mrs Karen Hird Senior Diabetes Educator and Research staff JCU

Mrs Jacqueline Bullbrook Diabetes Educator and Research Nurse TTH

Associate Professor Usman Malabu is a foundation member of Translational Research in Endocrinology and Diabetes (TREAD) at the College of Medicine and Dentistry, James Cook University.

Associate Professor Malabu joined James Cook University in 2007 and established the TREAD with the aim of carrying out research intended to be translated into improved management of diabetes and endocrine diseases. Trained as endocrinologist, Associate Professor Malabu spent 2 years of his specialist training to obtain experience in experimental and laboratory research techniques in endocrinology and diabetes at the University of Liverpool and Royal Liverpool Hospital, UK. Dr Malabu's current roles include that of Head of James Cook University 's TREAD, Head of JCU/ AITHM PNG Diabetes and Tuberculosis Projects in New Ireland Province.

Dr Malabu has developed several Telehealth models to address access issues faced by undeserved populations in Australia's Indigenous Communities and PNG's Pacific Islanders in areas of communicable and non-communicable diseases notably diabetes and tuberculosis. These include the Townsville Tele-diabetes and Tele-endocrinology Models based in Australia and m-health interactive voice recognition model in PNG's Kavieng that have attracted national and international recognition with active participation of AITHM, BUPA Health Foundation, Australian Diabetes Society, Queensland Government and World Diabetes Foundation.

His main research theme has been the evaluation of diagnostic, therapeutic and access to care of diabetic foot complications using innovative models that suit rural/ remote communities. Novel diagnostic tests for diabetic foot infections in remote areas have been published by TREAD under his leadership while new modes of therapy has been evaluated.

Research Collaborations:

Professor John D. Piette University of Michigan
USA Ann Arbor Center for Clinical Management
Research -TeleDiabetes Projects

Professor Yogesan Kanagasingam, Australian
e-Health Research Centre, Harvard University USA
-TeleDiabetes in Rural Areas

Mr Daisuke Yajima, Nomura Research Institute,
Japan -Telerobotic for Infection Control at TTH

Professor Patrick Kyamanywa, Kampala
International University Uganda- Telediabetes

Professor Chidum Ezenwaka -University of
West Indies St Augustine, Trinidad and Tobago
-Diabetes in Tropical/Rural Areas

Distinguished Professor Jonathan Golledge,
Queensland Centre of Excellence for Vascular
diseases, JCU Townsville

Professor Sabe Sabesan -TeleDiabetes in North
Queensland

Professor Emma McBryde, AIH/M/JCU --Diabetes
and Tuberculosis in PNG

Professor Robyn McDermott, Centre for Chronic
Disease Prevention JCU Cairns -Telehealth

Professor Yvonne Cadet-James Head, Indigenous
Studies -JCU Indigenous Health

Research Grants:

Grant: Queensland Health Telehealth Seed
Funding

Investigator: Usman Malabu

Grant Title: Integrated 3-D Camera Assisted
Telehealth: Connecting Diabetic Eye and Foot
Care in Rural/Remote NQ

Grant: Townsville HHS SERTA Fund

Investigator: Oliver Hayes

Grant Title: Use of Procalcitonin in Diagnosing
and Monitoring Diabetic Foot Cellulitis and
Osteomyelitis at The Townsville Hospital-A Pilot
Study

Grant: Rotary Club

Investigator: Robyn Chadwick

Grant Title: Teleophthalmology for diabetes care
at the Townsville Hospital

Grant: Queensland Government Community
Grant

Investigator: Usman Malabu

Grant Title: Townsville Multicultural Youth
Soccer Tournament

Grant: Queensland Government Community
Grant

Investigator: Usman Malabu

Grant Title: Townsville Multicultural Food for
Unity

Publications:

Mann JFE, Ørsted DD, Brown-Frandsen K, Marso SP,
Poulter NR, Rasmussen S, Tornøe K, Zinman B, Buse
JB; LEADER Steering Committee and Investigators.
Liraglutide and Renal Outcomes in Type 2 Diabetes.
N Engl J Med. 2017;377(9):839-848.



What first sparked your interest in research?

I was an editor for the Australasian Sonography Association Journal which led to an interest in evidence. The concept of answering questions was both challenging and exciting.

- Sonia Brennan, Consultant Sonographer, Medical Imaging Department



Professor Damon Eisen

Infectious Diseases

Research Team:

Dr Peter Mulvey - Post doctoral fellow - Australian Institute of Tropical Health and Medicine (AITHM)

Eva Duck - Research Assistant - Australian Institute of Tropical Health and Medicine (AITHM)

Sebastian Primrose Research Assistant
Australian Institute of Tropical Health and Medicine (AITHM)

Elizabeth Heyer - Clinical Trials Coordinator -
Townsville Hospital and Health Service

Dr Beth Hamilton - JHO Clinical Researcher -
Townsville Hospital and Health Service

Dr Brett Travers - JHO Clinical Researcher -
Townsville Hospital and Health Service

Harmann Jitt - MBBS Clinical Researcher -
Townsville Hospital and Health Service

Research Collaborations:

Monash University; Department of Epidemiology
and Preventive Medicine

Queensland Institute of Medical Research –
Berghoffer; Scabies Unit

Northumbria Health Trust; Orthopaedic Clinical
Research Unit

University of Queensland; Centre for Translational
Pharmacodynamics

Professor Eisen has designed and commenced work on a group of research trials involving severe and recurrent infections.

These include a randomised controlled trial - The Aspirin To Inhibit SEPSIS (ANTISEPSIS) trial; an ASPREE Substudy to measure the benefit of low dose aspirin in the prevention of severe sepsis. This uses a large primary prevention randomised controlled trial comparing low-dose aspirin with placebo. Professor Eisen will determine whether 100 mg aspirin / day is effective in preventing death due to severe infection in the 17,000 elderly patients who were included in the trial and followed for a minimum of 5 years.

Publications:

DENHOLM, J. T., MCBRYDE, E. S., EISEN, D., STREET, A., MATCHETT, E., CHEN, C., SHULTZ, T., BIGGS, B. & LEDER, K. 2017. SIRCLE: a randomised controlled cost comparison of self-administered short-course isoniazid and rifapentine for cost-effective latent tuberculosis eradication. *Internal Medicine Journal*, 47, 1433-1436.

DOAN, T. N., EISEN, D. P., ROSE, M. T., SLACK, A., STEARNES, G. & MCBRYDE, E. S. 2017. Interferon-gamma release assay for the diagnosis of latent tuberculosis infection: A latent-class analysis. *PLoS ONE*, 12.

EISEN, D. P., MOORE, E. M., LEDER, K., LOCKERY, J., MCBRYDE, E. S., MCNEIL, J. J., PILCHER, D., WOLFE, R. & WOODS, R. L. 2017. Aspirin to Inhibit SEPSIS (ANTISEPSIS) randomised controlled trial protocol. *BMJ Open*, 7.

RAMACHANDRAN, P.; CHAN, E., POON, M.; TU, HTH.; DAVIS, JM., EISEN, D.; MARRIOTT, M. 2017. Adult food borne botulism in Australia: The only 2 cases from the last 15years. *Journal Of Clinical Neuroscience: Official Journal Of The Neurosurgical Society Of Australasia*.

TRAUER, J., MUHI, S., MCBRYDE, ES., EISEN, D. ET AL. 2017. Quantifying the Effects of Prior Acetyl-Salicylic Acid on Sepsis-Related Deaths: An Individual Patient Data Meta-Analysis Using Propensity Matching. *Critical Care Medicine*. 1871-1879.



Publications continued:

TANG, BM., SHOJAEI, M., PARNELL, GP., EISEN, D., ET AL. 2017. A novel immune biomarker IFI27 discriminates between influenza and bacteria in patients with suspected respiratory infection. *The European Respiratory Journal*.

Management of Tuberculosis; A guide for clinicians. TB Forum 2017.

Research Grants:

Grant Name: Study, Education, Research Trust Account (SERTA)

Grant Application Title: Measuring aspirin and its biometabolites penetration into synovial fluid to assess its potential for prevention of prosthetic joint infection using in vitro and experimental animal models. 2017 Principal Investigator Professor Damon Eisen

Grant Amount: \$39,450

Grant Name: James Cook University New Professor Grant

Grant Application Title: Testing the impact of aspirin on biofilm formation of uropathogens and nasopharyngeal *Staphylococcus aureus*; leveraging a clinical trial to understand phenotypic and genotypic change in bacteria that frequently cause infection

Grant Amount: \$25,000

Research goals for the future?

I look forward to Townsville HHS developing a national and international profile for conducting nursing and midwifery research that transforms clinical care, optimises clinical outcomes and improves patients' experience of healthcare.

- Professor Cate Nagle, Professor of Nursing and Midwifery





Dr Sabe Sabesan

Oncology

Research Team:

Dr Abhishek Joshi
Ms Amy Brown
Prof Sarah Larkins
Dr Emily Callander
Dr Zulfiquer Ottay
Ms Melanie Poxton

Research Collaborations:

James Cook University
Flinders Medical Centre
University of Jaffna
Clinical Oncology Society of Australia

Research Grants:

Grant Name: Breast Screen Australia

Grant Application Title: National Research Project on Remote Radiology Assessment Service Delivery

Grant Amount: \$350,000 over 3 years

Publications:

HAFAEEZ, U., JOSHI, A., BHATT, M., KELLY, J., SABESAN, S. & VANGAVETI, V. 2017. Clinical profile and treatment outcomes of advanced neuroendocrine tumours in rural and regional patients: a retrospective study from a regional cancer centre in North Queensland, Australia. *Internal Medicine Journal*, 47, 284-290.

Professor Sabe Sabesan, BMBS, PhD, FRACP is the Clinical Dean of the Northern Clinical Training Network-Townsville, a joint training venture between James Cook University and the Townsville Hospital and Health Services and the Director of the Department of Medical Oncology at the Townsville Cancer Centre, Townsville Hospital.

He is a nationally and internationally recognised expert in the area of teleoncology and developed and evaluated various teleoncology models of care to deliver rural cancer care closer to home including the Queensland Remote Chemotherapy Supervision (QReCS) model which is adopted by the Queensland Health and Australasian Teletrial Model and national guide on behalf of the Clinical Oncology Society of Australia (COSA). He is the program lead for the Tropical Centre for Telehealth Practice and Research, a joint initiative between The Townsville Hospital and the AITHM.

His research collaborations include the Menzies School of Health Research, various Australian clinical trial groups and clinicians and academics within Queensland Health and James Cook University in the areas of telehealth, rural and Indigenous health. Internationally, he collaborates with clinicians from Sri Lanka and India in the area of telehealth. To date, he has received more than \$7 million in grants from National Health and Medical Research Council, Cancer Institute of NSW and Queensland Health Innovation funds. Dr Sabesan has contributed to the development of ANZ melanoma and prostate cancer guidelines, clinical practice guidelines for teleoncology and RACP telehealth and tele supervision guidelines. As a member of the oncology education committee, he co-edited the web book "Clinical Oncology for medical students" in collaboration with all 20 medical schools in Australia and New Zealand on behalf of the Cancer Council of Australia.

Publications continued:

RAJASOORIYAR, C., KELLY, J., SIVAKUMAR, T., NAVANESAN, G., NADARASA, S., SRISKANDARAJAH, MH., SABESAN, S. 2017. Breaking Bad News in Ethnic Settings: Perspectives of Patients and Families in Northern Sri Lanka. *Journal of Global Oncology*. 250-256.

DU TOIT, M., MALAU-ADULI, B., VANGAVETI, V., SABESAN, S., RAY, RA. 2017. Use of telehealth in the management of non-critical emergencies in rural or remote emergency departments: a systematic review. *Journal of Telemedicine and Telecare*.

Medical Service Group Publications

1. COX, R., WELCH, C., CAMERON, D. & ROCHE, E. 2017. Gastrointestinal: Verrucous cell carcinoma (VCC) of the esophagus: A rare variant of esophageal squamous cell carcinoma (SCC). *Journal of Gastroenterology and Hepatology (Australia)*, 32, 544.
2. BARBOUR, S., MOORE, J., DUNN, N., EFFENEY, R., HARDEN, H., MCCARTHY, A., WALPOLE, E., LEHMAN, M. 2017. Patterns of care for ductal carcinoma in situ of the breast: Queensland's experience over a decade. *Breast*, 167-176.
3. TRINKS, T. P., BLAKE, D. F., YOUNG, D. A., THISTLETHWAITE, K. & VANGAVETI, V. N. 2017. Transcutaneous oximetry measurements of the leg: Comparing different measuring equipment and establishing values in healthy young adults. *Diving and Hyperbaric Medicine*, 47, 82-87.
4. PERKS, S., BLAKE, D. F., YOUNG, D. A., HARDMAN, J., BROWN, L. H., LEWIS, I. & PAIN, T. 2017. An assessment of the performance of the baxter elastomeric (LV10) infusor™ pump under hyperbaric conditions. *Diving and Hyperbaric Medicine*, 47.
5. BUKHARI, W., PRAIN, K. M., WATERS, P., WOODHALL, M., O'GORMAN, C. M., CLARKE, L., SILVESTRINI, R. A., BUNDELL, C. S., ABERNETHY, D., BHUTA, S., BLUM, S., BOGGILD, M., et al. 2017. Incidence and prevalence of NMOSD in Australia and New Zealand. *Journal of Neurology, Neurosurgery and Psychiatry*, 88, 632-638.
6. BEGLEY, J.L., BUTSON, B., KWA P. 2017. The emergency surgical airway. *Emergency Medicine Australasia*, 570-575.
7. DENHOLM, J. T., MCBRYDE, E. S., EISEN, D., STREET, A., MATCHETT, E., CHEN, C., SHULTZ, T., BIGGS, B. & LEDER, K. 2017. SIRCLE: a randomised controlled cost comparison of self-administered short-course isoniazid and rifapentine for cost-effective latent tuberculosis eradication. *Internal Medicine Journal*, 47, 1433-1436.
8. DOAN, T. N., EISEN, D. P., ROSE, M. T., SLACK, A., STEARNES, G. & MCBRYDE, E. S. 2017. Interferon-gamma release assay for the diagnosis of latent tuberculosis infection: A latent-class analysis. *PLoS ONE*, 12.
9. EISEN, D. P., MOORE, E. M., LEDER, K., LOCKERY, J., MCBRYDE, E. S., MCNEIL, J. J., PILCHER, D., WOLFE, R. & WOODS, R. L. 2017. AspiriN To Inhibit SEPSIS (ANTISEPSIS) randomised controlled trial protocol. *BMJ Open*, 7.
10. RAMACHANDRAN, P.; CHAN, E., POON, M.; TU, HTH.; DAVIS, JM., EISEN, D.; MARRIOTT, M. 2017. Adult food borne botulism in Australia: The only 2 cases from the last 15years. *Journal of Clinical Neuroscience: Official Journal Of The Neurosurgical Society Of Australasia*.

11. TRAUER, J., MUHI, S., MCBRYDE, ES., EISEN, D. ET AL. 2017. Quantifying the Effects of Prior Acetyl-Salicylic Acid on Sepsis-Related Deaths: An Individual Patient Data Meta-Analysis Using Propensity Matching. *Critical Care Medicine*. 1871-1879.
12. TANG, BM., SHOJAEI, M., PARNELL, GP., EISEN, D., ET AL. 2017. A novel immune biomarker IFI27 discriminates between influenza and bacteria in patients with suspected respiratory infection. *The European Respiratory Journal*.
13. BRICHKO, L., FORBES, J. & HUMPHREY, K. 2017. Evidence-based medicine: The significance of research literacy in emergency medicine training. *EMA - Emergency Medicine Australasia*.
14. LOPES FLORO, K., MUNCKHOF, W., COUCHER, J. 2017. Retrospective review of CT-guided intervertebral disc biopsies performed at a tertiary referral centre for suspected osteodiscitis. *Journal of Medical Imaging and Radiation Oncology*.
15. COYNE, E., NORTHFIELD, S., ASH, K., BROWN-WEST, L., MILES, C., MUNTUN, K., BARRATT, C. 2017. The minimum education and safety requirements for the nursing administration of cytotoxic drugs: an integrative review protocol. *The Australian Journal of Cancer Nursing*.
16. HAFEEZ, U., JOSHI, A., BHATT, M., KELLY, J., SABESAN, S. & VANGAVETI, V. 2017. Clinical profile and treatment outcomes of advanced neuroendocrine tumours in rural and regional patients: a retrospective study from a regional cancer centre in North Queensland, Australia. *Internal Medicine Journal*, 47, 284-290.
17. RAJASOORIYAR, C., KELLY, J., SIVAKUMAR, T., NAVANESAN, G., NADARASA, S., SRISKANDARAJAH, MH., SABESAN, S. 2017. Breaking Bad News in Ethnic Settings: Perspectives of Patients and Families in Northern Sri Lanka. *Journal of Global Oncology*. 250-256.
18. DU TOIT, M., MALAU-ADULI, B., VANGAVETI, V., SABESAN, S., RAY, RA. 2017. Use of telehealth in the management of non-critical emergencies in rural or remote emergency departments: a systematic review. *Journal of Telemedicine and Telecare*.
19. SHARMA, DK., BOGGILD, M., VAN HEUVEN, AW., WHITE, RP. 2017. Creutzfeldt-Jakob Disease Presenting as Stroke: A Case Report and Systematic Literature Review. *The Neurologist*. 48-53.
20. DUTTON, K. & SODEN, M. 2017. Malignancy screening in autoimmune myositis among Australian rheumatologists. *Internal Medicine Journal*, 47, 1367-1375.
21. MORRISROE, K., NAKAYAMA, A., SODEN, M., ET AL. 2017. EVOLVE: The Australian Rheumatology Association's 'top five' list of investigations and interventions doctors and patients should question. *Internal Medicine Journal*. 135-143.
22. BIRD, P., LITTLEJOHN, G., SODEN, M. 2017. Fatigue, poor health and mood disturbance persist in patients despite remission: The OPAL PRO study (DEEPER). *Annals of the Rheumatic Diseases*

23. DALZIEL, S. R., FURYK, J., BONISCH, M., OAKLEY, E., BORLAND, M., NEUTZE, J., DONATH, S., SHARPE, C., HARVEY, S., DAVIDSON, A., CRAIG, S., PHILLIPS, N., GEORGE, S., RAO, A., CHENG, N., ZHANG, M., SINN, K., KOCHAR, A., BRABYN, C. & BABL, F. E. 2017. A multicentre randomised controlled trial of levetiracetam versus phenytoin for convulsive status epilepticus in children (protocol): Convulsive Status Epilepticus Paediatric Trial (ConSEPT) - a PREDICT study. *BMC Pediatrics*, 17.
24. BABL, F. E., BORLAND, M. L., PHILLIPS, N., KOCHAR, A., DALTON, S., MCCASKILL, M., CHEEK, J. A., GILHOTRA, Y., FURYK, J., NEUTZE, J., LYTTLE, M. D., BRESSAN, S., DONATH, S., MOLESWORTH, C., JACHNO, K., WARD, B., WILLIAMS, A., BAYLIS, A., CROWE, L., OAKLEY, E. & DALZIEL, S. R. 2017. Accuracy of PECARN, CATCH, and CHALICE head injury decision rules in children: A prospective cohort study. *The Lancet*.
25. CHU, K. H., HOWELL, T. E., KEIJZERS, G., FURYK, J. S., ELEY, R. M., KINNEAR, F. B., THOM, O., MAHMOUD, I. & BROWN, A. F. T. 2017. Acute Headache Presentations to the Emergency Department: A Statewide Cross-sectional Study. *Academic Emergency Medicine*, 24, 53-62.
26. BABL, F. E., MACKAY, M. T., BORLAND, M. L., HERD, D. W., KOCHAR, A., HORT, J., RAO, A., CHEEK, J. A., FURYK, J., BARROW, L., GEORGE, S., ZHANG, M., GARDINER, K., LEE, K. J., DAVIDSON, A., BERKOWITZ, R., SULLIVAN, F., PORRELLO, E., DALZIEL, K. M., ANDERSON, V., OAKLEY, E., HOPPER, S., WILLIAMS, F., WILSON, C., WILLIAMS, A. & DALZIEL, S. R. 2017. Bell's Palsy in Children (BellPIC): Protocol for a multicentre, placebo-controlled randomized trial. *BMC Pediatrics*, 17.
27. BABL, F. E., GARDINER, K. K., KOCHAR, A., WILSON, C. L., GEORGE, S. A., ZHANG, M., FURYK, J., THOSAR, D., CHEEK, J. A., KRIESER, D., RAO, A. S., BORLAND, M. L., CHENG, N., PHILLIPS, N. T., SINN, K. K., NEUTZE, J. M. & DALZIEL, S. R. 2017. Bell's palsy in children: Current treatment patterns in Australia and New Zealand. A PREDICT study. *Journal of Paediatrics and Child Health*.
28. OAKLEY, E., MAY, R., HOEPPNER, T., SINN, K., FURYK, J., CRAIG, S., ROSENGARTEN, P., KOCHAR, A., KRIESER, D., DALTON, S., DALZIEL, S., NEUTZE, J., CAIN, T., JACHNO, K., BABL, F. E. & FOR THE PAEDIATRIC RESEARCH IN EMERGENCY DEPARTMENTS INTERNATIONAL, C. 2017. Computed tomography for head injuries in children: Change in Australian usage rates over time. *EMA - Emergency Medicine Australasia*, 29, 192-197.
29. WILSON, S. & GANGATHIMMAIAH, V. 2017. Does prehospital management by doctors affect outcome in major trauma? A systematic review. *Journal of Trauma and Acute Care Surgery*.
30. GANGATHIMMAIAH, V. 2017. Emergency transvenous cardiac pacing. *EMA - Emergency Medicine Australasia*.
31. FURYK, J. S., LAWTON, L. D., TING, J. Y. & MCD TAYLOR, D. 2017. Informed consent in emergency care research: An oxymoron?

32. COLEMAN, S., HAVAS, K., ERSHAM, S., STONE, C., TAYLOR, B., GRAHAM, A., BUBLITZ, L., PURTELL, L. & BONNER, A. 2017. Patient satisfaction with nurse-led chronic kidney disease clinics: A multicentre evaluation. *Journal of Renal Care*, 43, 11-20.
33. FURYK, J., WATT, K., EMETO, T. I., DALZIEL, S., BODNAR, D., RINEY, K. & BABL, F. E. 2017. Review article: Paediatric status epilepticus in the pre-hospital setting: An update. *EMA - Emergency Medicine Australasia*.
34. FURYK, J. & BANKS, C. 2017. From Other Journals. *EMA - Emergency Medicine Australasia*, 29, 480-482.
35. FURYK, J. & BANKS, C. 2017. From Other Journals. *EMA - Emergency Medicine Australasia*, 29, 750-751.
36. TEO, E., LOCKHART, K., PURCHURI, S. N., PUSHPARAJAH, J., CRIPPS, A. W. & VAN DRIEL, M. L. 2017. Haemophilus influenzae oral vaccination for preventing acute exacerbations of chronic bronchitis and chronic obstructive pulmonary disease. *Cochrane Database of Systematic Reviews*, 2017.
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50. PERKS, S., BLAKE, D. F., YOUNG, D. A., HARDMAN, J., BROWN, L. H., LEWIS, I. & PAIN, T. 2017. An assessment of the performance of the baxter elastomeric (LV10) infusor™ pump under hyperbaric conditions. *Diving and Hyperbaric Medicine*, 47.

Medical Service Group Research Grants

Investigators	Grant Title	Grant body/scheme	Amount
Corrie Miles	Update of Cancer Nurses Society of Australia Position Statements on the minimum safety and education requirements for nurse administration of anti-neoplastic drugs	Cancer Nurses Australia Society	\$7,500
Denise Blake	First aid oxygen treatment of divers with decompression sickness	Emergency Medicine Foundation	\$30,003

Medical Service Group RGO Approved Research

Investigators	Department	Grant Title	Funding Source
A/Prof Usman Malabu	Department of Endocrinology and Diabetes	Use of Procalcitonin in Diagnosing and Monitoring Diabetic Foot Osteomyelitis at The Townsville Hospital–A Pilot Study	
A/Prof Usman Malabu	Department of Endocrinology and Diabetes	The Impact of Telemedicine in the Management of Diabetes in Rural/ Remote North Queensland: A Retrospective Cohort Study	
A/Prof Usman Malabu	Department of Endocrinology and Diabetes	Management of Diabetic Foot Ulcer by Electromagnetic Stimulator Therapy at The Townsville Hospital – A Pilot Study	
Dr Nadia Sugiarto	Department of Endocrinology and Diabetes	A 2-year retrospective cohort study of dapagliflozin's effect on renal and metabolic parameters in patients diagnosed with Type 2 Diabetes Mellitus at The Townsville Hospital	
Dr Amy Hsieh	Department of Endocrinology and Diabetes	Retrospective audit to determine clinical profile, treatment approach and outcome of Graves' Disease at The Townsville Hospital: 10-year review	
Dr Paul Miles	Emergency Department	My Health Record	
Mrs Susan Montgomery	Emergency Department	Knowledge Translation in Australasian Paediatric Acute Care Settings: a multi-centred, cluster, randomised controlled trial comparing a tailored, theory informed Knowledge Translation intervention versus passive dissemination of a bronchiolitis guideline	National Health and Medical Research Council – Murdoch Children's Research Institute
Dr Jeremy Furyk	Emergency Department	Fibrinogen Concentrate vs Cryoprecipitate in Traumatic Haemorrhage: A Pilot Randomised Controlled Study	Emergency Medicine Foundation and Gold Coast Hospital and Health Service
Dr Jeremy Furyk	Emergency Department	Evaluating the Impact of Alcohol on emergency department presentations	Health Improvement Unit Queensland Health – Gold Coast Hospital and Health Service

Investigators	Department	Grant Title	Funding Source
Dr Jeremy Furyk	Emergency Department	Understanding serious quad bike-related injuries in Queensland and Northern Territory: Comparing circumstances, patterns, severity, costs and outcomes	
Dr Karthik Velusamy	Emergency Department	Bell's Palsy in Children: A Multi-Centre, Randomised Blinded, Placebo Controlled Trial to Determine Whether Prednisolone Improves Time to Recovery At 1 Month	Emergency Medicine Foundation
Mr Rishabh Verma	Emergency Department	Comparison of administration patterns of antiemetics in the ED and pre-hospital setting	
Dr Luke Burman	Emergency Department	Ketamine Intranasal Delivery in the Emergency Room: A multicentre, randomised control trial of IN versus IV/ IM ketamine for paediatric sedation in the Emergency Department. Is a totally needle-free approach feasible?	
Dr Kaushik Hazratwala	Orthopaedic Surgery and Emergency Department	A Combined Randomised and Observational Study of Surgery for Fractures In the distal Radius in the Elderly (CROSSFIRE)	Whitlam Orthopaedic Research Centre
Dr John Masson	Endoscopy	Hookworm Therapy for Coeliac Disease: A phase Ib safety and dose-ranging clinical trial examining sustained gluten consumption in hookworm-naïve and hookworm-infected people with coeliac disease.	National Health and Medical Research Council & James Cook University
Ms Jodie Marsh	Haematology and Bone Marrow Transplantation	The Evaluation of Hyperhydration for High Dose Melphalan in Stem Cell Transplantation: A Pilot Study	
Dr Hock Choong Lai	Haematology Oncology	A Multicenter Randomized Double-blind Placebo-controlled Phase 3 Study of the Bruton's Tyrosine Kinase(BTK) Inhibitor Ibrutinib in Combination with Rituximab versus Placebo in Combination with Rituximab in Treatment	PPD Australia Pty Ltd
Prof Damon Eisen	Infectious Diseases	Use of High-risk Influenza Stratification Test (HIST) in Patients with Suspected Infection	Neapean Hospital
Prof Damon Eisen	Infectious Diseases	Microbiological testing of aspirin's effects on bacteria that cause urinary tract infection.	
Prof Damon Eisen	Infectious Diseases	Mechanisms of aspirin therapy in sepsis.	

Investigators	Department	Grant Title	Funding Source
Dr Candice Holland	Infectious Diseases	Is there an association between the social determinants of health and health care-associated infections?	
Dr Suresh Varma	Medical Oncology	A Phase III, Double-Blinded, Randomized, Placebo Controlled Study of Atezolizumab Plus Cobimetinib And Vemurafenib Versus Placebo Plus Cobimetinib And Vemurafenib In Previously Untreated BRAF V600 Mutation-Positive Patients with Unresectable Locally Advanced Or Metastatic Melanoma	Roche Products Pty
Dr Suresh Varma	Medical Oncology	A Phase III, Open-Label, Multicenter, Two-Arm, Randomized Study to Investigate the Efficacy and Safety of Cobimetinib Plus Atezolizumab Versus Pembrolizumab in Patients With Previously Untreated	Roche Products Pty Ltd
Dr Suresh Varma	Medical Oncology	PEARL – A randomised phase 3 trial of Palliative Care Early in Advanced Lung Cancers	University of Sydney
Dr Corrine Ryan	Medical Oncology	MonarchE: Protocol 13Y-MC-JPCF A Randomized, Open-Label, Phase 3 Study of Abemaciclib Combined with Standard Adjuvant Endocrine Therapy versus Standard Adjuvant Endocrine Therapy Alone in Patients with High Risk, Node Positive, Early Stage, Hormone Receptor Positive, Human Epidermal Receptor 2 Negative, Breast Cancer	Eli Lilly Australia Pty Limited
Dr Abhishek Joshi	Medical Oncology	A Phase II, Open-Labelled, Single Arm Study to Evaluate the Safety and Tolerability of Pembrolizumab in Participants with Recurrent or Metastatic Cutaneous Squamous Cell Carcinoma.	Merck Sharpe Dohme (Australia) Pty Limited
Dr Abhishek Joshi	Medical Oncology	NABNEC: A Randomised Phase II Study Of nab-paclitaxel In Combination with Carboplatin as First Line Treatment Of Gastrointestinal Neuroendocrine Carcinomas	National Health and Medical Research Council & Australasian Gastro-Intestinal Trials Group

Investigators	Department	Grant Title	Funding Source
Dr Abhishek Joshi	Medical Oncology	Phase 2, Open-Label, Randomized Study to Evaluate the Efficacy and Safety of GS-5745 Combined with Nivolumab versus Nivolumab Alone in Subjects with Unresectable or Recurrent Gastric or Gastroesophageal Junction Adenocarcinoma	Gilead Sciences Pty Ltd
Dr Abhishek Joshi	Medical Oncology	A Phase 1 Dose Escalation and Phase 2 Randomized Double-Blind Study of Veliparib in Combination with Carboplatin and Etoposide as a Therapy of Treatment-Naïve Extensive Stage Disease Small Cell Lung Cancer.	Abbvie Pty Ltd
Dr Abhishek Joshi	Medical Oncology	A Phase 2 Study of MM-121 in Combination With Docetaxel versus Docetaxel Alone in Patients with Heregulin Positive, Locally Advanced or Metastatic Non-Small Cell Lung Cancer	Parexel International Pty Ltd
Dr Abhishek Joshi	Medical Oncology	A Phase 3, Randomized, Double-Blind Study of Pembrolizumab plus Ipilimumab vs Pembrolizumab plus Placebo in Previously Untreated, Stage IV, Metastatic Non-small Cell Lung Cancer Subjects Whose Tumors are PD-L1 Positive (TPS ≥ 50%) (KEYNOTE-598)	Merck Sharp & Dohme Corp
Dr Zulfiqar Ottay	Medical Oncology	An Open Label, Randomized, Two Arm Phase III Study of Nivolumab in Combination with Ipilimumab versus Extreme Study Regimen (cetuximab + cisplatin/carboplatin + fluorouracil) as First Line Therapy in Recurrent or Metastatic Squamous Cell Carcinoma of the Head and Neck (SCCHN)	Bristol-Myers Squib Australia Pty Ltd
Dr Georgina Hodges	Medical Oncology	A Multicentre single arm study of carfilzomib-thalidomide-dexamethasone (CarTD) for newly diagnosed transplant-eligible multiple myeloma (MM) patient's refractory to initial bortezomib-based induction therapy	Australian Leukaemia & Lymphoma Group (ALLG)
Ms Helen Wright	Medical Oncology	Genomics in oncology nursing practice	
Mrs Amy Brown	Radiation Oncology	Health Technology Assessment of the Clarity Autoscan system: Motion correction and margin reduction in the radiation therapy treatment of prostate cancer	

Investigators	Department	Grant Title	Funding Source
Ms Kylie Robbie	Radiation Oncology	A randomised comparison of StrataXRT to standard clinical practice in the prevention and treatment of radiation dermatitis	Stratpharma
Alex Ngoo	Radiation Oncology	Human papilloma virus positive squamous cell carcinoma of the Oropharynx: An analysis of Clinical Outcomes following Definitive Radiation +/- Chemotherapy in an Elderly Population	
Dr Sean Brennan	Radiation Oncology	A Phase II study of local therapy only (stereotactic radiosurgery and/or surgery) for treatment of up to 5 brain metastases from HER2 positive Breast Cancer	Trans-Tasman Radiation Oncology Group (TROG)
Dr Catherine Wilkinson	Nephrology	Effect of low dialysate sodium on interdialytic weight gain (IDWG) and hypertension in patients undergoing chronic intermittent haemodialysis – a prospective study in The Townsville Hospital and the North Ward haemodialysis units	
Dr Richard White	Neurology	Latitudinal Differences of the Prevalence of Inflammatory Neuropathies in Australia	
Dr Valli Manickham	Renal	Reducing the burden of dialysis Catheter ComplicaTIONS: A National approach	
A/Prof Muriel Soden	Rheumatology	Retrospective study of prevalence and Type of Infection in Patients with SLE related nephritis and those with non-renal SLE	
Dr Matthew Terrill	Rheumatology	Defining the impact of topical non-steroidal anti-inflammatory drugs on renal function, a survey of Australasian Renal and Rheumatology Specialists	
Prof Sarah Larkins		Identifying the impact of patient costs on decisions about health care utilisation	
Claire Hosie	Pharmacy	On the Dot time-critical medication list	
Dr Andrew Gosbell	Rural Hospitals and Emergency Medicine	Rural Regional Emergency Department and Hospital-Based Emergency Care Facility Profile Project	

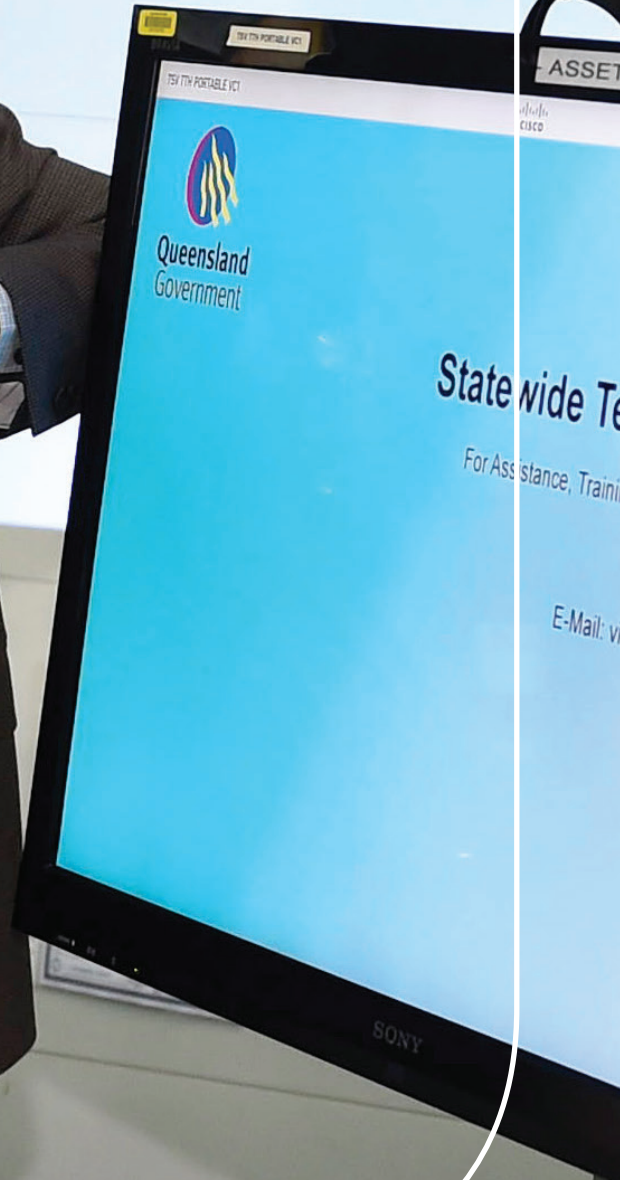
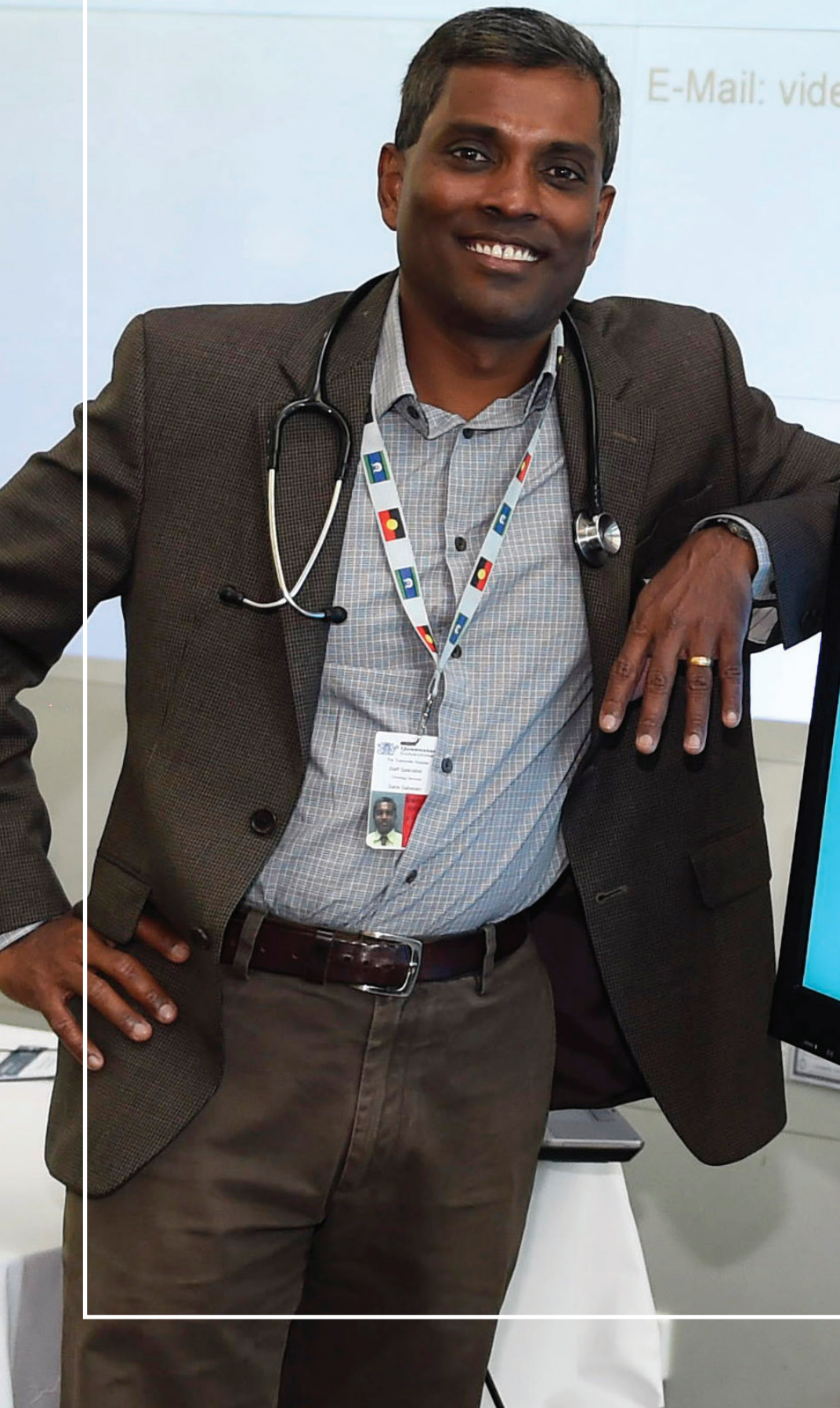
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Surgical Service Group

Valerie Gilmore, A/Service Group Director

The surgical service group maintained an excellent research profile in 2017, in both research and publications.

Key researchers within the Service group were Professor Jonathon Golledge, vascular surgeon, and Sonja Brennan, Ultrasonographer both of whom had significant output in terms of both publications and research.

Professor Golledge continues to lead a strong research team in vascular surgery generating multiple publications and driving national and international research collaborations in the area of vascular disease and a proliferation of other areas. Sonja also led a multidisciplinary research team, generating

in excess of \$40,000 in grants, to evaluate a novel ultrasound measurement to assess fetal renal development.

In 2017, the service group completed a number of Research Governance Office approved research projects in cardiology, general surgery, intensive care, medical imaging, neurosurgery, pain services, urology and vascular outpatients. It is encouraging to see the commitment of staff to generating new knowledge in their respective fields and fostering external interest in Townsville HHS. In addition, there was significant contribution by staff from a range of specialties to multiple publications.



Collaboration with Orthopaedic Research Institute of QLD (ORIQL)

Orthopaedic Surgery

Research Team:

Research team for 2017 included a surgical fellow

Dr Rohit Kulkarni

Dr Genevive Graw

Dr Jodie Morris

Mrs Andrea Grant

Dr Jason Smith

Dr Tristan Simmonds, Medical student

Yassin Elsiwy

ORIQL has strong collaborative ties with accomplished local researchers from James Cook University (JCU), Townsville HHS and the wider research community.

ORIQL's THHS collaboration in 2017 included an affiliation with Professor Damon Eisen and also Senior Researchers from the Stem Cell Laboratory, Andrew McCutchin and Natalie Stewart. Far reaching collaborations involve PhD Candidate and Orthopaedic Surgeon Dr Sergio Barrosa-Rosa from Spain, Dr Brent Matthews (Registrar Ortho, Adelaide) and Industry Partners such as DePuy Synthes, Stryker, Lima Orthopaedics and Corin Australia.

As a result of these partnerships, ORIQL possesses the expertise and research capacity in diverse, multi-disciplinary areas with the central goal of improving health outcomes for orthopaedic patients in North Queensland. ORIQL fosters relationships with both the Mater Townsville and Townsville Hospital and Health Services to provide teaching and research opportunities for junior Doctors and to share best practice with fellow clinicians.

Publications:

MATTHEWS, B., HAZRATWALA, K., BARROSO-ROSA, S. 2017 Comminuted Patella Fracture in Elderly Patients: A systematic Review and Case Report. *Geriatric Orthopaedic Surgery and Rehabilitation*, 135-144.

MATTHEWS, B., WILKINSON, M., MCEWEN, HAZRATWALA, K., MANOHARAN, V., DOMA, K. 2017 In vivo arthroscopic temperatures: comparison between two types of radiofrequency ablation systems in arthroscopic anterior cruciate ligament reconstruction. *Arthroscopy*, 165-172.



Sonja Brennan

Medical Imaging – Ultrasound Department

Research Team:

A/Prof Yoga Kandasamy - Primary Advisor & Associate Investigator

Dr David Watson - Secondary Advisor & Associate Investigator

Dr Donna Rudd - Secondary Advisor & Associate Investigator

A/Prof Michal Schneider - Secondary Advisor & Associate Investigator

Research Grants:

Grant Name: Australian Society for Ultrasound Medicine Research Grant 2018

Grant Application Title: The renal parenchyma – evaluation of a novel ultrasound measurement to assess fetal renal development

Grant Amount: \$20,000

Grant Name: Australian Society for Ultrasound Medicine Research Grant 2018

Grant Application Title: The renal parenchyma – evaluation of a novel ultrasound measurement to assess fetal renal development

Grant Amount: \$20,000

Consultant sonographer Sonja Brennan will analyse kidney development in utero to see what effects foetal growth may have on these organs in later life.

Sonja was drawn to the research through her special interest in foetal and neonatal ultrasound and is undertaking her PhD at James Cook University in this field. Her research is being supported by SERTA grants from THHS.

Sonja currently does a lot of work with babies both in utero and with pre-term babies after birth. Her research will look at the effects of both restricted and excessive foetal growth in utero on babies' kidneys after birth. This will be compared to the kidney development of a baby who has had normal growth in the womb to see where the risks and anomalies are.

Sonja's research involves around 60 babies and help find ways to minimise the chances of abnormal kidney development.

Abnormal kidney growth can lead to hypertension (high blood pressure) and chronic kidney disease in adulthood. The research she has undertaken will look at kidney development in-utero and aims to will have an impact on lifelong kidney health.

Publications:

BRENNAN, S. & KANDASAMY, Y. 2017. Ultrasound Imaging of the Renal Parenchyma of Premature Neonates for the Assessment of Renal Growth and Glomerulomegaly. *Ultrasound in Medicine and Biology*.

BRENNAN, S., WATSON, D., RUDD, D., SCHNEIDER, M. & KANDASAMY, Y. 2017. Evaluation of fetal kidney growth using ultrasound: A systematic review. *European Journal of Radiology*, 96, 55-64.



Dr Jonathan Golledge

Vascular Surgery

Research Team:

Joe Moxon - Deputy director

Jenna Pinchbeck - Trial coordinator

Lisan Yip - Trial coordinator

Georgina Andersen - Trial coordinator

Glenys Standley - Data entry

Research Collaborations:

Royal Brisbane and Women's Hospital

Griffith University

University of Queensland

Curtin University

Monash University

St Vincents Institute

University of Western Australia

Leiden

Stanford University

Research Grants:

Grant Name: National Health Medical Research Council Practitioner Fellowship

Grant Application Title: Developing improved management for peripheral artery diseases

Grant Amount: \$569,219

Professor Jonathan Golledge is Director of the Queensland Research Centre for Peripheral Vascular Disease (QRCPPD) and its pre-clinical arm The Vascular Biology Unit (VBU) at the College of Medicine and Dentistry, James Cook University and The Townsville Hospital.

His research commitment is illustrated by a large number of presentations at International and National meetings and publications in peer-reviewed journals, including a large number in top specialised journals.

Professor Golledge holds a conjoint position between the College of Medicine and Dentistry and Queensland Health, where he works as a vascular surgeon. In addition to providing a high quality clinical service his principal aspiration is to improve management of peripheral vascular diseases. The research impact of this is evidenced by external grant support from the NIH, National Health and Medical Research Council, Queensland Government, NHF and other bodies. Of note in 2010 Professor Golledge led a successful bid to establish a National Health and Medical Research Council funded centre of research excellence for Peripheral Vascular Disease.

Publications:

ABBOTT, A. L., SILVESTRINI, M., TOPAKIAN, R., GOLLEDGE, J., BRUNSER, A. M., DE BORST, G. J., HARBAUGH, R. E., DOUBAL, F. N., RUNDEK, T., THAPAR, A., DAVIES, A. H., KAM, A. & WARDLAW, J. M. 2017. Optimizing the definitions of stroke, transient ischemic attack, and infarction for research and application in clinical practice. *Frontiers in Neurology*, 8.

ALMEIDA, O. P., HANKEY, G. J., YEAP, B. B., GOLLEDGE, J. & FLICKER, L. 2017. Depression as a modifiable factor to decrease the risk of dementia. *Translational Psychiatry*, 7.

ALMEIDA, O. P., MCCAUL, K., HANKEY, G. J., YEAP, B. B., GOLLEDGE, J., FLICKER, L. 2017. Excessive alcohol consumption increases mortality in later life: a genetic analysis of the health in men cohort study. *Addiction Biology*. 570-578.

- ALMEIDA, O. P., HANKEY, G. J., YEAP, B. B., GOLLEDGE, J., HILL, K. D. & FLICKER, L. 2017. Depression Among Nonfrail Old Men Is Associated with Reduced Physical Function and Functional Capacity After 9 Years Follow-up: The Health in Men Cohort Study. *Journal of the American Medical Directors Association*, 18, 65-69.
- ALMEIDA, O. P., MORAR, B., HANKEY, G. J., YEAP, B. B., GOLLEDGE, J., JABLENSKY, A. & FLICKER, L. 2017. Longevity Klotho gene polymorphism and the risk of dementia in older men. *Maturitas*, 101, 1-5.
- BAILEY, T. G., PERISSIOU, M., WINDSOR, M., RUSSELL, F., GOLLEDGE, J., GREEN, D. J. & ASKEW, C. D. 2017. Cardiorespiratory fitness modulates the acute flow-mediated dilation response following high-intensity but not moderate-intensity exercise in elderly men. *Journal of Applied Physiology*, 122, 1238-1248.
- BAILEY, T. G., PERISSIOU, M., WINDSOR, M., GOLLEDGE, J., ET AL. 2017. Effects of acute exercise on endothelial function in abdominal aortic aneurysm patients. *American Journal of Physiology. Heart and Circulatory Physiology*.
- BIROS, E., MORAN, C. S., MAGUIRE, J., HOLLIDAY, E., LEVI, C. & GOLLEDGE, J. 2017. Upregulation of arylsulfatase B in carotid atherosclerosis is associated with symptoms of cerebral embolization. *Scientific Reports*, 7.
- CHAN, Y. X., ALFONSO, H., CHUBB, S. A. P., HANDELSMAN, D. J., FEGAN, P. G., HANKEY, G. J., GOLLEDGE, J., FLICKER, L. & YEAP, B. B. 2017. Higher Dihydrotestosterone Is Associated with the Incidence of Lung Cancer in Older Men. *Hormones and Cancer*, 1-8.
- CHAN, Y. X., ALFONSO, H., PAUL CHUBB, S. A., HO, K. K. Y., GERARD FEGAN, P., HANKEY, G. J., GOLLEDGE, J., FLICKER, L. & YEAP, B. B. 2017. Higher IGFB3 is associated with increased incidence of colorectal cancer in older men independently of IGF1. *Clinical Endocrinology*.
- CHAN, Y. X., ALFONSO, H., CHUBB, S. A., FEGAN, P., HANKEY, G. J., GOLLEDGE, J., FLICKER, L. & YEAP, B. B. 2017. Higher thyrotropin concentration is associated with increased incidence of colorectal cancer in older men. *Clinical Endocrinology*
- DEWDNEY, B., TROLLOPE, A., MOXON, J., THOMAS MANAPURATHE, D., BIROS, E. & GOLLEDGE, J. 2017. Circulating MicroRNAs as Biomarkers for Acute Ischemic Stroke: A Systematic Review. *Journal of Stroke and Cerebrovascular Diseases*.
- EMETO, T. I., ALELE, F. O., SMITH, A. M., SMITH, F. M., DOUGAN, T., GOLLEDGE, J. 2017. Use of Nanoparticles As Contrast Agents for the Functional and Molecular Imaging of Abdominal Aortic Aneurysm. *Frontiers in Cardiovascular Medicine*.
- GOLLEDGE, J., HANKEY, G. J., ALMEIDA, O. P., FLICKER, L., NORMAN, P. E. & YEAP, B. B. 2017. Plasma free thyroxine in the upper quartile is associated with an increased incidence of major cardiovascular events in older men that do not have thyroid dysfunction according to conventional criteria. *International Journal of Cardiology*.
- GOLLEDGE, J., MOXON, J., PINCHBECK, J., ANDERSON, G., ROWBOTHAM, S., JENKINS, J., BOURKE, M., BOURKE, B., DEAR, A., BUCKENHAM, T., JONES, R. & NORMAN, P. E. 2017. Association between metformin prescription and growth rates of abdominal aortic aneurysms. *British Journal of Surgery*.
- GOLLEDGE, J., NORMAN, P. E., MURPHY, M. P., DALMAN, R. L. 2017. Challenges and opportunities in limiting abdominal aortic aneurysm growth. *Journal of Vascular Surgery*. 225-233
- GOLLEDGE, J., ET AL. 2017. Acute Inflammatory Responses to Exercise in Patients with Abdominal Aortic Aneurysm. *Medicine and Science in Sports and Exercise*.
- GOLLEDGE, J., ET AL. 2017. Risk of prevalent and incident dementia associated with insulin-like growth factor and insulin-like growth factor-binding protein 3. *Molecular Psychiatry*
- GOLLEDGE, J., ET AL. 2017. Reference Ranges for Thyroid-Stimulating Hormone and Free Thyroxine in Older Men: Results from the Health in Men Study. *The Journals of Gerontology. Series A, Biological Sciences and Medical Sciences*.
- GOLLEDGE, J., ET AL. 2017. Plantar pressures are elevated in people with longstanding diabetes-related foot ulcers during follow-up. *PLoS One*

- HENZE, M., ALFONSO, H., FLICKER, L., GEORGE, J., CHUBB, S. A. P., HANKEY, G. J., ALMEIDA, O. P., GOLLEDGE, J., NORMAN, P. E. & YEAP, B. B. 2017. Profile of diabetes in men aged 79–97 years: The Western Australian Health in Men Study. *Diabetic Medicine*, 34, 786-793.
- IYER, V., ROWBOTHAM, S., BIROS, E., BINGLEY, J. & GOLLEDGE, J. 2017. A systematic review investigating the association of microRNAs with human abdominal aortic aneurysms. *Atherosclerosis*.
- KRISHNA, S. M., SETO, S. W., JOSE, R., LI, J., MOXON, J., CLANCY, P., CROSSMAN, D. J., NORMAN, P., EMETO, T. I. & GOLLEDGE, J. 2017. High serum thrombospondin-1 concentration is associated with slower abdominal aortic aneurysm growth and deficiency of thrombospondin-1 promotes angiotensin II induced aortic aneurysm in mice. *Clinical Science*, 131, 1261-1281.
- KRISHNA, SM., SETO, SW., GOLLEDGE, J., ET AL. 2017. Wnt Signaling Pathway Inhibitor Sclerostin Inhibits Angiotensin II-Induced Aortic Aneurysm and Atherosclerosis. *Arteriosclerosis Thrombosis and Vascular Biology*.
- LACEY, B., GOLLEDGE, J., YEAP, B. B., LEWINGTON, S., MCCAUL, K. A., NORMAN, P. E., FLICKER, L., ALMEIDA, O. P. & HANKEY, G. J. 2017. Systolic Blood Pressure and Vascular Disease in Men Aged 65 Years and Over: The HIMS (Health in Men Study). *Hypertension*.
- LACEY, B., YEAP, B. B., GOLLEDGE, J., LEWINGTON, S., MCCAUL, K. A., NORMAN, P. E., FLICKER, L., ALMEIDA, O. P. & HANKEY, G. J. 2017. Body mass index and vascular disease in men aged 65 years and over: HIMS (Health In Men Study). *Journal of the American Heart Association*, 6.
- MANAPURATHE, D. T., KRISHNA, S. M., DEWDNEY, B., MOXON, J. V., BIROS, E. & GOLLEDGE, J. 2017. Effect of blood pressure lowering medications on leg ischemia in peripheral artery disease patients: A meta-analysis of randomised controlled trials. *PLoS ONE*, 12.
- MATTHEWS, E. O., ROWBOTHAM, S. E., MOXON, J. V., JONES, R. E., VEGA DE CENIGA, M. & GOLLEDGE, J. 2017. Meta-analysis of the association between peripheral artery disease and growth of abdominal aortic aneurysms. *British Journal of Surgery*.
- MENESES, AL., RITTI-DIAS, RM., PARMENTER, B., GOLLEDGE, J., ASKEW, CD. 2017. Combined Lower Limb Revascularisation and Supervised Exercise Training for Patients with Peripheral Arterial Disease: A Systematic Review of Randomised Controlled Trials. *Sports Medicine*. 987-1002.
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Fenofibrate in the management of AbdoMinal aortic anEurysm (FAME): Study protocol for a randomised controlled trial. *Trials*, 18.

ROWBOTHAM, S. E., PINCHBECK, J. L., ANDERSON, G., BOURKE, B., BOURKE, M., GASSER, T. C., JAEGGI, R., JENKINS, J. S., MORAN, C. S., MORTON, S. K., REID, C. M., VELU, R., YIP, L., MOXON, J. V. & GOLLEDGE, J. 2017. Inositol in the MAnaGemENT of abdominal aortic aneurysm (IMAGEN): Study protocol for a randomised controlled trial. *Trials*, 18.

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TOME, SM., BASTIAANNET, E., SCHERMERHORN, ML., GOLLEDGE, J., ET AL. 2017. The Consequences of Real Life Practice of Early Abdominal Aortic Aneurysm Repair: A Cost-Benefit Analysis. *The European Journal of Vascular and Endovascular Surgery*.

What brought you to Townsville HHS?

I started as a pharmacy assistant and was inspired to pursue pharmacy as a career.

- Stephen Perks, Pharmacist, Clinical Educator



Surgical Service Group Publications

1. BRENNAN, S. & KANDASAMY, Y. 2017. Ultrasound Imaging of the Renal Parenchyma of Premature Neonates for the Assessment of Renal Growth and Glomerulomegaly. *Ultrasound in Medicine and Biology*.
2. BRENNAN, S., WATSON, D., RUDD, D., SCHNEIDER, M. & KANDASAMY, Y. 2017. Evaluation of fetal kidney growth using ultrasound: A systematic review. *European Journal of Radiology*, 96, 55-64.
3. BRENNAN, S., KANDASAMY, Y. 2017. Ultrasound Imaging of the Renal Parenchyma of Premature Neonates for the Assessment of Renal Growth and Glomerulomegaly. *Ultrasound in Medicine and Biology* 2546-2549.
4. MINA, M., MINA, P., REID, M. & CHAVAN, A. 2017. Importance of early detection and management of necrotising myositis as demonstrated by the case of an 8-year-old female. *Journal of Paediatrics and Child Health*, 53, 817-820.
5. CHO, H., DAVID, MC., LYNHAM, AJ., HSU, E. 2017 Effectiveness of irrigation with chlorhexidine after removal of mandibular third molars: a randomised controlled trial. *British Journal of Oral and Maxillofacial Surgery*
6. CHO, H., LYNHAM, AJ., HSU, E. 2017. Postoperative interventions to reduce inflammatory complications after third molar surgery: review of the current evidence. *Australian Dental Journal*
7. CHEN, GB., LEE, SH., MONTGOMERY, GW., MAHY, G., ET AL. 2017. Performance of risk prediction for inflammatory bowel disease based on genotyping platform and genomic risk score method. *BMC Medical Genetics*.
8. DOECKE, JD., HARTNELL, F., BAMPTON, P., BELL, S., MAHY, G., AUSTRALIAN AND NEW ZEALAND INFLAMMATORY BOWEL DISEASE CONSORTIUM. 2017. *Alimentary Pharmacology & Therapeutics*.
9. SELWOOD, A., SENTHURAN, S., BLAKELY, B., LANE, P., NORTH, J. & CLAY-WILLIAMS, R. 2017. Improving outcomes from high-risk surgery: A multimethod evaluation of a patient-centred advanced care planning intervention. *BMJ Open*, 7.
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11. UDY, A. A., JARRETT, P., LASSIG-SMITH, M., STUART, J., STARR, T., DUNLOP, R., DEANS, R., ROBERTS, J. A., SENTHURAN, S., BOOTS, R., BISHT, K., BULMER, A. C. & LIPMAN, J. 2017. Augmented renal clearance in traumatic brain injury: A single-center observational study of atrial natriuretic peptide, cardiac output, and creatinine clearance. *Journal of Neurotrauma*, 34, 137-144.

12. WINEARLS, J., WULLSCHLEGER, M., WAKE, E., HURN, C., FURYK, J., RYAN, G., TROUT, M., WALSHAM, J., HOLLEY, A., COHEN, J., SHUTTLEWORTH, M., DYER, W., KEIJZERS, G., FRASER, J. F., PRESNEILL, J. & CAMPBELL, D. 2017. Fibrinogen Early in Severe Trauma study (FEISTY): Study protocol for a randomised controlled trial. *Trials*, 18.
13. YOUNG, A., TACON, C., SMITH, S., REEVES, B., WISEMAN, G. & HANSON, J. 2017. Case report: Fatal pediatric melioidosis despite optimal intensive care. *American Journal of Tropical Medicine and Hygiene*, 97, 1691-1694.
14. YONG, M. S., GRANT, R., SAXENA, P. & YADAV, S. 2017. Recurrent Bioprosthetic Valve Thrombosis - Should Long-Term Anticoagulation Be Considered? *Heart Lung and Circulation*.
15. SPARREBOOM, B., LITTON, B. & YAXLEY, J. 2017. A rare case of adult rhabdomyosarcoma. *Polish Journal of Radiology*, 82, 395-397.
16. REZNIK, J. E., BIROS, E., LAMONT, A. C., SACHER, Y., KIBRIK, O., MILANESE, S., GORDON, S. & GALEA, M. P. 2017. A preliminary investigation on the effect of extracorporeal shock wave therapy as a treatment for neurogenic heterotopic ossification following traumatic brain injury. Part I: Effects on pain. *Brain Injury*, 1-7.
17. EVAN, J. S., HUANG, S. J., MCLEAN, A. S. & NALOS, M. 2017. Left ventricular outflow tract obstruction - Be prepared! *Anaesthesia and Intensive Care*, 45, 12-20.
18. MANICKAM, A., MARSHMAN, L. A. G., JOHNSTON, R. & THOMAS, P. A. W. 2017. Mathematical formulae to estimate chronic subdural haematoma volume. Flawed assumption regarding ellipsoid morphology. *Journal of Clinical Neuroscience*.
19. MANICKAM, A., MARSHMAN, L. A. G. & JOHNSTON, R. 2017. Membrane Surface Area to Volume Ratio in Chronic Subdural Hematomas: Critical Size and Potential Postoperative Target. *World Neurosurgery*, 100, 256-260.
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22. CANDY, N., NG, E. & VELU, R. 2017. Paclitaxel-coated balloon reduces target lesion revascularization compared with standard balloon angioplasty. *Journal of Vascular Surgery*, 65, 558-570.
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24. FLAVELL, C., GORDON, S. & MARSHMAN,

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 26. MCLELLAN, J., MARSHMAN, L. A. G. & HENNESSY, M. 2017. Anterograde amnesia and disorientation are associated with in-patients without traumatic brain injury taking opioids. Retrograde amnesia (RA) is absent. RA assessment should be integral to post-traumatic amnesia testing. *Journal of Clinical Neuroscience*.
 27. SMITH, S. & WOLANSKI, P. 2017. Metastatic prostate cancer incidence in Australia after amendment to prostate-specific antigen screening guidelines. *ANZ Journal of Surgery*.
 28. MARSHMAN, L. A. G., HENNESSY, M., DELLE BAITE, L. & BRITTON, G. 2017. Utility of Retrograde Amnesia Assessment Alone, Compared with Anterograde Amnesia Assessment in Determining Recovery After Traumatic Brain Injury: Prospective Cohort Study. *World Neurosurgery*.
 29. RAY MOHAPATRA, C. K., MISHRA, P., SAXENA, P., RAUT, C., KHANDEKAR, J., AMMANNAYA, G. K., SETH, H. S., SHAH, V. & SINGH, J. 2017. Use of nitroglycerin and verapamil solution by organ bath technique in preparation of left internal thoracic artery for coronary artery bypass surgery. *Indian Heart Journal*.
 30. O'DONOHUE, T. J. & SCHRALE, R. G. 2017. Acute compartment syndrome: A rare but important complication of transradial cardiac catheterization. *Journal of Cardiology Cases*.
 31. RUSSELL, E. A., WALSH, W. F., REID, C. M., TRAN, L., BROWN, A., BENNETTS, J. S., BAKER, R. A., TAM, R. & MAGUIRE, G. P. 2017. Outcomes after mitral valve surgery for rheumatic heart disease. *Heart Asia*, 9.
 32. SABHARWAL, N., DEV, H., SMAIL, H., MCGIFFIN, D. C. & SAXENA, P. 2017. Nina Braunwald: A female pioneer in cardiac surgery. *Texas Heart Institute Journal*, 44, 96-100.
 33. SAXENA, P., SMAIL, H. & MCGIFFIN, D. C. 2017. Surgical Techniques of Pulmonary Embolectomy for Acute Pulmonary Embolism. *Operative Techniques in Thoracic and Cardiovascular Surgery*.
 34. SEKHON, H., SINGH, R. & BARWA, J. 2017. Determination of sex from Mandibular canine index in Delhi population. *Medico-Legal Update*, 17, 156-159.
 35. WANG, Y., DINH, T. N., NIELD, A., KRISHNA, S. M., DENTON, K. & GOLLEDGE, J. 2017. Renal denervation promotes atherosclerosis in hypertensive apolipoprotein E-Deficient mice infused with angiotensin II. *Frontiers in Physiology*, 8.

36. WILTSHIRE, D., CRONIN, M., LINTERN, N., FRASER-KIRK, K., ANDERSON, S., BARR, R., BENNETT, D., BOND, C. 2017. The debate continues: a prospective, randomised, single-blind study comparing Coblation and bipolar tonsillectomy techniques. *The Journal of Laryngology and Otology*.
37. SIDDAIAH-SUBRAMANYA, M., TIANG, KW., NYANDOWE, M. 2017. Complications, Implications, and Prevention of Electrosurgical Injuries: Corner Stone of Diathermy Use for Junior Surgical Trainees. *Surgery Journal* (New York, N.Y).
38. SIDDAIAH-SUBRAMANYA, M., NYANDOWE, M., ZUBAIR, O. 2017. Self-regulated learning: why is it important compared to traditional learning in medical education? *Advances in Medical Education and Practice*.
39. SIDDAIAH-SUBRAMANYA, M., TIANG, KW., NYANDOWE, M. 2017. A New Era of Minimally Invasive Surgery: Progress and Development of Major Technical Innovations in General Surgery Over the Last Decade. *Surgery Journal* (New York, N.Y).
40. O'DONOHUE, TJ., KETHEESAN, N., SCHRALE, RG. 2017. Anti-troponin antibodies following myocardial infarction. *Journal of Cardiology*.
41. RUSSELL, EA., WALSH, WF., TRAN, L., TAM, R., REID, CM., BROWN, A., BENNETTS, JS., BAKER, RA., MAGUIRE, GP. 2017. The burden and implications of preoperative atrial fibrillation in Australian heart valve surgery patients. *International Journal of Cardiology*.
42. SIDDAIAH-SUBRAMANYA, M., SMITH, S., LONIE, J. 2017. Mastery learning: how is it helpful? An analytical review. *Advances in Medical Education and Practice*.
43. MACFARLANE, AI., RUDD, D., KNIGHT, E., MARSHMAN, LA., GUAZZO, EP., ANDERSON, DS. 2017. Prospective controlled cohort study of Troponin I levels in patients undergoing elective spine surgery for degenerative conditions: Prone versus supine position. *Journal of Clinical Neuroscience*.
44. Oztel, M., Bilski, WM., Bilski, A. 2017. Risk Factors associated with Dental Implant Failure: A Study of 302 Implants placed in a Regional Center. *Journal of Contemporary Dental Practice*.

Surgical Service Group RGO Approved Research

Investigators	Department	Grant Title	Funding Source
Dr Ryan Schrale	Cardiology	Evaluating the efficacy and adherence of administration of a PCSK9 inhibitor Alirocumab in Aboriginal Participants with hyperCholesTerolaemia	South Australian Health and Medical Research Institute Limited (SAHMRI)
Dr Bobby John	Cardiology	Cardiac Resynchronisation therapy (CRT) and AV nodal ablation trial in Atrial Fibrillation)	South Australian Health and Medical Research Institute Limited (SAHMRI)
Dr Gary Foo	General Surgery	Is Hyperbilirubinaemia a Useful Marker of Complication in Acute Diverticulitis?	
Dr Alex Croese	General Surgery	Prevalence of Low Anterior Resection Syndrome in Patients Treated at The Townsville Hospital	
Dr Soon Yee Teoh	Hyperbaric	Staged protocol to assess repeated hyperbaric exposures and glass ampoule safety	
Dr Adam Holyoak	ICU and Pathology Queensland	Determination of Brown snake (Pseudonaja sp.) venom neutralisation following antivenom using ROTEM	
Dr Sutrisno Gunawan	Intensive Care Unit	Diastology in Intensive Care (Diastol-IC) –Diastolic Function in Critically Ill Shocked Patients in Australian ICUs	
Miss Marnie Rawle	Medical Imaging	Do Queensland Health general radiographers use evidence-based practice when modifying current imaging acquisition techniques?	
Mr Andrew Cartwright	Medical Imaging	Evaluation of a workforce model incorporating a trained assistant in Computed Tomography (CT)	
Annette Cotter	Nuclear Medicine & PET Medical Imaging Department	Diagnostic reference level of PET/CT studies in Australia	

Investigators	Department	Grant Title	Funding Source
Dr Maria Hennessy	Neurosurgical Unit and Surgical Ward 3	Improving mental health outcomes following mild to moderate traumatic brain injury	
Mrs Alison Beeden	North Queensland Persistent Pain Management Service	Examining the effectiveness of The Pain Course in a regional hospital pain clinic setting	Allied Health Professions Office of Qld
Dr Matthew Bryant	North Queensland Persistent Pain Management Service	What are the barriers to Referral to a Pain Management Clinic for Indigenous People?	
Dr Alexander Ngoo	Urology	A Prospective Randomised Trial Comparing the Bard Inlay Optima Stent with the Cook Universa Soft Ureteral Stents Using the Validated Ureteric Stent Symptom Questionnaire	
Prof Jonathan Golledge	Vascular Outpatients	VAP638-001: A Randomized, Double-Blind, Placebo-Controlled Study to Determine the Analgesic Efficacy, Safety and Tolerability of VPX638 Administered Topically on a Single Study Occasion, to Patients with Painful Wounds	Novotech (Australia) Pty Ltd



Goal for the future:

To be a part of the development of new research at Townsville HHS Emergency Department

- Nicole Chapman, Clinical Nurse - Emergency Department





Other Townsville Hospital and Health Service Research

In addition to our larger Service Groups, Townsville HHS researchers from other Service Groups and entities contribute substantially to our research profile.

Pathology Queensland encouraged a number of pathology staff to embark on novel projects of their own. Damian Juskiw, a medical scientist, is conducting a Haemokinesis trial for assessment of new technologies in blood transfusion testing. Ailie Ross, a senior haematology scientist, secured a \$10,000 grant for studying the effects of severe trauma and associated therapies on fibrinolytic proteins. This research could lead to enhanced diagnostic testing for targeted therapies in the setting of trauma and sepsis.

The Mental Health Service Group is developing its research portfolio. Professor Brett McDermott, Professor of Psychiatry, has a joint appointment with JCU, and is tasked with enhancing research and education within the Mental Health Service Group. Professor

McDermott's research interests include mental health systems of care with a specific focus on individuals presenting with depression, PTSD and eating disorders. The Service Group has also shown their commitment to research with the recent appointment of Dr Jenny Kelly as the Senior Research Officer for the Service Group.

Professional Nursing and Midwifery Services and Research lead by Dr Wendy Smyth, until the recent appointment of the Professor of Nursing and Midwifery, Professor Cate Nagle, continues to support nurses and midwives throughout Townsville HHS to undertake research. Dr Smyth and Professor Nagle have a remit to ensure nursing and midwifery research at Townsville HHS is a leader in its field, for the benefit of our North Queensland population.

Research at Townsville HHS is not limited to clinicians with several staff from the Corporate Services undertaking research.

Other Townsville HHS Research Grants

Investigators	Grant Title	Grant body/scheme	Amount
Ailie Ross	The effects of severe trauma and associated therapies on fibrinolytic proteins Protein C, Activated protein C and Antithrombin III	Study, Education, Research, Trust Account	\$10,000
B McDermott, Z Sarnyai, R Phillips	Reducing suicide and promoting resilience among elite youth Rugby League athletes in North Queensland	Bishop Michael Putney Fellowship Grant	\$105,000

Other Townsville HHS Publications

- SHIELDS, L., JOMEEN, J., SMYTH, W. & STANLEY, D. 2017. Matthew Flinders Senior (1751-1802): Surgeon and 'man midwife'. *Journal of Medical Biography*, 967772017707713.
- MOORES, A. & FITZGERALD, C. 2017. New graduate transition to practice: How can the literature inform support strategies? *Australian Health Review*, 41, 308-312.
- SMYTH, W., LINDSAY, D., BRENNAN, D. & LINDSAY, D. 2017. Medical and allied health staff self-reported long-term conditions: Findings from a regional Australian health service. *International Journal of Workplace Health Management*, 10, 418-433.
- MALONEY, S., ENGLER, C. & NORTON, R. 2017. Epidemiological cut-off value of clinical isolates of *Burkholderia pseudomallei* from Northern Queensland to meropenem, ceftazidime, trimethoprim/sulfamethoxazole and doxycycline by the microbroth dilution method. *Journal of Global Antimicrobial Resistance*, 10, 291-294.
- NORTON, R. 2017. Q fever: Changing perspectives over 75 years in Queensland's human population (Australia). The Principles and Practice of *Q Fever: The One Health Paradigm*. Nova Science Publishers, Inc.
- SIVABALAN P, SABOO A, YEW J, NORTON R. 2017. Q fever in an endemic region of North Queensland, Australia: A 10-year review. *One Health*.
- ROBERTSON G, KOEHLER A, GASSER R, WATTS M, NORTON R, BRADBURY R. 2017. The Application of a *Strongyloides* sp. Diagnostic PCR in Northern Australia – Advantages and Challenges. *Journal of Tropical Medicine* (2017) In press.

8. CLEMENCE M, HENDERSON A, GREENBURY C, NORTON R, FURYK J. A survey of the antibiotic prescribing practices of doctors in an Australian Emergency Department. *Infection Disease and Health* (2017) In press
9. ROBERTSON, GJ., KOEHLER, AV., GASSER, RB., WATTS, M., NORTON, R., BRADBURY, RS. 2017. Application of PCR-Based Tools to Explore Strongyloides Infection in People in Parts of Northern Australia. *Tropical Medicine and Infectious Disease*.
10. SIKDER, S., AE., WILLIAMS, NL., ALIM, MA., VIDGEN, ME., MORELAND, NJ., RUSH, CM., KETHEESAN, NK., SRIPRAKASH, KS., SIMPSON, RS., GOVAN, BL., NORTON, R., CUNNINGHAM, MW., MCMILLAN, DJ., 2017. Group G streptococcus induces an autoimmune IL-17A/IFN- γ mediated carditis in the Lewis rat model of Rheumatic Heart Disease. *The Journal of Infectious Diseases*
11. Westerman NK, Cobham VE, McDermott B. Trauma-Focused Cognitive Behavior Therapy: Narratives of Children and Adolescents. *Qualitative Health Research*. 2017 Jan;27(2):226-235.
12. Akosile W, McDermott BM. Prevalence and clinical correlates of chlamydia infection in youth who use drugs and alcohol: a good opportunity for early intervention. *Australasian Psychiatry*. 2017 Jan
13. Joyce P, O'Rourke C, McDermott B, Heussler H. Health-related quality of life in 22q11.2 deletion syndrome: The child's perspective. *Journal of Paediatrics and Child Health*. 2017 Oct 30. doi: 10.1111/jpc.13746.
14. d'Emden H, McDermott B, D'Silva N, Dover T, Ewais T, Gibbons K, O'Moore-Sullivan T. Psychosocial screening and management of young people aged 18-25 years with diabetes. *Internal Medicine Journal*. 2017 Jan 20.
15. Cobham VE., McDermott BM, Sanders M. Parenting support in the context of natural disaster. In: Sanders M & Mazzucchelli TG, The Power of Positive Parenting: Transforming the lives of children, parents and communities using the Triple P System. *Oxford University Press*, Oxford UK. (2017)

Other Townsville HHS RGO Approved Research

Investigators	Department	Grant Title
Dr Anna Brischetto	Microbiology	Assessment of the diagnostic utility of the syphilis polymerase chain reaction (PCR) test when compared with serology in primary syphilis
Dr Phillip Amoabeng	Microbiology	The utility of anaerobic blood cultures.
Dr Wendy Smyth	Professional Nursing and Midwifery Services and Research	Viewpoints of participants in the Townsville HHS Graduate Nurse/Midwife Program before and after significant changes to the educational content and structure
Dr Wendy Smyth	Professional Nursing and Midwifery Services and Research	Evaluation of the Clinical Partnership Program

Investigators	Department	Grant Title
Alexandra Edelman	Townsville HHS Executive	The role of academic health centres in building equitable health systems: a multi-centre cross-country comparative case study
Mr Tim McNabb	Facilities, Infrastructure & Support Services	Improving outpatient patient experience and reducing operational costs through the use of Internet of things (IOT) technology
Dr Lynette Knowles	Townsville HHS Executive Medical Administration	Pilot Study: Can exit surveys inform junior doctor workforce trends?
Dr Peter Bristow	Townsville HHS Chief Executive Officer	PLUS: Patient Level Utilisation Study of a Tertiary Referral Hospital and Health Service
Dr Carolyn Ehrlich	Townsville HHS Corporate	Evaluation of Health Consumers Queensland Impact on Consumer Engagement
Mr Alan Taylor	Nursing, Medical and Allied Health	Sustainable Telehealth Services
Prof Andrew Burton-Jones	Townsville HHS Corporate – Program Management	Using electronic health/medical record systems effectively
Ms Louise Scanlan	Mental Health	Job satisfaction of mental health workers
Dr Elisabeth Hoehn	Child and Youth Mental Health Service	Mental Health Promotion and Prevention using SMS technology with fathers at risk of perinatal mental health difficulties and mothers with diagnosed perinatal mental illness - funding source Children's Health Queensland
Dr Karen Hallam	Townsville Alcohol, Tobacco and Other Drug Youth Outreach Service	The Victorian and Queensland Youth Needs Census
Mr Hani Mikhail	Community Child and Youth Mental Health Service (CCYMHS)	Hair cortisol as a novel biomarker for mental illness in children
Dr Susan Cameron	Townsville Adolescent Inpatient Unit	Audit of metabolic monitoring in an adolescent in-patient population prescribed antipsychotic or mood stabilising medication.



How did you come to Townsville HHS?

I came to Townsville HHS because a rare, visionary opportunity was created for a Nurse Manager of Research in 2002.

- Dr Wendy Smyth. Nurse Researcher





Townsville Health Library

Bronia Renison, Library Director

The Townsville Health Library provides a range of services and resources to assist staff conducting or learning about research. Researchers are encouraged to consult with library staff as early as possible in the research design process.

Advice is provided on developing an effective strategy for searching the literature and identifying the best resources to meet individual research needs. Assistance with EndNote reference manager includes downloading

citations, automatic in-text referencing and bibliographies, and changing the referencing style.

Library staff also assist researchers by supplying hard-to-find articles, reports and books. Advice is available on using journal impact factors and selecting the best publication outlet.

Library services are available online from work or from home: search for Townsville Health Library or QH libraries.

