

MONTHLY BULLETIN FOR TOEH RESEARCH COMMUNITY

WINNING NEWS

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THRF Project Grants awarded to three BHI researchers



L-R: Professor Michael Roberts, Dr Katharina Richter and Dr Robert Bryant

On Monday 24th February <u>The Hospital Research Foundation</u> announced \$1 million in funding for 9 research grants, three of which were awarded to researchers based at the Basil Hetzel Institute, TQEH. Professor Michael Roberts (Therapeutics Research Centre, University of South Australia) received a grant in the 'Experienced Stream' while Drs Robert Bryant and Katharina Richter each received a grant in the 'Early Career Stream'. Each one year grant received up to \$130,000. The lay summary of each of their grants is included here, together with information about other BHI, TQEH researchers involved in the work.

Professor Mike Roberts, Therapeutics Research Centre, BHI and UniSA
Dr David Jesudason, Director of Endocrinology and Diabetes, TQEH
Dr Emily Meyer, consultant endocrinologist, TQEH
Dr Venkatesan Thiruvenkatarajan, Staff Specialist Anaesthetist, TQEH

Addressing potentially life-threatening ketoacidosis associated with key anti-diabetic medicines: For the two million Australians at risk of Type 2 diabetes, the newest class of anti-diabetic drugs has been very effective in managing the disease. However for those undergoing surgery, these drugs bring a higher risk of the patient developing life-threatening diabetic ketoacidosis (DKA). DKA occurs when the body produces dangerously high levels of acids called ketones in the blood, with roughly two to three cases a week seen at The Queen Elizabeth Hospital. This project aims to prevent DKA in patients undergoing surgery by better understanding why some patients develop DKA, developing a model which can predict DKA in patients and therefore altering patient management.

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BHI SEMINARS

BHI Staff/Student Seminars 1pm Tuesdays commence 3 March

BHI Invited Speaker Seminar

<u>Assistant Professor Rachel Dreyer</u>

1pm Wednesday 11 March

All seminars take place in the BHI Ground Floor Seminar Rooms

UPCOMING EVENTS

BHI Mindfulness Sessions 12pm Monday 2, 16, 30 March

UoA Researcher Profile Workshop 10am Thursday 26 March

> BHI Off the Clock 4pm Wednesday 25 March

BHI HUB

Scientific Director Joy Rathjen

BHI First Floor Phone: 8222 6524 jov.rathjen@sa.gov.au

Work days: Monday - Wednesday



Good grant outcomes are guaranteed to make a Scientific Director happy, so February was a good month. Among the research grants received this month were 3 THRF project grants, (this represented a third of the grants awarded in this scheme). This was an unexpectedly competitive grant round with nearly 200 applications from health and medical researchers across South Australia. The importance of this outcome to The Institute cannot be understated – like all our funding it not only supports our research programs but it makes a statement of confidence in the quality of the research undertaken here.

At every larger meeting about research in South Australia I have attended since I started, and there have been many, the theme of research funding and the difficulty of attracting funding to the state has been raised. The NHMRC schemes are recognised as heavily subscribed and success rates are low, not just here but across the country. SA has not been as successful as other states in attracting grants from the Medical Research Futures Fund. Careers founder on a lack of funding. This situation will rectify itself. SA has a long and illustrious history in health and medical research, and this includes research at the BHI. Basil Hetzel, our namesake, began his studies on the impact of iodine deficiency at TQEH. The result of this work was the global adoption of iodised salt, a simple innovation that effectively eliminated iodine deficiency disorders, such as cretinism and goitre, from the human population. Another South Australian success story, Repromed, had its roots in at TQEH. BHI researchers continue to address important clinical issues with the sole purpose of making a difference in patient's lives. To keep research going, our researchers tap into a diversity of funding sources to support their projects, and the importance of the support of our community, through charitable funding, cannot be understated.

BHI Facility Manager Kathryn Hudson

BHI Ground Floor Phone: 8222 7427

kathryn.hudson@sa.gov.au



BHI Communications Officer Rebecca Anderson

BHI Ground Floor Phone: 8222 7345

rebecca.anderson@adelaide.edu.au Work days: 9-3pm Tuesday - Thursday



NEWS CONTINUED

THRF Project Grants (continued)

Dr Rob Bryant Inflammatory Bowel Disease Research Group

The 4-SURE (4-Sulphide-Reducing) project: pioneering a new diet paradigm in the management of ulcerative colitis: Ulcerative colitis (UC) is an inflammatory bowel disease that causes long-lasting inflammation and ulcers in your digestive tract. Current treatments are inadequate, helping only onethird of patients while one-in-five patients ultimately require a colectomy. Diet is a key factor in the development of UC via its influence on the balance of gut bacteria. Preliminary studies have shown that adopting a diet strategy aimed at reducing harmful gut bacteria is effective in reducing inflammation in UC. This project aims to explore effective diet therapies as an exciting additional approach to bridging the gap in treatments of UC. A randomised controlled, single-blind feeding study will investigate the effects of a 6-week intervention with the 4-SURE diet in individuals with active UC compared to those receiving a placebo sham diet.



Dr Rob Bryant will work with Alice Day, TQEH Senior Research Dietician and PhD student, on this THRF funded project

Dr Kati Richter Surgical Science Research Group



A new implant to stop infections in hernia surgery: About 40,000 hernia repair surgeries are performed every year in Australia, which typically involves inserting a mesh prosthetic into the abdominal wall. However, in up to 40% of patients, the mesh becomes infected with antibiotic-resistant bacteria causing debilitating infections, pain and long-term morbidity. This project aims to develop a new medical device, specifically designed for hernia repair surgery, which will prevent implant-related infections. The benefits of this intervention will include improved health outcomes for the patient, reduced length of hospital stay and a lower economic cost to Australia's healthcare system.



Tour de Cure grant awarded to Dr Kevin Fenix

An early career researcher grant, valued at \$50,000, has been awarded to THRF Early Career Fellow **Dr Kevin Fenix** from the Surgical Science Research Group at the Basil Hetzel Institute. His project involves a collaboration between the Surgical Science Group and the Gut Cancer Research Group based at SAHMRI, which is led by Dr Susan Woods. Tour de Cure is a national charity organisation established in 2007 to raise funds to support cancer research.

Pre-clinical assessment of a patient-derived cellular immunotherapy for metastatic colorectal cancer: Metastatic colorectal cancer (CRC) is the second biggest cause of cancer related death in Australia. While current immunotherapy treatments have transformed the lives of countless cancer patients, sadly, this has not translated well for CRC. Our proposal will use cutting- edge techniques to test a novel cellular immunotherapy for



metastatic CRC patients with cancer in the liver. This therapy, called Cytokine Induced Killer Cell (CIK) therapy, expands potent anti-tumour immune cells derived from either the patient's blood, or that of a healthy donor in the laboratory. After expansion, CIKs are reinfused into the patient where they will target and kill cancer cells. CIK therapy is being trialled around the world, and our group will determine if metastatic CRC patients can benefit from this therapy.

In the proposed research we will test the capacity of CIK therapy to control established CRC liver metastases using a preclinical mouse model and determine if CIK therapy can be enhanced by combining it with other therapies. Finally, we will test if CIK therapy is effective against a variety of metastatic CRC samples by growing patient-derived tumour organoids and testing the capacity of patient-derived CIK therapy to kill those tumours. Positive results from this project will allow our group to progress this needed treatment to clinical trials in Australia.



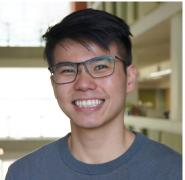
NEWS CONTINUED

Introducing new BHI, TQEH researchers



Dr Bron Lett
Level 2, Basil Hetzel Institute TQEH. bron.lett@sa.gov.au
Medical Scientist, Inflammatory Bowel Disease Research Group

Bron has a background in genetics, immunology and pharmacology. He is undertaking research in gastroenterology with a particular focus on the gut microbiome and how it impacts disease states. The goal is to understand the complex interplay of gut bacteria an health with an aim to develop clinically applicable ways of encouraging a beneficial microbiome.



Arthur Yeow
Level 1, Basil Hetzel Institute TQEH. arthur.yeow@adelaide.edu.au
Research Assistant, Virology Group

Arthur will be working on two new Zika projects (pregnancy and male testes infection) as well as assisting students and staff on other projects.

Please welcome 8 new Honours Students



Sophie Camens

Level 1 BHI sophie.camens@student.adelaide.edu.au

ENT Surgery

Supervisors: A/Prof Sarah Vreugde, A/Prof Alkis Psaltis, Dr Sha Liu

Thesis title: Preclinical development of a P.aeruginosa phage cocktail for use to treat

infections with multidrug resistant bacteria

Scholarship: The Hospital Research Foundation Honours Scholarship







Level 1 BHI kitty.germein@student.adelaide.edu.au

ENT Surgery

Supervisor: Professor PJ Wormald

Thesis title: Preclinical assessment of safety and efficacy of Acriflavin for the treatment of

S.aureus biofilm sinus inflammation

Scholarship: The Hospital Research Foundation Honours Scholarship



Level 2 BHI olivia.girolamo@student.adelaide.edu.au

Cardiovascular Pathophysiology and Therapeutics Group

Supervisors: Emeritus Professor John Horowitz, Dr Yulily Chirkov, Dr Ha Nguyen

Thesis title: Improving outcomes after Takotsubo Syndrome

NEWS CONTINUED

New Honours Students (continued)



Emily Kovacev

Level 2 BHI emily.kovacev@student.adelaide.edu.au
Cardiovascular Pathophysiology and Therapeutics Group

Supervisor: Dr Cher-Rin Chong

Thesis title: Novel treatment to prevent cardiovascular disease in Type 2 diabetes

Scholarship: The Hospital Research Foundation Honours Scholarship



Ryan Santos

Level 1 BHI ryan.santos@student.adelaide.edu.au

Virology Group

Supervisors: Dr Branka Grubor- Bauk, Dr Makutiro Masavuli, Dr Zelalem Mekonnen

Thesis title: Evaluating novel Zika virus DNA vaccines



Michelle Sims

Level 2 BHI michelle.sims@student.adelaide.edu.au

Clinical Pharmacology Research Group

Supervisors: Professor Betty Sallustio, Dr John Licari, Professor Andreas Evdokiou

Thesis title: New therapies for Doxorubicin induced myocardial toxicity



Dawn Whelan

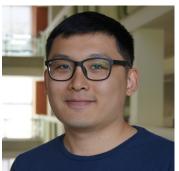
Level 1 BHI dawn.whelan@student.adelaide.edu.au

Virology Group

Supervisors: Dr Branka Grubor- Bauk, Dr Makutiro Masavuli, Dr Zelalem Mekonnen

Thesis title: Maternal immunisation with a novel Zika vaccine to protect offspring from

congenital Zika syndrome



Kenny Yeo

Level 1 BHI a1811332@student.adelaide.edu.au

Solid Tumour Group

Supervisors: Dr Jenny Hardingham, Dr Eric Smith

Thesis title: Cellular targets and mechanisms of action of bacopaside 1 and 2 in breast

cancer

Scholarship: The Hospital Research Foundation Honours Scholarship





BHI STUDENT NEWS

BHI STUDENT REPS 2019-2020



Bimala Dhakal (Level 1) bimala.dhakal@adelaide.edu.au



Gohar Shaghayegh (Level 1) gohar.shaghayegh@adelaide.edu.au



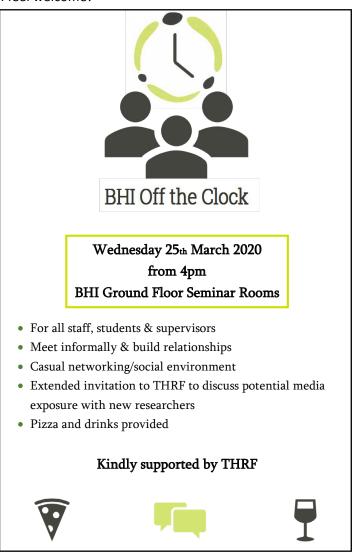
Sadik Abdella (Level 2) sadikalmahdi.abdella@mymail. unisa.edu.au

BHI Off the Clock

Please join us, the BHI Student Reps, for the BHI 'Off the Clock' events on the last Wednesday of each month in the ground floor BHI seminar rooms. These events are generously supported by The Hospital Research Foundation.

This is a student initiative, aimed at providing all staff and students with the opportunity to socialise and network in a casual environment. It is also a chance for new researchers to discuss their work with staff from THRF.

Be sure to come along and meet some new people and make those who are new to the BHI feel welcome!



Mindfulness sessions

12pm every second Monday (2 March, 16 March, 30 March)
BHI Ground floor seminar rooms
see flyer on page 13 for more details

Reverend Nicholas Rundle, a qualified secular meditation teacher, will be running these sessions for BHI and TQEH staff and students each fortnight. Everyone is welcome to attend these free sessions.

COMMUNITY ENGAGEMENT



Community Group Presentations

THRF are always looking for BHI researchers to present at community group events. It is a wonderful opportunity for you to practice your public speaking skills, and present your work to a lay audience! If you are interested or would like some more information, please contact Brendan Hardman at THRF on 8244 1100 or bhardman@hospitalresearch.com.au

Dr Danielle Taylor: Coast FM Radio 5 February

THRF have a monthly community radio opportunity with Coast FM that provides researchers with an opportunity to sharpen their media skills.

Dr Danielle Taylor (Adelaide G-TRAC Centre) spoke to radio presenters Dave and Bruce about her research into healthy ageing. It was a great opportunity for Danielle to share her research with the wider community. "Learning to be a good communicator is critical for successful research translation. If you are lucky enough to get the opportunity to present your work to Coast FM listeners, jump at it," Danielle said. "Dave and Bruce provide a comfortable format to share your research and connect through them to their audience. It's a very rewarding experience."

If you are interested in sharing your research on radio, please email Antonia from THRF's Communications team, and she will happily organise a segment for you!



Predicting and mapping need

Researchers and experts are crunching the numbers to better inform those providing aged care services, writes NATASHA EGÁN.



csidential aged care providers will soon have access to software to predict the deterioration of aged care residents' health. The new evidence-based tool aims to improve resident care planning and reduce avoidable hospiral transfer.

The clinical decision support software is being developed for Telstar Fleath's though a SI million partnership with RMIT University and the Digital Health Cooperative Research Centre.

The software will analyse the clinical data of aged care residents for signs of deteriorating health to help providers plan and direct staffing and clinical resources. Once developed, the predictive algorithms will be embedded into Telstra Health's software now in use for more than \$5,000 residents across Australia, says Larisas Briedis, senior strategy specialist at Telstra Health's continuation of the software the staff of the software health's Clinical from existing residential aged car providers using Telstra Health's Clinical from existing residential aged car providers using Telstra Health's Clinical diacions of deteriorating resident and continuity of the software the softwar

of the project aims to identify clinically-validated measures to reliably predict deterioration, Briedis says.

"This will enable care staff to adjust the care of the residents accordingly together with reducing avoidable emergency hospitalisations."

In addition to keeping more aged care residents out of avoidable emergency care, the project has enormous potential to provide earlier indications when residents are approaching und of life, asy Dr Victor Pantano, CEO of Digital Health CRC.

"The earlifer we can essertain that an aged care resident we approaching end of life, the series we can essert their advances."

In programment of the control of the care o

Pantano says.

Informed by gerontologists, aged care staff
Clinical decision support software to predict deterioration is already used in acute care settings, but this will be the first time for aged care. Working with gerontologists and aged care staff to interpret historical data and develop new predictive analytics techniques. They are also going to adapt existing decision support methods from the acute care

sector, says Lawrence Cavedon, a professor of computer science at RMIT. "Researchers will work closely with clinicians to understand reliable signs of patient detectionation, how this might be identified from recorded data, and to manage any related ethical issues," Cavedon says.

The new algorithms will first be tested using historical data then applied to current data in a trial setting before they are integrated into Telstra Health's software.

they are integrated into Jestra Heatin's software.

Telstra Health has begun a pproaching providers using it residential aged care software to participate in the research and trial, Briedis says. "Flesta Health and RMIT with the control to board" a the says.

Analysis with participating aged care providers is expected to commence in early 2020.

Mapping frailty



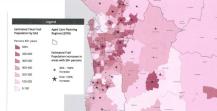
Aged care stakeholders can now see the current and future prevalence of frailty around Australia using an online interactive tool. The

DanieleTaylor was launched; and marked the first inseptember, and marked the first time stakeholders could see Australia's fraitly prevalence mapped like this.

The tool has been developed by researchers at the University of Adelaide's Centre of Research Excellence in Fraitly and Healthy Ageing to help raise awareness and inform health and aged care services. Dr Danielle Taylor is the project's research lead.

"As our population ages, even if the prevalence rate doesn't increase, the number of people greatly." This yield, Addie Taylor and the prevalence rate of the prevalence and the prevalence are doesn't increase, the number of people greatly. "This yield, Addie Taylor and the prevalence are doesn't increase, the number of people greatly." This yield, Addie Taylor and the prevalence are not distributed uniformly across all areas so were more vulnerable people are."

TECHNOLOGY



Frailty increases a person's vulnerability to adverse health outcomes including loss of mobility. Alls, hospitalisation and death. While failty is associated with ageing, it is preventable and treatable, rather than inevitable, says Taylor. The first step in addressing frailty is identifying it, which is where the map comes in, she says.

The interactive map shows population estimates of the number of frail and pre-frail people within all Australian suburbs for 2011, 2016 and 2027. It shows that the number of frail people in some suburbs around capital cities are projected to double.

The information can be used to inform resource distribution, such as the provision of health and aged care services to areas likely to have a high level of need, Taylor says.

"The aged care sector could use thas information to know the areas where they would expect to have a large number of people with frailty

prevalence rates to population statistics and population projections to try and get a better understanding of the current and future situation, Taylor says.

It puts Australia in a unique position to address this growing issue, she says, "Reducing frailty will improve the quality of life of many older Australians, enabling them to remain independent and living for longer in their own homes, while also reducing the higher utilisation of health services, a characteristic of frailty."

Beneats fraily study, which was commissioned by the Commonwealth Government and published in January 2018, recommended government develop a map of inferred frailty prevalence

thas information to know the areas where they would espect to have a large number of people with failty and understand the areas where fixilly screening might be valuable," she says More than 415,000 people were frail and 1.7 million pre-frail in 2016 and more than 000,000 people will be frail and 2.2 million pre-frail in 2020 and more than four continuous cont Australia is the first country to develop a frailty web map that applies

or all of Australia using Geographical

for all of Australia using Geographical Information Systems.

Taylor says they started working on their map before the report came out. They are now hoping to work with governments and health departments to use and further develop the map.

Taylor presented the map for the first time at the Healthy Ageing: Every Step Matters research showcase in Adelaide in September. The map is available for anyone to use including individuals, community groups and severes the product of the severe should be severed to the severe the severe the severe service providers.
Access the map at spatialonline.com.au/frailtyestimates

This article featuring Danielle Taylor appeared in the November-December edition of the Australian Ageing Agenda newsletter.

GENERAL INFORMATION

STATISTICIAN AT THE BHI

Suzanne Edwards works at the BHI on Tuesdays. She is available and can be consulted by TQEH/ The University of Adelaide Faculty of Health & Medical Sciences staff and research higher degree students. Support is limited to 15 hours on a per project basis.



Tuesdays
BHI Level 1
Room 1E.07
Phone: 8222 6679
suzanne.edwards@
adelaide.edu.au

Suzanne Edwards

Statistical Consultant
Data, Design and Statistics
Services
Adelaide Health Technology
Assessment (AHTA)
School of Public Health
The University of Adelaide

TQEH Librarians

Every Wednesday a TQEH librarian, Anna or Rachel, visits the BHI (Room 1E.07). These librarians are from the SA Health Library Service, The Queen Elizabeth Hospital campus, and are available to assist you with constructing suitable literature and database searches for your research and help you obtain relevant material. AutoAlerts can also be configured by library staff to automatically deliver the latest results from a saved database search directly to your preferred email account.

Please contact <u>anna.holasek@sa.gov.au</u> or <u>rachel.davey@sa.gov.au</u> to arrange a Wednesday morning meeting, or another time at TQEH Library on level 5B of the Main Tower.

Alternatively, visit the library website at SALUS [https://salus.sa.gov.au] to view our services and resources or use the quick online chat option to contact us.

Please <u>register online</u> for a SALUS username and password to access online library resources.

Funding Opportunities

BHI Bulletin of Funding

The <u>BHI Bulletin of Funding</u>, which can be found on the BHI website, is updated regularly by the CALHN Research Office.



TQEH Research Secretariat Contact Details
Ground Floor, (DX465101)
Basil Hetzel Institute for Translational Health Research
The Queen Elizabeth Hospital
28 Woodville Rd, WOODVILLE SOUTH 5011
Phone: 08 8222 7836 Fax: 08 8222 7872
Email: gwenda.graves@sa.gov.au

GENERAL INFORMATION CONTINUED

Pre-review service for clinical research grants

All research studies, including grant funded research, require appropriate ethics and governance approvals before they can commence. Unlike the NHMRC, many funding bodies do not utilise a peer-review system as part of their grant funding rounds. This can lead to delays in researchers obtaining the post-award approvals that are required before they can start their projects. The CALHN Research Office is offering pre-application scientific review of clinical human research projects by the CALHN HREC Chair, Mr Ian Tindall, with a view to facilitating efficient post-award approval processes.

For further information and submission please contact the CALHN Research Office on Health.CALHNResearchEthics@sa.gov.au or call 7117 2230

CALHN Human Research Ethics Committee 2020 Submission and Meeting Dates for Applications

A list of all meeting dates can be found on the BHI website

HREC/IDSC Submission deadlines	CALHN HREC Meeting	IDSC Meeting
Monday 17 February 2020	Thursday 12 March 2020	
Monday 2 March 2020	Thursday 26 March 2020	Thursday 26 March 2020
Monday 16 March 2020	Thursday 9 April 2020	
Monday 30 March 2020	Thursday 23 April 2020	Thursday 23 April 2020

The Central Adelaide Local Health Network Human Research Ethics Committee (CALHN HREC) will hold two meetings and with two submission deadlines each month in 2020.

The Investigational Drug Sub-Committee (IDSC) will continue to meet monthly.

Research studies involving investigational medicinal products require review and approval from both the IDSC and CALHN HREC.

ALL HREC meetings will continue to be held on Thursdays at Roma Mitchell House, Level 3, 136 North Terrace, Adelaide.

For more information please contact:

Investigational Drugs Subcommittee (IDSC)	CALHN Human Research Ethics Committee (HREC)
Mr Peter Siobodian or Dr Ada Lam	Ms Lisa Barrie
Executive Officer, Specialist Pharmacist	CALHN HREC
Phone: (08) 7074 1430 or (08) 7074 1150	Level 3, Roma Mitchell House
peter.siobodian@sa.gov.au	Phone: (08) 7117 2229 or (08) 8222 6841
ada.lam@sa.gov.au	Health.CALHNResearchEthics@sa.gov.au

Animal Ethics

All animal ethics applications now go through The University of Adelaide Animal Ethics Committee.

Details of meeting and submission dates: www.adelaide.edu.au/research-services/oreci/animal/applications/

Contact details for this committee:

Amanda Camporeale, Animal Ethics Officer

Phone: 8313 6310

Email: amanda.camporeale@adelaide.edu.au

WORK, HEALTH & SAFETY

Honours Student Inductions

Associate Professor Joanne Bowen, Honours Program Co-ordinator for the Faculty of Health and Medical Sciences at the University of Adelaide, will be emailing all students to advise of the mandatory online induction in the next few weeks. The Health, Safety and Wellbeing Team will, to supplement and answer any questions, be offering face to face inductions in March - May and again July – September. These will be of 30 – 45 minutes duration.

Chemwatch Update

For those new to Chemwatch I strongly suggest undertaking the eLearning course. It is quick and easy and very informative.

eLearning is now available in the following languages:

- English
- Russian
- Norwegian
- German
- Italian
- French
- Spanish
- Chinese
- Japanese
- Thai



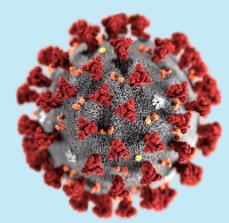
For more information about our eLearning presentations, please <u>click here</u>

Novel Coronavirus (COVID-19)

The University of Adelaide has prepared a series of <u>online FAQs</u> to assist staff and students, which will be updated as the situation changes.

Serge Stebellini

Faculty Health, Safety and Wellbeing Coordinator Faculty of Health and Medical Sciences The University of Adelaide serge.stebellini@adelaide.edu.au



UPCOMING EVENTS

THE QUEEN ELIZABETH HOSPITAL



March - April 2020

BHI Invited Speaker Seminars

basilhetzelinstitute.com.au/events

Seminars will be held in the Ground Floor Seminar Rooms Basil Hetzel Institute, TQEH, 37a Woodville Road, Woodville South

1pm, Wednesday 11th March

SPEAKER: Assistant Professor Rachel Dreyer, Center for Outcomes Research and Evaluation

(CORE), Yale University School of Medicine (Emergency Medicine), New Haven,

Connecticut, USA

TITLE: Improving Outcomes for Women with Cardiovascular Disease: Past, Present and

Future Research

CHAIRS: Professor John Beltrame, Michell Chair of Medicine, The University of Adelaide and

Director of Research, CALHN. john.beltrame@adelaide.edu.au

1pm, Tuesday 7th April

SPEAKER: Dr Jess Borger, Monash University, Melbourne, Australia and the University of

Edinburgh, UK

TITLE: The role of the transmembrane protein Caveolin-1 in T cell signaling and extracellular

communication

CHAIR: Associate Professor Wendy Ingman, THRF Breast Cancer Research Fellow, Breast

Biology and Cancer Unit, The University of Adelaide and Basil Hetzel Institute,

TQEH. wendy.ingman@adelaide.edu.au

2:30pm, Tuesday 7th April (yes – two seminars on this day!)

SPEAKER: Emeritus Professor Stuart Parker, Newcastle University, Newcastle, UK

TITLE: Comprehensive Geriatric Assessment (CGA) and Frailty in Acute Care

CHAIR: Dr Joanne Dollard, Postdoctoral Fellow, Adelaide G-TRAC Centre, The University of

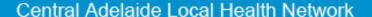
Adelaide and Basil Hetzel Institute, TQEH. joanne.dollard@adelaide.edu.au

Please Note

All Honours and Postgraduate research students based at TQEH campus are required to attend at least two thirds of the BHI Seminar Programs.

Attending students are requested to sign the attendance sheet each session. University of Adelaide students attending these seminars gain 1hr CaRST (refer to <u>UoA website</u> for more information).

UPCOMING EVENTS CONTINUED



Meditation Program on Mondays @ BHI

03/02, 17/02, 02/03, 16/03, 30/03, 06/04, 20/04, 04/05, 18/05, 01/06, 15/06

1200 - 1225 hrs Drop in workshop to learn and practice some brief 1 - 3 minute 'Spot Meditations' for home and work

1230 - 1250 hrs Guided 'Standard' Meditation

- These non-religious sessions are for TQEH and BHI staff and volunteers so please sign in after swiping in.
- There is no cost, and feel free to come and go as your schedule allows.
- Basil Hetzel Institute for Translational Health Research, 37a, Woodville Rd, Ground floor Seminar Rooms

"There is good evidence that regular sessions of mindful attention have a calming effect on the amygdala, the brain's emotion processor, and reduce impulsive reactions to stressful or negative thoughts and experiences"

'New Scientist 13 September 2017' Michael Bond

- Prof Benedetta Sallustio is the organiser and sponsor of the BHI Meditation Program. Benedetta.Sallustio@sa.gov.au
- Sessions are led by Nicholas Rundle, who is a qualified teacher of Secular Meditation and is the Uniting Church Chaplain at the RAH nicholas.rundle@sa.gov.au Phone: +61870741122

The Meditation Program is a project of the CALHN Wellness and Spiritual Care.



PUBLICATIONS

If you wish to have a recent publication included, please send details to the BHI Communications Officer rebecca.anderson@adelaide.edu.au

Hart ZP, Nishio N, Krishnan G, Lu G, Zhou Q, Fakurnejad S, et al. Endoscopic Fluorescence-Guided Surgery for Sinonasal Cancer Using an Antibody-Dye Conjugate. *The Laryngoscope*. 2019 Dec 19. DOI: 10.1002/lary.28483. [Giri is currently undertaking part of his PhD studies at Stanford University in the US with the support of a Fulbright Scholarship].

Chan F, Lester S, Whittle S, Hill C. The utility of ESR, CRP and platelets in the diagnosis of GCA. *BMC Rheumatology*. 3(1):Article Number: 14, 2019 doi.org/10.1186/s41927-019-0061-z.

Duke G, Moran J, Santamaria J, Pilcher D. Sepsis in the new millennium - Are we improving? *Journal of Critical Care*. 56:273-280, 2020 Jan doi.org/10.1016/j.jcrc.2020.01.015.

Gummow J, Masavuli M, Mekonnen Z, Li Y, Wijesundara D, Shrestha A, Voskoboinik I, Gowans E, Grubor-Bauk B. Safety profile of a multi-antigenic DNA vaccine against hepatitis c virus. *Vaccines*. 8(1), 2020 Jan. doi.org/10.3390/vaccines8010053.

Holmes A, Mackenzie L, Roberts M. Disposition and measured toxicity of zinc oxide nanoparticles and zinc ions against keratinocytes in cell culture and viable human epidermis. *Nanotoxicology*. 1-12, 2020 Jan doi.org/10.1080/17435390 .2019.1692382.

Inacio M, Amare A, Whitehead C, Bray S, Corlis M, Visvanathan R, Wesselingh S. Factors associated with accessing aged care services in Australia after approval for services: Findings from the historical cohort of the Registry of Senior Australians. *Australasian Journal on Ageing*. 2020 Jan. doi.org/10.1111/ajag.12760.

Konst R, Guzik T, Kaski J, Maas A, Elias-Smale S. The pathogenic role of coronary microvascular dysfunction in the setting of other cardiac or systemic conditions. *Cardiovascular Research*. 2020 Jan doi.org/10.1093/cvr/cvaa009.

McNeill D, Karapetis C, Price T, Meagher P, Piantadosi C, Quinn S, Roder D, Padbury R, Maddern G, Townsend A, Jayawardana M, Roy A. Treatment and outcomes of metastatic colorectal cancer patients in public and private hospitals: Results from the South Australian Metastatic Colorectal Cancer Registry. *Internal Medicine Journal*. (no pagination), 2020 Jan doi. org/10.1111/imj.14765.

Psaltis A, Vyskocil E. What are the challenges in choosing pharmacotherapy for rhinosinusitis? *Expert Opinion on Pharmacotherapy*. 1-7, 2020 Jan doi.org/10.1080/1465656 6.2020.1717467.

Stevens D, Holtzhausen L, Appleton S, Adams R. Concussion assessment tools - A possible measure of sleepiness? *Sleep Medicine*. (no pagination), 2019 doi.org/10.1016/j. sleep.2019.08.006.

Thiruvenkatarajan V, Nanjappa N, Sembu M, Meyer E, Van Wijk R, Jesudason D. An analysis of the Australian Therapeutic Goods Administration Database of Adverse Event Notifications of diabetic ketoacidosis associated with sodium-glucose cotransporter-2 inhibitors in surgical patients. *Anaesthesia and Intensive Care*. (no pagination), 2020 doi.org/10.1177/0310057X19892988.

Al-Qurain A, Gebremichael L, Khan M, Williams D, Mackenzie L, Phillips C, Russell P, Roberts M, Wiese M. Prevalence and factors associated with analgesic prescribing in polymedicated elderly patients. *Drugs & Aging*. (no pagination), 2020 Feb doi.org/10.1007/s40266-019-00742-0.

Albayaty Y, Thomas N, Ramirez-Garcia P, Davis T, Quinn J, Whittaker M, Prestidge C. pH-Responsive copolymer micelles to enhance itraconazole efficacy against *Candida albicans* biofilms. *Journal of Materials Chemistry*. B. (no pagination), 2020 doi.org/10.1039/c9tb02586c.

Khadra Y, Walker J, Hakendorf P, Proudman S, Rischmueller M, Hill C, Whittle S, Pontifex E, Roberts-Thomson P. Scleroderma renal crisis: Observations from the South Australian Scleroderma Register. *Internal Medicine Journal*. 2020 Feb doi: 10.1111/imj.14772.

Liu X, Yousef S, Anissimov Y, van der Hoek J, Tsakalozou E, Ni Z, Grice J, Roberts M. Diffusion modelling of percutaneous absorption kinetics. Predicting urinary excretion from *in vitro* skin permeation tests (IVPT) for an infinite dose. *European Journal of Pharmaceutics & Biopharmaceutics*. 2020 Feb doi.org/10.1016/j.ejpb.2020.01.018.

Mulder C, Lassi Z, Grieger J, Ali A, Jankovic-Karasoulos T, Roberts C, Andraweera P. Cardio-metabolic risk factors among young infertile women: a systematic review and meta-analysis. BJOG: *An International Journal of Obstetrics & Gynaecology*. 2020 Feb doi:10.1111/1471-0528.16171.

PUBLICATIONS CONTINUED

If you wish to have a recent publication included, please send details to the BHI Communications Officer rebecca.anderson@adelaide.edu.au

Nastiti C, Ponto T, Mohammed Y, Roberts M, Benson H. Novel nanocarriers for targeted topical skin delivery of the antioxidant resveratrol. *Pharmaceutics*. 12(2), 2020 Jan. doi. org/10.3390/pharmaceutics12020108.

Ramachandran J, Kaambwa B, Muller K, Haridy J, Tse E, Tilley E, Altus R, Waddell V, Gordon D, Shaw D, Huynh D, Stewart J, Nelson R, Warner M, Boyd M, Chinnaratha M, Harding D, Ralton L, Colman A, Woodman R, Wigg A. Cost effectiveness of treatment models of care for hepatitis C: the South Australian state-wide experience. *European Journal of Gastroenterology & Hepatology*. 2019 Dec doi: 10.1097/MEG.0000000000001659.

Ranasinghe I, Hossain S, Ganesan A, Krumholz H, McGavigan A. In response. Institutional variation in quality of cardiovascular implantable electronic device implantation. *Annals of Internal Medicine*. 172(2):166-167, 2020 Jan doi. org/10.7326/L19-0709.

Thiruvenkatarajan V, Sim J, Emmerson R, Tong D, Liu W-M, Van Wijk R, Currie J. Predictors of early pharyngolaryngeal complications with cuffed supraglottic airway devices: A prospective observational study. *Journal of Clinical Anesthesia*. 61: Article Number:109614, 2020 May. doi. org/10.1016/j.jclinane.2019.09.008.

Camici P, Merz N, Beltrame J, Brown D, Crea F, Kaski J, Maas A, Ong P, Pepine C, Rimoldi O, Sechtem U, Shimokawa H, Elias-Smale S, Berry C. Commentary - The ISCHEMIA trial. *International Journal of Cardiology*. 2020 doi.org/10.1016/j. ijcard.2020.02.011.

Haifer C, Kelly C, Paramsothy S, Andresen D, Papanicolas L, McKew G, Borody T, Kamm M, Costello S, Andrews J, Begun J, Chan H, Connor S, Ghaly S, Johnson P, Lemberg D, Paramsothy R, Redmond A, Sheorey H, van der Poorten D, Leong R. Australian consensus statements for the regulation, production and use of faecal microbiota transplantation in clinical practice. *Gut*. 2020 Feb. doi.org/10.1136/gutjnl-2019-320260.

Rana A, Rana A, Hewett P. Multiple small bowel perforations secondary to tumor lysis-a complication of *Pseudomyxoma peritonei* in a patient undergoing intraperitoneal chemotherapy. *Journal of Gastrointestinal Cancer*. 51(1):289-291, 2020 Mar doi.org/10.1007/s12029-019-00216-x.

Roe Y, Buchbinder R, Grotle M, Whittle S, Ramiro S, Huang H, Gagnier J, Verhagen A, Ostensjo S. What do the OMERACT Shoulder Core Set candidate instruments measure? An analysis using the refined ICF linking rules. *Journal of Rheumatology*. 2020 Feb doi.org/10.3899/jrheum.190832.

Singh M, Jackson K, Wang J, ... Rischmueller M *et al.* Lymphoma driver mutations in the pathogenic evolution of an iconic human autoantibody. *Cell.* 2020 Feb. doi. org/10.1016/j.cell.2020.01.029.

Thomas M, Patel K, Gosch K, Labrosciano C, Mena-Hurtado C, Fitridge R, Spertus J, Smolderen K. Mental health concerns in patients with symptomatic peripheral artery disease: Insights from the PORTRAIT registry. *Journal of Psychosomatic Research*. 131. Article Number: 109963. 2020 Apr. doi.org/10.1016/j.jpsychores.2020.109963.

To M-S, Jukes A. Reporting trends of p values in the neurosurgical literature. *Journal of Neurosurgery*. 132(2):662-670, 2020. doi.org/10.3171/2018.8.JNS172897.

Tong S, Lye D, Yahav D, ... Warner M, et al. Effect of vancomycin or daptomycin with vs without an antistaphylococcal beta-lactam on mortality, bacteremia, relapse, or treatment failure in patients with MRSA bacteremia: A randomized clinical trial. *JAMA*. 323(6):527-537, 2020 Feb. doi.org/10.1001/jama.2020.0103.

Tran L, Sharrad K, Kopsaftis Z, Stallman H, Tai A, Spurrier N, Esterman A, Carson-Chahhoud K. Pharmacological interventions for the treatment of psychological distress in patients with asthma: a systematic review and meta-analysis. *The Journal of Asthma*. (pp 1-17), 2020 Feb. doi.or g/10.1080/02770903.2020.1731826.

Venugopal P, Gagliardi L, Forsyth C, Feng J, Phillips K, Babic M, Poplawski N, Rienhoff H, Schreiber A, Hahn C, Brown A, Scott H. Two monogenic disorders masquerading as one: severe congenital neutropenia with monocytosis and non-syndromic sensorineural hearing loss. *BMC Medical Genetics*. 21(1):35, 2020 Feb doi.org/10.1186/s12881-020-0971-z.



THRF NEWS

\$1 million in research grants to fight deadly diseases

Nine researchers have been awarded Project Grants worth \$1 million to fight our most deadly diseases and improve the health and wellbeing of the community. This was a hotly-contested grant round with our highest-ever number of submissions, all of which were of extremely high quality.

Congratulations to the following researchers from the BHI, TQEH who were successful in securing a grant:

- · **Professor Michael Roberts** (Basil Hetzel Institute / University of South Australia / TQEH) Preventing complications for Type 2 diabetes sufferers undergoing surgery: Addressing potentially life-threatening ketoacidosis associated with key anti-diabetic medicines
- · **Dr Robert Bryant** (Basil Hetzel Institute / The University of Adelaide / TQEH) Diet strategies for ulcerative colitis (an inflammatory bowel disease): The 4-SURE (4-Sulphide-Reducing) project: pioneering a new diet paradigm in the management of ulcerative colitis
- · **Dr Katharina Richter** (Basil Hetzel Institute / The University of Adelaide / TQEH) Preventing infections associated with mesh implants in hernia surgery: A new implant to stop infections in hernia surgery

THRF is the largest non-government funder of medical research in South Australia. This important funding is only possible thanks to the generous support of our donors, corporate partners and ticket buyers in the Hospital Research Home Lottery.

Visit our <u>website</u> to see the full list of projects covering leukemia, childhood brain cancer, inflammatory bowel disease, diabetes and more.

THRF's Impact Showcase Success

On Thursday 13 February, we were thrilled to welcome 400 guests to our Impact Showcase event to highlight the incredible impact made by THRF Group in 2019, thanks to the support from our donors.

We were inspired to hear from the Royal Adelaide Hospital's Head of Stroke, Associate Professor Tim Kleinig along with stroke patient Roslyne Harness and her husband Graeme about how medical research is saving lives.

Thank you to our donors, researchers, partners and supporters for joining the fight to save lives and improve care in South Australian hospitals, including TQEH.

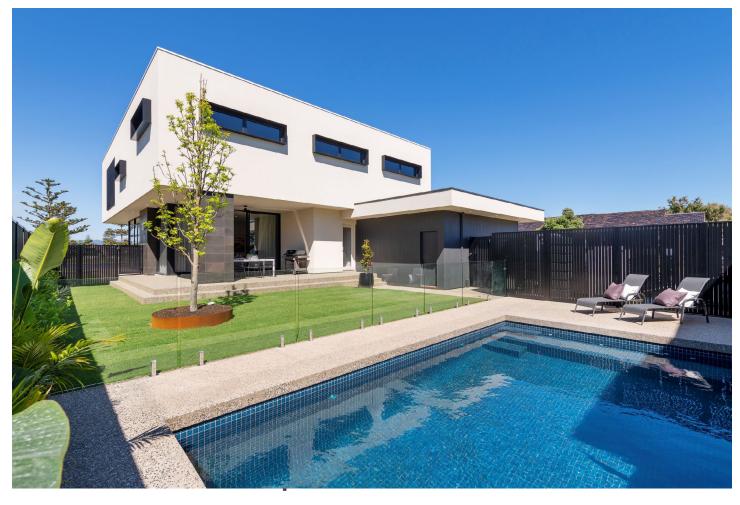


THRF CEO Paul Flynn led a panel discussion with A/Prof Kleinig and his patient Roslyne and her husband Graeme.



THRF NEWS CONTINUED

Home Lottery tickets selling fast



Over 85% of tickets have been sold in our Hospital Research Home Lottery!

By purchasing a ticket, you can join THRF's fight to support more than 50 areas of research and patient care across all South Australian communities and hospitals, including TQEH and the BHI.

Our \$3.7 MILLION Grand Prize offers the ultimate waterfront lifestyle along the banks of Patawalonga River. It comes fully furnished AND with \$1 MILLION cash.

You can purchase your ticket today from our office at 60 Woodville Road, Woodville or online. Good luck!