

MONTHLY BULLETIN FOR TOEH RESEARCH COMMUNITY

WINNING NEWS

www.basilhetzelinstitute.com.au

Follow us



Associate Professor Joy Rathjen appointed as Scientific Director



In mid-August Professor Guy Maddern, Director of Research at the Basil Hetzel Institute (BHI), announced, "I am delighted to advise members of the Basil Hetzel Institute that we have been able to obtain the services of Associate Professor Joy Rathjen as Scientific Director." He went on to say, "Joy brings a strong background in laboratory based research, is enthusiastic about gaining greater input from the universities in support of students and is keen

to provide support to both supervisors and students working within the Basil Hetzel Institute. This position is supported by The Hospital Research Foundation (THRF) and we are very grateful to them for their commitment to The Institute." THRF CEO Paul Flynn said "We're excited to welcome Associate Professor Joy Rathjen to the THRF team, seconded to the role of Scientific Director at the BHI to mentor researchers and further their impact in the community. Joy brings a wealth of science and research experience from across Australia and will be a huge asset to our team."

Joy has worked with Embryonic Stem (ES) cells since the early 1990's. Her research focussed on using ES cells to understand the regulation of early developmental decisions in the mammal, characterising genes and pathways that control cell decision-making processes, including a novel role for a metabolic switch in cell regulation, and demonstrating the existence of previously uncharacterised cell intermediaries. Her work has been instrumental in showing the importance of epigenetic control in early development.

Joy has held research positions in the Universities of Adelaide, Melbourne and Tasmania. In addition to her research work, she is passionate about student research. She has supervised students within her laboratory, has developed a teaching practice in the professional practice of science and science communication for higher degree by research students, and has acted as a postgraduate research coordinator for over 5 years in the School of Medicine at the University of Tasmania. Her teaching practise took her to PNG on an Australian Centre for International Agricultural Research funded program to develop and deliver a Graduate Certificate in Research for industry-based scientists in the National Fisheries Authority.

continued on page 3

SEPTEMBER 2019

ISSUE 126

IN THIS ISSUE

- p 3 News
- p 11 Student News
- p 12 Community Engagement
- p 17 General Information
- p 19 Work, Health & Safety
- p 20 Upcoming Events
- p 27 Publications
- p 29 THRF News

BHI SEMINARS

BHI HDR Student Seminars

Tuesdays, 1-2pm

BHI Invited Speaker Seminar Wednesday 2 October, 1-2pm

Professor Regine Süss

Albert-Ludwigs-University, Freiburg, Germany

BHI Staff Seminars

Thursdays, 1-2pm

All seminars take place in the BHI Ground Floor Seminar Rooms

UPCOMING EVENTS

BHI Off the Clock

Wednesday 25 September, 4pm

TQEH Research Expo

Thursday 10 October
Friday 11 October
BHI Ground Floor Seminar Rooms

BHI HUB

From the BHI Facility Manager Kathryn Hudson

BHI Ground Floor Phone ext: 27427

kathryn.hudson@sa.gov.au



What does it mean when funding outcomes are provided "under embargo"?

For NHMRC's purposes, an embargo is the prohibition of publicising information provided by NHMRC until a certain date or until certain conditions have been met. NHMRC provides funding outcomes under embargo on the condition that they will not be publicised (e.g. through media, social media or on individuals' or Administering Institutions' websites) until the embargo is lifted.

Under the embargo period, applicants *can share* outcomes with the research team and partner organisations (where applicable), however, they must not publicise the information until the embargo has been lifted. This includes posting comments regarding outcomes in public domains such as social forums, websites, journals or newspapers. Once the embargo is lifted, applicants may share outcomes publically.

Allowable activities: During the embargo period successful applicants may accept offers and proceed with planning. This includes seeking necessary approvals (for example, ethics approvals) and recruiting staff. Successful applicants may add grants to CVs for review (for example, as part of a new grant application) provided they add the words 'under embargo'. Research projects may commence if the embargo continues past the commencement date.

Rationale: NHMRC recognises that delays in officially releasing outcomes can make it difficult to maintain partner commitments and employment contracts associated with research projects. By releasing results under embargo, NHMRC aims to facilitate researchers taking necessary steps to initiate research projects so they commence on time.

Adapted from NHMRC website 2019

From the BHI Communications Officer Rebecca Anderson

BHI Ground Floor Phone ext: 27345

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



Science Alive! is the Basil Hetzel Institute's most significant community outreach activity each year. The BHI has participated in this event every August since 2014. Almost 20 volunteers give up part of their weekend to enthuse young South Australians and their families about science and medical research through hands-on activities (see story on page 15).

During the year there are also many other opportunities to engage with the general public. For example, we'd like to publicly thank those who have shown small groups of Woodville Primary School students around the labs this year, as well as individuals who have contributed to high school biology projects, worked with visiting foreign students or taken other VIPs from government and Universities on tours around our facilities. And of course, we also thank those who have contributed to the many presentations, public tours and activities arranged by The Hospital Research Foundation!

NHMRC Development Grant awarded





NHMRC Development Grant (#1171756)

A novel medicated resorbable adhesion barrier device for use in abdominal surgery

\$953,880

2020 - 2022

CIA, <u>Professor Peter-John Wormald</u>, ENT Surgery, The University of Adelaide & CALHN

CIB, <u>Associate Professor Sarah Vreugde</u>, ENT Surgery, The University of Adelaide

CIC, <u>Professor Guy Maddern</u>, Surgical Science Research Group, The University of Adelaide & CALHN

This project aims to develop a new medication that improves wound healing and prevents microbial infections. The medication is specifically made for application into the abdomen after surgery. The formation of adhesions after abdominal and pelvic surgery is often considered an inevitable consequence of these procedures yet it is one of the main complications that can cause many symptoms such as pain and infertility. Our ultimate goal is to improve wound healing after abdominal surgery so that the formation of adhesions does not occur.

It is estimated that around 9 million abdominal surgeries occur each year in the US with some form of adhesion presenting in up to 90% of cases, costing the health care system \$USD 2.3 billion annually. Numerous strategies have been tested to reduce adhesion formation, however, to date, no surgical or medical therapeutic approaches have been wholly successful in the prevention of adhesions following abdominal surgery.

Research will be undertaken by an inter-disciplinary research team with the objective of obtaining regulatory and marketing approval of a novel patent-protected resorbable adhesion barrier device composed of a surgical hydrogel (Chitogel) complexed with Deferiprone (Def). This compound has potent anti-microbial and anti-adhesive properties.

Building on the outstanding results obtained in our pilot studies, this NHMRC Development Grant will allow us to undertake studies to:

- prove effectiveness
- assess the biodistribution
- demonstrate the absence of topical and systemic toxicity and show good biocompatibility of Def-Chitogel in relevant animal models which will allow rapid translation in the clinic.

The proposed studies match regulatory requirements to support a Request For Designation (RFD) and Premarket Approval (PMA) filing to the FDA for Def-Chitogel as an adhesion barrier device in abdominal surgery.

Three THRF Fellowships awarded to BHI researchers



finding cures improving care

In mid August The Hospital Research Foundation announced a total of 16 Fellowships that have been awarded to researchers across Adelaide in the fight to find cures and improve healthcare for all South Australians. Paul Flynn, THRF CEO, said the eight Early Career and eight Mid Career Fellowships would help deliver research outcomes that save lives. He said "This was a state-wide grant round and all submissions were of an extremely high calibre. All applications have undergone rigorous assessment by an independent review panel to ensure they will deliver excellent medical research and healthcare outcomes."

Three of these fellowships have been awarded to researchers based at the Basil Hetzel Institute. Each of their projects is described in the following articles. Visit THRF's website for the full list of recipients.



L-R: Dr Amy Holmes, Dr Makutiro Masavuli and Dr Branka Grubor-Bauk each received a THRF Fellowship

Dr Branka Grubor-Bauk, Virology Group, BHI & The University of Adelaide THRF Mid Career Fellowship 2020 - 2022 \$460,000 branka.grubor@adelaide.edu.au

Neutralizing the menace of Zika virus

Since an outbreak in Brazil during 2016, Zika virus (ZIKV) spread rapidly throughout the Americas leading the World Health Organisation (WHO) to declare ZIKV as a public health emergency. There were over 750,000 suspected and confirmed cases of ZIKV from 2015 to 2017. People in 84 countries and territories have been infected with ZIKV. As a consequence, WHO included ZIKV as one of the priority diseases for action to prevent epidemics, as the risk of a new outbreak in the future cannot be ignored.

Zika virus is primarily transmitted by the bite of infected *Aedes aegypti* mosquitoes. Although cleared from blood after about 7-10 days, ZIKV persists in semen for 3 months. It is the only arbovirus [any of a group of viruses which are transmitted by mosquitoes, ticks, or other arthropods] that is sexually transmitted, with persistence in the reproductive tissues of males that has been linked with testicular damage and infertility.

ZIKV infection during pregnancy may result in early miscarriage, fetal death, placental insufficiency and intrauterine growth restriction. However, the most devastating aspect of ZIKV infection is congenital Zika syndrome (CZS) in infants born to infected mothers. This syndrome includes a spectrum of severe, life-long birth defects. CZS presents with neurological defects such

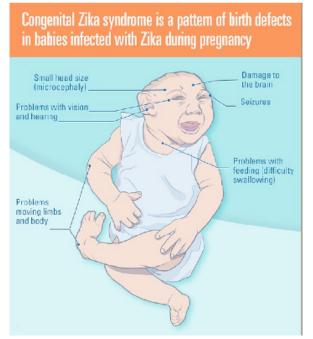
as microcephaly and other complications, including vision and hearing impairment, as well as articular and musculoskeletal abnormalities. About 20% of children born with CZS have normal head size but even children born without any obvious physical abnormality were later found to have developed brain damage and developmental problems. In addition, ZIKV infections during any trimester of pregnancy may result in CZS, even if the infection was asymptomatic.

Guillain-Barré syndrome (GBS) is an uncommon sickness of the nervous system in which a person's own immune system damages the nerve cells, causing muscle weakness, and sometimes, paralysis. GBS is strongly associated with Zika but only a small proportion of people with a recent Zika infection get GBS.

There is no therapy for ZIKV and because the infections are mostly subclinical, antiviral agents are not useful. The causal association of Zika virus (ZIKV) with microcephaly, congenital malformations in infants and Guillain-Barré syndrome in adults highlights the need for effective vaccines. Efforts to develop ZIKV vaccines have focused on the viral envelope. ZIKV NS1 [non-structural protein] as a vaccine immunogen has not been fully explored although it can circumvent the risk of antibody dependent enhancement of ZIKV infection, associated with envelope antibodies. This project will focus on further development of a novel vaccine encoding a secreted ZIKV NS1 which has shown rapid protection from systemic ZIKV infection in immunocompetent mice.

Dr Amy Holmes, Therapeutic Research Centre, School of Pharmacy and Medical Sciences, BHI & University of South Australia THRF Early Career Fellowship 2020 – 2021 (0.6 FTE) \$152,000

amy.holmes@unisa.edu.au





finding cures improving care

Development of novel prevention and treatment strategies for postpartum vaginal and perineal infections

Amy's area of research concerns advancing the dermatological sciences and wound healing. This project aims to develop novel prevention and treatment strategies for postpartum vaginal and perineal infections that occur during childbirth. More than 85% of women who have a vaginal birth will suffer from a vaginal/perineal tear. Subsequent infections cause 11% of maternal deaths globally yet there are limited options for management with sitz baths [a warm, shallow bath that cleanses the perineum] the first line of defence. To date, research has identified high rates of mortality and morbidity associated with these wounds, yet very little research exists on localised treatment. Prophylactic antibiotics in vaginal births are not currently recommended by the World Health Organisation therefore topical products are needed to play a key role.

This project will investigate the use of novel antiseptic and probiotic formulations to reduce infections and promote wound healing. This multi-disciplinary study of combining validated *ex vivo* models as gold-standard human surrogates with state-of-the-art metabolic imaging, will aid evaluation of these novel therapeutics for vaginal, rectal and perineal wounds. The *ex vivo* model is viable pig tissue that would normally go to waste as a food by-product. Amy will be culturing the pig tissue in the laboratory as a surrogate for human vaginal and perineal wounds as a means of screening novel treatments. An imaging technique known as multiphoton microscopy with fluorescence lifetime imaging will be used to assess wound healing to ensure that evidence-based therapeutics are developed for translation into clinic. Novel nanomaterials that exhibit antimicrobial behaviour, that are also biocompatible with tissue, will be screened. The key innovation in this project will be the development of a two-stage treatment, firstly to control infection and secondly to administer a probiotic treatment to prevent recurrent infection.



Three THRF Fellowships awarded to BHI researchers (continued)



finding cures improving care

Dr Makutiro Masavuli, Virology Group, BHI & The University of Adelaide

THRF Early Career Fellowship 2020 – 2021 \$240,000

makutiro.masavuli@adelaide.edu.au

Hepatitis C: Examining the protective efficacy of a Hepatitis C virus (HCV) vaccine

Globally, an estimated 71 million people have chronic hepatitis C virus (HCV) infection, while there are 3-4 million new infections per annum including approximately 10,000 in Australia. The majority of chronic persistent infections result in serious liver disease, including cirrhosis and hepatocellular carcinoma, in many patients. Hepatitis C medications such as the new generation direct acting antiviral agents (DAAs) can cure infections, but these individuals can be re-infected and resistance to DAAs may emerge as a future barrier to therapy. In addition, it is believed that only 20% of HCV-infected persons are aware of their diagnosis while approximately 7.4% (or 1.1 million persons) of those diagnosed received treatment worldwide in 2015. Furthermore, the high cost of the DAAs limits their use particularly in low to middle-income regions, where the majority of these individuals are likely to remain untreated and represent a reservoir for continuing transmission. Thus, HCV medications alone are unlikely to eliminate HCV in the absence of a vaccine that can limit viral transmission. Consequently, a prophylactic HCV vaccine is necessary to relieve the worldwide burden of HCV disease.

DNA vaccines are simple, inexpensive and stable at room temperature, simplifying handling and distribution as well as raising hopes that even developing countries can benefit from this type of vaccine. The Virology Group has pioneered innovative DNA vaccines which have been engineered to increase the frequency of white blood cells to target highly conserved HCV viral proteins. We have shown that these vaccines are highly immunogenic when tested in small and large animals. These DNA vaccines are now ready to advance to human clinical trials. The current project is therefore crucial for this purpose as it will provide evidence of efficacy and/or safety in animals prior to starting human clinical trials. As virus challenge represents the only measure of vaccine protective efficacy, we aim to assess the protective efficacy of our DNA vaccines in a recently developed novel transgenic mouse model that is permissive for HCV infection. The data gathered in this study will be highly significant and of great scientific value, as it will determine if the DNA vaccines can elicit immune responses which can protect against virus challenge, and by inference against authentic HCV challenge in vaccinated humans.

What receiving this fellowship means to me

Receiving this fellowship is a validation of all the dedication, time, effort and hard work that has gone into this project so far. It is also a confirmation of the value of the research conducted by the Virology Group here at the BHI. I am very grateful for the opportunity that the THRF Early Career Research Fellowship provides me with. I will be able to dedicate the next two years of my time here at the BHI assessing if the DNA vaccines I developed during my PhD studies can protect animals against virus infection. This research is important as it lays the groundwork for testing these vaccines in human clinical trials.

Makutiro Masavuli

Sven Surikow: Ralph Reader Prize finalist at CSANZ meeting held in Adelaide







L-R: Leonard Kritharides, President of the Cardiac Society of Australia and New Zealand, presenting Dr Sven Surikow with his 2019 Ralph Reader Prize (Basic Science) finalist certificate

The Cardiac Society of Australia and New Zealand's (CSANZ) 67th Annual Scientific Meeting is the largest national congregation of clinicians and scientists specialising in cardiovascular diseases. This year's CSANZ meeting was held in conjunction with the International Society of Heart Research (ISHR) meeting, at the Adelaide Convention Centre from 8 - 11 August 2019, with leading national and international experts covering hot topics from the entire field. The profile and scientific content of the meeting was further enhanced by interactions with the American College of Cardiology & European Society of Cardiology (ESC), as joint sessions with CSANZ were presented by international and local experts focusing on innovation and training in cardiology, heart failure with preserved ejection fraction and atrial fibrillation.

The Basil Hetzel Institute had a strong presence at this year's CSANZ meeting with researchers from three research groups attending: Professor John Beltrame's Translational Vascular Function Research Collaborative (John, Dr Rosanna Tavella, Dr Adrian

Abdo, Clementine Labrosciano and Abdul Shiekh), Professor John Horowitz's Cardiovascular Pathophysiology and Therapeutics Group (John, Dr CherRin Chong, Sven Surikow and Irene Stafford) and Dr Isuru Ranasinge and Dr Linh Ngo from the Health Performance and Policy Research Unit.

Cardiovascular Pathophysiology and Therapeutics Group

Sven Surikow, who completed his PhD research at the BHI under the supervision of Professor John Horowitz and Dr Ha Nguyen, was selected as one of three finalists in the Basic Science section for the Ralph Reader Prize. The Ralph Reader Prize is the most prestigious research award given to young Investigators by the CSANZ. This Young Investigator Award is named after Dr Ralph Reader as a tribute to his encouragement of young investigators during his time serving for the National Heart Foundation (1961-1980). Another BHI alumni, Dr Amenah Jaghoori, who completed her PhD under the supervision of Professor John Beltrame, was a finalist in the Clinical Section of the Ralph Reader Prize in 2014.

Sven's research focused on the pathophysiology and treatment of Takotsubo syndrome, also known as broken heart syndrome, which is usually triggered by intense emotional or physical stress. Exactly what causes Takotsubo syndrome is still a scientific mystery. Sven's work was trying to understand the underlying biochemical pathways in the hope that a treatment can be found to not only help during the acute phase of Takotsubo syndrome, but also to prevent a second episode occurring. At CSANZ, Sven presented his results on the impact of a therapeutic intervention (nitric oxide synthase inhibition) on cardiovascular injury and mortality. Extrapolated to clinical Takotsubo syndrome, this treatment may reduce early mortality risk at the expense of prolonged myocardial inflammatory activation. Sven is currently writing up his results for manuscript submission. An earlier article on his research can be found here.

CSANZ & ISHR meeting (continued)

Translational Vascular Function Research Collaborative (TVFRC)

This annual meeting was a great opportunity for the group to present their findings, collaborate with peers and learn more about world class cardiovascular research. Professor John Beltrame, Dr Adrian Abdo, PhD students Clementine Labrosciano and Abdul Shiekh as well as medical students Dione Jones and Peter Litwin presented mini-orals and posters. Professor Beltrame was invited to speak at the cardiac imaging session on his research on coronary vasomotor functional testing and also provided an update on the MINOCA-BAT trail in Australia. Dr Adrian Abdo presented a 3 minute mini-oral presentation about how zinc deficiency upregulates key zinc transport proteins and upregulates endothelial cells' expression and release of the potent artery constrictor, endothelin-1. Adrian also co-chaired the Early Career Investigator Symposium held by the International Society for Heart Research.



L-R: TVFRC members Dr Rosanna Tavella, Dione Jones and Professor John Beltrame with former lab member, cardiology trainee Dr Lynn Khor

Health Performance and Policy Research Unit

Dr Linh Ngo was one of 3 finalists in the Heart Rhythm Prize session at CSANZ. She has written the following account of her experience of the CSANZ meeting: "For me, as a cardiologist and now as a PhD candidate, being able to participate in CSANZ 2019 was not only a great honour but also a great opportunity. Through this conference I have gained essential knowledge and skills, recognition for my work, as well as networks with other fellow researchers with potential collaborations.

During CSANZ 2019 I attended scientific sessions presented by world-renowned experts and listened to the most up to date research in the field of cardiology, in particular, research into cardiovascular diseases. I also had the chance to present the results of my study as a Heart Rhythm Prize Finalist, which was a very good learning experience. I had practiced a lot for this

presentation before the conference and therefore my knowledge, my presentation skills, as well as my confidence, were greatly improved as a result of this opportunity. Watching and learning from other competitors also helped me to further improve my skills in presentation. As I will present results from my study at the upcoming European Society of Cardiology Congress at the end of August, I can perform even better with the experience I gained from CSANZ 2019. At this meeting I also met and networked with fellow researchers from other states and countries from around the world. Furthermore, I was recognised as an emerging researcher and invited to the mentoring dinner. Over the course of the dinner I networked with other young researchers and learnt about many interesting research projects being conducted. The mentors also shared their stories, experiences and gave advice that was both inspirational and helpful for my research career.

Taken together, attending CSANZ 2019 greatly benefitted my PhD study in the short-term and my career in the long-term."



HPPRU PhD student Dr Linh Ngo presents her results

Dr Tom Eldredge and Amita Ghadge: 3MT Finalists for the Faculty of Health and Medical Sciences











Research students have just 3 minutes to explain their thesis, using only one slide, during the Three Minute Thesis (3MT®) competition. BHI PhD students **Dr Tom Eldredge** (Oesophageal Physiology Group, led by Professor George Kiroff) and **Amita Ghadge** (Breast Biology and Cancer Unit, led by Associate Professor Wendy Ingman) were finalists in the Faculty of Health and Medical Sciences competition held at The University of Adelaide on Wednesday 21st August. While they each presented engaging talks, they were not the two students selected to compete for the faculty in the University wide final which will take place on Tuesday 10th September from 6pm. This popular event has already sold out but keep your eye on The University of Adelaide website and social media as they have livestreamed the event in previous years. Ten finalists from Australian universities will go on to compete in the Asia Pacific finals. If you're a Higher Degree by Research student keep your eye on the dates for 2020.

The first 3MT competition was held in 2008 at the University of Queensland (UQ). According to their <u>website</u> "The idea for the Three Minute Thesis (3MT®) competition came about at a time when the state of Queensland was suffering severe drought. To conserve water, residents were encouraged to time their showers, and many people had a three minute egg timer fixed to the wall in their bathroom. The then Dean of the UQ Graduate School, Emeritus Professor Alan Lawson, put two and two together and the idea for the 3MT competition was born." 3MT is now held in over 600 universities in more than 65 countries!



Dr Mark McGregor: Winner of Best New Concept Award at AGITG meeting in Adelaide

Dr Mark McGregor, Medical Oncology Fellow at TQEH, won the Best New Concept Award (value \$3,500) at the 21st Annual Scientific Meeting of the <u>Australasian GastroIntestinal Trials Group (AGITG)</u> that was held in Adelaide in late August. The AGITG is a not-for-profit membership organisation dedicated to improving the health and quality of life of patients with gastrointestinal cancer by developing and conducting impartial and collaborative multi-disciplinary clinical trials which include health professionals, patients and consumers.

Mark's new concept, "A phase II study of oncolytic immunotherapy of metastatic neuroendocrine tumours using intralesional Rose Bengal diodium in combination with pembrolizumab", follows on from the current trial using Rose Bengal, a red stain that was originally used to turn wool and food bright red! However, here it is used to create an inflammatory response [PV-10 is the cancer formulation of Rose Bengal]. The proposed new treatment for metastatic neuroendocrine tumours uses immunotherapy medication which traditionally doesn't work on its own with this type of cancer. This is because these neuroendocrine cancers have few immune cells within the tumour, which are needed to create an immune response. By injecting Rose Bengal, shown to regress tumours in melanoma patients, directly into liver lesions, Mark and his



L-R: Dr Mark McGregor with Professor Tim Price, Chair of AGITG and lead researcher with the Solid Tumour Group at the Basil Hetzel Institute, TQEH

colleagues are hoping to create an inflammation response, as seen in earlier phase trials, which will then allow immunotherapy drugs to work better. A story and a video of Mark explaining his new concept can be found on the <u>AGITG website</u>. In addition to national media, Mark's story was also picked up by the financial <u>media</u>!

This prestigious award from the AGITG is voted for by both local and international experts. Mark's award was presented by **Professor Tim Price**, an oncologist at TQEH who has been Chair of AGITG since 2014. Tim heads up the Clinical Trials Group at TQEH and is research leader of the Solid Tumour Group which is based at the Basil Hetzel Institute, TQEH. Another finalist for this award, medical oncologist **Dr Yoko Tomito**, is currently undertaking a PhD with Tim.

Scientific Director (continued from front page)

As Scientific Director at the BHI, Joy has put her pipettes away and will be working to support the scientists and students achieve their research goals. Joys says that "As a developmental biologist I have worked in departments of Biochemistry, Zoology and Medicine, in University and commercial research. I am keen to put all I have learnt about the process of research into practise in this new role as Scientific Director."

Joy would like to thank the staff and students at the BHI for their warm welcome and is really looking forward to working with them into the future. As she says, "This is a new role, and it will be what we make of it. Please don't hesitate to come and see me if you think I can be of help."

If you would like to contact Joy, please remember that her working days at the BHI are Mondays, Tuesdays and Wednesdays!

Contact details: email: joy.rathjen@sa.gov.au, phone: +61 8222 6524, Room 1E.04, Level 1 BHI building

BHI STUDENT NEWS

BHI STUDENT REPS 2019-2020



Mirabel Alonge (Level 2) mirabel.alonge@adelaide.edu.au



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



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

Welcome to new students

Ghais HOUTAK, PhD student, The University of Adelaide, ENT Surgery, Level 1 BHI

Supervisors: Associate ProfessorSarah Vreugde, Professor Peter-John Wormald, Associate Professor Alkis Psaltis

Thesis title: Development of a personalised therapeutic protocol for *Staphylococcus aureus* recalcitrant chronic rhinosinusitis

Scholarships: Adelaide Scholarships International from The University of Adelaide and a THRF Postgraduate Top-up Scholarship (3 years) ghais.houtak@adelaide.edu.au



Sarena LA, Honours student, Bachelor of Health and Medical Science (Discipline, Medicine), The University of Adelaide, Translational Vascular Function Research Collaborative, Level 2 BHI

Supervisors: Dr Rosanna Tavella & Dr Sivabaskari Pasupathy

Thesis title: Characteristics and Clinical Outcomes of Myocardial Infarction with Non-Obstructive Coronary Arteries (MINOCA) Patients Undergoing Cardiac Magnetic Resonance Imaging

Scholarship: The Hospital Research Foundation

Honours Scholarship

sarena.la@student.adelaide.edu.au



September "BHI Off the Clock"

4pm Wednesday 25th September
BHI Ground floor seminar rooms
All BHI Staff and Students,
and THRF Staff are welcome to join us!

Mindfulness session

2pm every Wednesday
BHI Ground floor seminar rooms

At 2pm each week the BHI Student Reps will be running a short (10-15 minutes) guided mindfulness session - please feel free to join in.

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

Patient risk should be public: Doc

DIXIE SULDA

THE chances of a patient having complications after a cardiac device is implanted, depend greatly on where the procedure is undertaken.

A University of Adelaide study looked at 174 hospitals across Australia and New Zealand and included 80,000 patients. It found complication rates at hospitals varied from 5 per cent to 14 per cent.

University of Adelaide's Drawn Parker Research Section 2018.

University of Adelaide's Dr Isuru Ranasinghe said the risk of complication varied greatly.

"That's a huge variation, that's not the sort of variation that is explained by the significance of the patient," Dr Ranasinghe, a senior cardiologist at Central Adelaide Local Health Network, said.
"Hospitals that have

"Hospitals that have 14 per cent and 15 per cent (complication rates) ... that's not really acceptable and poses a safety risk for patients."

Dr Ranasinghe said complication rates of hospitals should be made publicly available.

"There's really no reason we can't do that," he said.

An SA Health spokeswoman told *The Advertiser* all patients undergoing surgery were fully consulted by their doctor about expected surgical outcomes and any associated risks.

Dr Isuru Ranasinghe The Advertiser - Saturday 3 August

Read this story on <u>THRF's website</u>: The chances of patients experiencing complications after having a cardiac device implanted vary according to where they have the procedure, according to a recent study.

The study of 174 hospitals in Australia and New Zealand published today in the Annals of Internal Medicine shows that the quality of care people receive may account for the wide variation in the rate of complications after having a cardiovascular implantable electronic device (CIED) insertion.

"The study included 81,304 patients who received a new CIED with 65,711 permanent pacemakers and 15,593 implantable cardioverter-defibrillators," says the study's lead author, University of Adelaide's **Dr Isuru Ranasinghe**, Senior Cardiologist, Central Adelaide Local Health Network.

Honours Information Session Wednesday 7 August

The Faculty of Health and Medical Sciences at The University of Adelaide held an Honours Recruitment Event in Bonython Hall for students interested in pursuing honours in 2020.

The Basil Hetzel Institute was represented by Honours Coordinator Dr Peter Zalewski (Translational Vascular Function Research Collaborative), as well as Drs Eric Smith (Solid Tumour Group), Saifei

Liu (Cardiovascular Pathophysiology and Therapeutics group), Chandra Kirana (Surgical Science Research Group and Cher-Rin Chong (CVPT group).



L-R: Drs Peter Zalewski, Eric Smith, Saifei Liu, Chandra Kirana and Cher-Rin Chong

Dr Kati Richter: SA Tall Poppy visit to Flaxmill School, Thursday 8 August





As part of the SA Tall Poppy campaign I gave 3 talks to students in years 5-7 at Flaxmill School P-7 in Morphett Vale. After introducing the students to the wonderful world of microbiology, I did a hands-on experiment with them, making bacteria on their hands glow. The excitement of the kids about the "glitterbugs" was amazing and set the stage to talk about bacterial infections and to emphasise the importance of hygiene. I really enjoyed the vibe and the curiosity of the kids and their teachers. It's great to see that science can light up curiosity in children and adults. Dr Katharina Richter

SA Science Excellence Awards Gala Dinner



BHI researchers attended the South Australian Science Excellence Awards Gala Dinner at the Adelaide Convention Centre on Friday 9 August thanks to sponsorship from The Hospital Research Foundation. They included, from left to right in the photo above, Professor Andreas Evdokiou (Breast Cancer Research Unit), Dr Branka Grubor-Bauk (Virology Group), Associate Professor Wendy Ingman (Breast Biology and Cancer Unit), Dr John Licari (Clinical Pharmacology Research Group), Dr Amy Holmes (Therapeutics Research Centre), Dr Mahnaz Ramenzapour (ENT Surgery), Sue Lester (Rheumatology Research Group), Kathryn Hudson (BHI Facilities Manager) and Dr Danielle Taylor (Adelaide G-TRAC Centre).

Associate Professor Joanne Young City of Charles Sturt Council Longest Table **Breakfast, Thursday 22 August**

The City of Charles Sturt Council held their second Longest Table breakfast and raised an incredible \$5,100 towards cancer research. Amongst the 110 people attending the breakfast, held at the local St Clair Recreation Centre, were clinical research leaders from The Queen Elizabeth Hospital who were the invited guests of The Hospital Research Foundation. They included Professor John Beltrame (TVFRC), Professor Renuka Visvanathan (Adelaide G-TRAC), Dr David Jesudasan (Endocrinology Unit), Professor Catherine Hill (Rheumatology Research Group), Associate Professor Maureen Rischmueller (Rheumatology Research Group) and Associate Professor George Kiroff (Oesophageal Physiology Group). Newly appointed Scientific Director, Associate Professor Joy Rathjen, and future CALHN Executive Director of Research Strategy, Professor Andrew Zannettino, together with Kathryn Hudson (BHI Facilities Manager) and Dr Rebecca Anderson (BHI Communications Officer) also attended the breakfast.



Left: City of Charles Sturt Council CEO Paul Sutton and Mayor Angela Evans #fork cancer

Right: Associate Professor Joanne Young being interviewed by THRF CEO Paul Flynn





While everyone enjoyed their pastries and yoghurts a three member panel was interviewed by THRF CEO Paul Flynn. BHI Associate Professor Joanne Young (Solid Tumour Group), spoke about her research on bowel cancer and the South Australian Young Onset (SAYO) study, while breast cancer researcher Professor Claudine Bonder from the Centre for Cancer Biology (UniSA) talked about some of her new results. The third panel member, THRF Board Member Rilka Warbanoff, shared her personal experience with cancer and the importance of research.

L-R: THRF staff: (top) Alex Brown, Siri Bakke, Ash Shukla, Paul Flynn, Poppy Barui, Jessica Middleton and Kristy Wildy. (Bottom) Jody Stead and Antonia Costa

Science Alive! 2-4 August 2019



All kinds of awesome.

Each August Science Alive! is a highlight of National Science Week, and is attended by an estimated 20,000 people over 3 days. The event aims to celebrate science and technology in a fun, interactive, dynamic and educational way. It is held at the Adelaide Showground in Wayville.

This year the BHI display was visited by large numbers of year 7-12 school students on Friday, and by people of all ages on

Saturday and Sunday, as can be seen in the photo of the grip strength graph that was taken at the end Science Alive! In addition to measuring their grip strength visitors could test their laparoscopic (key-hole) surgical skills on simulators loaned from the Royal Australasian College of Surgeons for the 6th consecutive year. Thanks to all the BHI researchers and TQEH surgeons who volunteered their time over this 3 day extravaganza of science. Rebecca and Kathryn



L-R: Some of the BHI volunteers at Science Alive! Bimala Dhakal, Nicky Thomas, Sholeh Feizi, Jo Dollard and Jannatul Tuli

More photos on next page and in an album on the BHI facebook page

Adrian Abdo	Clementine Labrosciano	
Mirabel Alonge	Saifei Liu	
Sarah Bernhardt	Guy Maddern (TQEH surgeon)	
Shantanu Bhattacharjya (TQEH surgeon)	Beatriz Martins	
Martin Bruening (TQEH surgeon)	Linh Ngo	
Prue Cowled	Beula Panchatcharam	
Bimala Dhakal	Katharina Richter	
Joanne Dollard	Adam Schofield (TQEH surgeon)	
Sholeh Feizi	Nicky Thomas	
Unyime Jasper	Markus Trochsler (TQEH surgeon)	
Laurine Kaul	Jannatul Tuli	
Chandra Kirana	Rajan Vediappan	

Science Alive! 2-4 August 2019



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

Funding Opportunities

2019 THRF Project Grants, SA wide

The Hospital Research Foundation's (THRF) 2019 Project Grants are available to support medical researchers at all career stages and for all types of medical research (basic science, clinical science and public health). The grants are designed to support creative and innovative research projects or ideas that address a specific problem or question. More information can be found on page 29 of this edition or on THRF's website. Applications close at 4pm on Wednesday 25th September 2019. Enquiries to savelives@hospitalresearch.com.au

2020 THRF Postgraduate Research Scholarships (12months and top-up)

Applications will open, using THRF's SmartyGrants process, next week. Further information will be posted on their website. All enquiries to gwenda.graves@sa.gov.au

2020 THRF Honours Research Scholarships

Applications for THRF funded Honours Scholarships (valued at \$8,000) for projects commencing at the Basil Hetzel Institute, The Queen Elizabeth Hospital in 2020 will open on Friday 6th September 2019. Information and forms will be provided on the <u>BHI website</u>. The closing date will be COB Wednesday 20th November 2019.

2020 THRF Vacation Research Scholarships

Applications will open on Friday 6th September 2019, and close at COB on Tuesday 22nd October 2019. Please visit the <u>BHI website</u> for further information and application forms.

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 Librarians

Every **Wednesday** a TQEH librarian (Anna or Rachel) visits the BHI (Room 1E.07). These librarians from the SA Health Library Service, The Queen Elizabeth Hospital campus, will be 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 anna.holasek@sa.gov.au or rachel.davey@sa.gov.au to arrange a meeting with them at TQEH Library on level 5B of the main building. Alternatively, visit our website at https://salus.sa.gov.au to view our services and resources or use the quick online chat option to contact us. To access any of the electronic resources you will need to register online for a SALUS username and password.



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 2019 Submission and Meeting Dates for Applications

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

Submission to site (sponsored studies)	Submission to HREC	CALHN HREC Meeting	
Friday 16 August	Monday 19 August	Thursday 19 September	
Friday 30 August	Monday 2 September	Thursday 26 September	
Friday 20 September	Monday 23 September	Thursday 10 October	
Fridau 27 September	Monday 30 September	Thursday 24 October	

In 2019 there will be one submission date (and one meeting) each fortnight with the committee split into two meeting groups. Researchers can submit to either meeting group – a full NHMRC prescribed quorum will be present at all meetings. Above are the meeting dates and final dates for submissions of applications for Scientific and Ethical approval.

Any study which includes drug therapy is considered by the Investigational Drug Subcommittee (IDSC) the week prior to the CALHN HREC. Drug studies will be passed on to the CALHN HREC meeting. ALL HREC meetings will continue to be held on Thursdays at Roma Mitchell House, Level 3, 136 North Terrace, Adelaide, and NOT at the BHI, TQEH.

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

Common laboratory safety issues

Personal Protective Equipment (PPE)

Personal protective equipment (PPE) is an important last line of defence against injury from specific hazards; however poor selection or failure to use the equipment properly can render it useless. There are a number of common issues that reoccur:

• **INCORRECT GLOVE SELECTION:** it is important when selecting gloves that they are both the right type and the right fit. Not all gloves fit all situations – glove compatibility is important as some gloves are permeable to some hazardous chemicals. It is important that staff and students understand how to select the right gloves for the job. Gloves also need to fit – so consideration of what size gloves to have available is also important.

This document, https://www.ansellpro.com/download/Ansell_8thEditionChemicalResistanceGuide.pdf provides guidance or lab supervisors can contact the local HSW Advisor/Officer for assistance on glove selection.

- LAB COATS: it is important that staff and students wear their lab coats and safety glasses correctly whenever in the laboratory. Correct wearing of a lab coat means a correctly fitting lab coat that is buttoned up with the sleeves rolled down. Laboratory supervisors need to be especially vigilant around ensuring that any laboratory rules regarding lab coats, gloves and safety glasses are strictly adhered to.
- **SAFETY GLASSES:** Safety glasses are required when conducting work with a splash or eye hazard. Standard spectacles do not substitute for safety glasses as they allow a droplet of chemical to strike the eye from an angle. Where safety glasses are required they need to be worn over reading glasses or an individual should invest in prescription safety glasses. Safety glasses should never be pushed up onto the head or placed beside someone on the bench.





UPCOMING EVENTS

THE QUEEN ELIZABETH HOSPITAL



September & October 2019

BHI Research Seminars with Invited External Speakers

www.basilhetzelinstitute.com.au/events

Seminars will run from 1:00 – 2:00pm in the Basil Hetzel Institute, TQEH Ground floor Seminar Rooms, 37a Woodville Road, Woodville South

Wednesday 4th September

SPEAKER: Dr Roger Yazbek, Catherine Marie Enright Kelly Cancer Research Fellow, College of

Medicine and Public Health, Flinders University of South Australia

TITLE: Take my Breath Away: Development of new breath tests for gastrointestinal

dysfunction and cancer

CHAIR: Professor Betty Sallustio, Principal Medical Scientist, Clinical Pharmacology Unit, Level 2,

BHI, TQEH. benedetta.sallustio@sa.gov.au

Wednesday 2nd October

SPEAKER: Professor Regine Süss, Professor of Pharmaceutical Technology, Albert-Ludwigs-

University, Freiburg, Germany

TITLE: The challenge of targeted nanoparticulate drug delivery in gene therapy and for tumor

treatment

CHAIR: Dr Kati Richter, NHMRC Early Career Researcher, Discipline of Surgery (TQEH), The

University of Adelaide, Level 2, BHI TQEH. katharina.richter@adelaide.edu.au

Wednesday 30th October LUNCH from 12:30pm

SPEAKER: Professor David Roder, Research Chair in Cancer Epidemiology and Population Health,

Australian Centre for Precision Health, Cancer Research Institute, University of South

Australia

TITLE: Colorectal cancer incidence, treatment, mortality and survival in Australia: A global

and national overview

CHAIR: A/Prof Joanne Young, Chief Medical Scientist, Department of Medical Oncology Level 1, BHI

TQEH. joanne.young@adelaide.edu.au

Please Note:

All Honours and Postgraduate research students are required to attend two thirds of BHI Research Seminar Programs. Attending students are requested to sign the attendance sheet each session. University of Adelaide students attending these seminar gain 1hr CaRST (refer to UoA website).





BHI Off the Clock

Wednesday 25th September 2019 from 4pm **BHI Ground Floor Seminar Rooms**

- For all staff, students & supervisors
- Meet informally & build relationships
- Casual networking/social environment
- Extended invitation to THRF to discuss potential media exposure with new researchers
- Pizza and drinks provided

Kindly supported by THRF









SAVE THE DATES The Institute

basil hetzel institute for translational health research

TQEH Research Expo

Basil Hetzel Institute, 37a Woodville Road, Woodville South

Thursday 10 October 2019

9:30am **Poster Presentations**

Researcher Showcase 2pm

Friday 11 October 2019

8:15am **Oral Presentations**

12pm **Plenary Lecture**

Awards Presentation 4pm

Full program details: bit.ly/2ZvTrfs



2019 Plenary Speaker Professor John Rasko 2018 ABC Boyer Lecturer Professor of Medicine Centenary Institute, Sydney

TQEH Research Expo is for researchers in training. Presenters include:

- Honours, Masters and PhD candidates based at the BHI, TQEH
- Clinical Trainees at TQEH

Following abstract submissions and initial judging, these researchers in training are selected to give a poster (Thursday 10th) or an oral presentation (Friday 11th). Multiple prizes are on offer thanks to our generous sponsors.

Enquiries to: Dr Prue Cowled Interim Chair, TQEH Research Expo **Organising Committee** (08) 8222 7541 prue.cowled@adelaide.edu.au www.basilhetzelinstitute.com.au www.facebook.com/basilhetzelinstitute

Major Sponsors









TQEH Research Expo Thursday 10 & Friday 11 October 2019

Thursday:	Student Post	ers & Res	earcher Sl	howcase
illui Suay.	Oludoni i Osi	icio a ilco	Carcilli O	IOWGGGC

9:30am Poster Presentations: Junior Researchers

10:45am Morning Tea

11:15am Poster Presentations: Senior Researchers (end 12:30pm)

2:00pm Researcher Showcase, followed by afternoon tea

Friday: Student Oral Presentations & Plenary Lecture

8:15am Honours & Summer Vacation Students

9:15 am Junior PhD Students (Laboratory)

10:15am Morning Tea & Trade Displays

10:45am Senior PhD Students (Laboratory)

12:00pm Plenary Lecture: Professor John Rasko

1:00pm Lunch & Trade Displays

2:00pm Clinical Research Group 1 (Clinical Trainees)

3:00pm Clinical Research Group 2 (Clinical Higher Degrees)

4:00pm **Award Presentations**

Basil Hetzel Institute, Ground Floor Seminar Rooms, 37a Woodville Rd more information: www.basilhetzelinstitute.com.au

Major sponsors of TQEH Research Expo











finding cures improving care

Wednesday 18 September 2019

5.45-7.30pm (doors open 5.30pm)

The Braggs, G60 Bragg Lecture Theatre University of Adelaide, North Terrace Campus

Chaired by HDA Co-Convenor Professor Claire Roberts Deputy Director, Robinson Research Institute, University of Adelaide

Professor Caroline McMillen will be presented with the Healthy Development Adelaide Award for 2019

All welcome - FREE admission: light refreshments following event Register at eventbrite.com.au/e/70087302007

Healthy Development Adelaide (HDA) 15th Annual Oration

Please join us for our very special 15th annual HDA Oration to be presented by former HDA Convenor, 2004-2011

Professor Caroline McMillen Chief Scientist for South Australia

South Australia: Transition, Translation and Transformation

The past two decades have been a time of profound geopolitical, economic and social change. Notions, regions and cities have faced major economic transitions as established industries have declined or moved offshore. Across this period, however, there have been regions where 'rusthelts' have emerged as farain belts' and where cities in decline have transformed to become 'ragnet cities' attracting talented creative arts and STEM professionals. Such transformations have been underpinned by the emergence of feop frog' technologies and convergence of research from different STEM disciplines to have major impacts on all aspects of our lives including health.

During the past 2 decodes Healthy Development Adelaide (HDA) has been a pioneer in harnessing the power of collaboration to translate innovation to benefit the health and wellbeing of women, babies and young people across the world. The next leadership rale for HDA will be to deploy the convergence of disciplines and technologies from within and beyond health to address the intergenerational transmission of poor health and to ensure healthy development is distributed equitably across the globe.



Professor Caroline McMillen commenced in the role as Chief Scientist for South Australia in October 2018 after serving as Vice-Chancellor of the University of Newtastle from 2011.

She is a Fellow of the Australian Academy of Health and Medical Sciences, a Fellow of the Royal Society of New South Wales and a Bragg Member of the Royal Institution, Australia. She holds a BA (Honours) and Doctor of Philosophy from the University of Oxford, and completed her medical training graduating from the University of Cambridge.

Professor McMillen's research on how the environment in early development determines adult health has attracted national and international recognition. She has served on a range of industry boards including the National Automotive Industry Innovation Council, CRC for Advanced Automotive Technology, CRC for Rail Innovation as well as a range of national and state research, industry

and government leadership groups. She is committed to building collaborations between research, government and industry to deliver economic, environmental and social impact. Professor McMillen was honoured at the end of her term as Vice-Chancellor to be presented with the Keys to the City of Newcastle in recognition of her leadership contribution to Newcastle and the region.

National Foundation for Medical Research and Innovation (NFMRI)

Presentation: Solving the wicked problem of the gap from research to translation

by Dr Noel Chambers, Chief Executive Officer, NFMRI. register <u>here</u>

Date: Tuesday 24 September **Time:** 10am – 11.30am

Location: Level 8, University of South Australia Cancer Research Institute, North Terrace



SEP.

Solving the wicked problem of the gap from research to translation

by RCHDirector@unisa.edu.au Follow

Free

Registe

Description

Supporting Medical Research: A presentation by Dr Noel Chambers, Chief Executive Officer, National Foundation for Medical Research and Innovation (NFMRI).

The NFMRI was founded in 1977 as a not-for-profit organisation that is entirely independent. It is not affiliated with any university, hospital, government or state body. The Foundation provides financial support to research projects whilst conserving and building its capital base.

Our Mission is "To advance innovations in medical research related to the nature, prevention, diagnosis, treatment and incidence of disease and other health poblems that have a significant impact on the health of humans".

Our Strategy is to support pre-commercial research projects in Australian Publicly Funded Research Organisations (PFRO's) addressing gaps along the innovation pathway and in particular the 'valley of death' to assist medical innovations advance and de-risk to attract next stage partners required for translation/commercialisation.

A key aspect of our strategy is enabling access to external expertise and capabilities to conduct pre-clinical research activities. We look for outcomes not outputs and assist in building frameworks around our supported projects that extend beyond the provision of grants.

Date And Time

Tue., 24 September 2019 10:00 am - 11:30 am ACST Add to Calendar

Location

University of South Australia South Australia Cancer Research Institute Level 8, North Terrace Adelaide, SA 5000

2ND ANNUAL TOEH STAFF BALL

SATURDAY 12th October

7PM ARRIVAL | 7.30PM START

Adelaide Entertainment Centre

TICKETS

\$155 per person \$1450/table of 10 (group booking)

www.taehstaffball.org.au

proudly supporting







PUBLICATIONS

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

Biswas S, Bryant R, Travis S. Interfering with leukocyte trafficking in Crohn's disease. *Best Practice & Research in Clinical Gastroenterology*. 38-39:101617, 2019. doi. org/10.1016/j.bpg.2019.05.004.

Cammann V, Sarcon A, Ding K, ... Horowitz JD *et al*. Clinical features and outcomes of patients with malignancy and Takotsubo Syndrome: Observations from the International Takotsubo Registry. *Journal of the American Heart Association*. 8(15):e010881, 2019 Aug.

Cherian L, Cooksley C, Richter K, Ramezanpour M, Paramasivan S, Wormald P-J, Vreugde S, Psaltis A. Effect of commercial nasal steroid preparation on bacterial growth. *International Forum of Allergy & Rhinology*. 9(7):766-775, 2019 Jul.

Davis S, Babidge W, Kiermeier A, Maddern G. Regional versus metropolitan pancreaticoduodenectomy mortality in Australia. *ANZ Journal of Surgery*. 2019 Jul. doi: 10.1111/ans.15336.

Hu R, Barratt D, Coller J, Sallustio B, Somogyi A. A short communication: Is there a temporal relationship between trough whole blood tacrolimus concentration and acute rejection in the first 14 days after kidney transplantation? *Therapeutic Drug Monitoring*. 41(4):528-532 2019 Aug.

Liu S, Horowitz JD. Interactions between influenza and heart failure hospitalizations - Diagnostic and pathogenetic issues. *JAMA Cardiology*. 2019 Jul. doi:10.1001/jamacardio.2019.2214.

Potter M, Wood N, Walker M, Jones M, Talley N. Proton pump inhibitors and suppression of duodenal eosinophilia in functional dyspepsia. *Gut*. 68(7):1339-1340, 2019 Jul doi:10.1136/gutjnl-2018-316878.

Remilton L, Hesselfeldt R, Mazur S. Cardiac transvenous pacing in the retrieval setting: A retrospective case series. *Emergency Medicine Australasia*. 31(4):575-579, 2019 Aug.

Thompson M, Theou O, Tucker G, Adams R, Visvanathan R. Recurrent measurement of frailty is important for mortality prediction: Findings from the North West Adelaide Health Study. *Journal of the American Geriatrics Society*. 2019 Jul.

Versace V, Coffee N, Franzon J, Turner D, Lange J, Taylor D, Clark R. Comparison of general and cardiac care-specific indices of spatial access in Australia. *PLoS ONE*. 14(7):e0219959, 2019. doi.org/10.1371/journal.pone.0219959 J.

Boyd C, Hickson K. Radiation dosimetry considerations for skeletal survey imaging of multiple myeloma. *Physica Medica*. 64:109-113, 2019 Aug.

Forster J, Marcu L, Bezak E. Approaches to combat hypoxia in cancer therapy and the potential for in silico models in their evaluation. *Physica Medica*. 64:145-156, 2019 Aug.

Govindaraju R, Cherian L, Macias-Valle L, Murphy J, Gouzos M, Vreugde S, Wormald P-J, Bassiouni A, Psaltis A. Extent of maxillary sinus surgery and its effect on instrument access, irrigation penetration, and disease clearance. *International Forum of Allergy & Rhinology*. 2019 Jul.

Moran J, Graham P. Risk related therapy in meta-analyses of critical care interventions: Bayesian meta-regression analysis. *Journal of Critical Care*. 53:114-119, 2019 Oct.

Nakhjavani M, Palethorpe H, Tomita Y, Smith E, Price T, Yool A, Pei J, Townsend A, Hardingham J. Stereoselective Anti-Cancer Activities of Ginsenoside Rg3 on Triple Negative Breast Cancer Cell Models. *Pharmaceuticals*. 12(3), 2019 Aug.

Opperman K, Vandyke K, Clark K, Coulter E, Hewett D, Mrozik K, Schwarz N, Evdokiou A, Croucher P, Psaltis P, Noll J, Zannettino A. Clodronate-liposome mediated macrophage depletion abrogates multiple myeloma tumor establishment *in vivo*. *Neoplasia* 21(8):777-787, 2019 Aug.

Sato K, Takahashi J, Odaka Y, Suda A, ... Beltrame J, Shimokawa H. Clinical characteristics and long-term prognosis of contemporary patients with vasospastic angina: Ethnic differences detected in an international comparative study. *International Journal of Cardiology*. 291:13-18, 2019 Sep.

Tam L, Wei J, Aggarwal A, Baek H, Cheung P, Chiowchanwisawakit P, Dans L, Gu J, Hagino N, Kishimoto M, Reyes H, Soroosh S, Stebbings S, Whittle S, Yeap S, Lau C. 2018 APLAR axial spondyloarthritis treatment recommendations. *International Journal of Rheumatic Diseases*. 22(3):340-356, 2019 Mar.

PUBLICATIONS CONTINUED

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

Taylor D, Barrie H, Lange J, Thompson M, Theou O, Visvanathan R. Geospatial modelling of the prevalence and changing distribution of frailty in Australia - 2011 to 2027. *Experimental Gerontology.* 123:57-65, 2019 Aug.

Wilcox A, Trooboff S, Lai C, Turner P, Wong S. Trends in gender representation at the American College of Surgeons Clinical Congress and the Academic Surgical Congress: A mixed picture of progress. *Journal of the American College of Surgeons*. 2019. doi.org/10.1016/j.jamcollsurg.2019.06.002.

Andersen K, Cheah J, March L, Bartlett S, Beaton D, Bingham C, Brooks P, Christensen R, Conaghan P, D'Agostino M, de Wit M, Dueck A, Goodman S, Grosskleg S, Hill C, Howell M, Mackie S, Richards B, Shea B, Singh J, Strand V, Tugwell P, Wells G, Simon L. Improving benefit-harm assessment of therapies from the patient perspective: OMERACT premeeting toward consensus on core sets for randomized controlled trials. *Journal of Rheumatology*. 46(8):1053-1058, 2019 Aug.

Bunjo Z, Bacchi S, Chandran A.S, Zacest A. Orthostatic hypotension following deep brain stimulation in Parkinson's Disease: A systematic review. *British Journal of Neurosurgery*. 2019. doi.org/10.1080/02688697.2019.1639617.

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

Imam H, Nguyen T, De Caterina R, Nooney V, Chong C-R, Horowitz JD, Chirkov Y. Impaired adenylate cyclase signaling in acute myocardial ischemia: Impact on effectiveness of P2Y₁₂ receptor antagonists. *Thrombosis Research*. 181: 92-98, 2019 Sep.

Lazzarini P, Fitridge R. Regional variations in amputation rates: are regional diabetic foot services the reason? *ANZ Journal of Surgery*. 89(7-8):796-797, 2019 Jul.

Mekonnen Z, Grubor-Bauk B, English K, Leung P, Masavuli M, Shrestha A.C, Bertolino P, Bowen D, Lloyd A, Gowans E, Wijesundara D. Single dose vaccination with a hepatotropic adeno-associated virus (AAV) efficiently localises T cell immunity in the liver with the potential to confer rapid protection against hepatitis C virus (HCV). *Journal of Virology*. 2019 Jul. doi:10.1128/JVI.00202-19.

Nagpal A, Hillier S, Milton A, Hamilton-Bruce M, Koblar S. PERSPECTIVES: Stroke survivors' views on the design of an early-phase cell therapy trial for patients with chronic ischaemic stroke. *Health expectations*. 2019. dio: 10.1111/hex.12932.

Rimmer J, Hellings P, Lund V, Alobid I, Beale T, Dassi C, Douglas R, Hopkins C, Klimek L, Landis B, Mosges R, Ottaviano G, Psaltis A, Surda P, Tomazic P, Vent J, Fokkens W. European position paper on diagnostic tools in rhinology. *Rhinology*. 57(Suppl S28):1-41, 2019 Jul.

Roberts-Thomson I, Bryant R, Costello. Uncovering the cause of ulcerative colitis. *JGH Open*. 3(4):274-276, 2019 Aug.

Tang M, Joensuu H, Simes R, Price T, Yip S, Hague W, Sjoquist K, Zalcberg J. Challenges of international oncology trial collaboration-a call to action. *British Journal of Cancer*. 2019 Aug.



THRF NEWS

Welcome Joy!

THRF is excited to welcome **Associate Professor Joy Rathjen** to the role of Scientific Director at the BHI to mentor researchers and further their impact in the community.

In a role supported by THRF, Joy joins us with a wealth of science and research experience from across Australia (*read more in the cover page story*).

\$5.7 Million in research grants announced

Congratulations to the BHI's **Drs Branka Grubor-Bauk**, **Amy Holmes** and **Makutiro Masavuli** who were successful in securing funding in The Hospital Research Foundation's (THRF) recent Early and Mid Career Fellowship Grant Round!

They were part of a total 16 Fellowships awarded to researchers across Adelaide in the fight to find cures and improve healthcare for all South Australians.

THRF CEO Paul Flynn said the eight Early Career and eight Mid Career Fellowships would help deliver research outcomes that save lives.

"We are very proud to provide this much-needed funding to help advance medical research and improve the health and wellbeing of our community," Paul said.



Dr Branka Grubor-Bauk, THRF Mid Career Fellow, Virology Group

Visit THRF's website to find out the successful applicants.

2019 THRF Project Grant Round is now open

Applications are now open for THRF's 2019 Project Grant Round.

The THRF 2019 Project Grants are available to support medical researchers at all career stages and for all types of medical research (basic science, clinical science and public health). The grants are designed to support creative and innovative research projects or ideas that address a specific problem or question.

The Project Grant amount that can be requested is up to \$130,000 for one year of funding.

This round is divided into two streams: an Early Career and an Experienced stream. Please refer to the guidelines on our website for more details.

Applicants who are unsure of which stream they should apply for should contact their Institution's Research Office or THRF Research Office at savelives@hospitalresearch.com.au.

Applications will close at 4pm Wednesday 25th September 2019.

For more information, visit THRF's website.



THRF NEWS CONTINUED

Life-changing Laser Equipment at TQEH



L-R: Frank Pangallo, Sandra Kanellos and THRF's Fiona Smithson at the afternoon tea launch

On Monday 29 July, an afternoon tea was held at TQEH's Physio Ward to recognise the achievements of breast cancer survivor Sandra Kanellos, who raised funds to purchase a Bioflex laser machine to help healing for women after breast cancer.

Sandra's mission was to have the Bio-Flex laser located at TQEH so that public patients can experience the benefits of laser therapy. She held a Pink Velvet Ball to raise the funds needed to purchase the equipment and ended up raising an overwhelming \$60,000, through Australian Breast Cancer Research, a charity of The Hospital Research Foundation Group.

This piece of equipment has been installed in TQEH's Physiotherapy Unit and has already helped more than 20 breast cancer patients who suffer from lymphedema, which is abnormal swelling that can develop in the arm as a side effect of breast cancer and radiation therapy.

It was a lovely afternoon recognising Sandra's incredible achievements with the Honourable Frank Pangallo, CALHN staff, Sandra's Pink Velvet Ball sponsors, her family, friends and employees from THRF.

Click here to read more on Sandra's inspirational story.

Your Choice Patient Impact grant winners

The winners of THRF's inaugural Your Choice Patient Impact Grant Round were announced recently in the areas of cancer patient care and aged care.

In the category of **cancer patient care**, we're pleased to be funding Professor Bogda Koczwara's project titled iSCREEN. Every cancer patient. Every need' at the Flinders Medical Centre.

Through iSCREEN, Prof Koczwara plans to help cancer patients overwhelmed by their cancer journey by implementing an online tool which screens cancer patients for their unmet needs and therefore improves their experience and healthcare outcomes.

In the category of **aged care**, the RAH's Professor Gillian Harvey was successful with her project titled 'Meeting the needs of older people during transitions of care between hospital and the community'.

Prof Harvey plans to improve the experience for older people moving between hospital and home care by designing a coordinator role that brings an integrated approach and prevent people from falling through the gaps.



THRF NEWS CONTINUED

Hospital Research Home Lottery



Live the dream mortgage free in this stunning Henley Beach home!

The Hospital Research Home Lottery is back! Enjoy a beautifully built Scott Salisbury home amongst the pines on one of Henley's most popular streets as well as \$1Million CASH!

You could be living mortgage free in a fully furnished architectural masterpiece, complete with four bedrooms, a viewing window to the pool and much more.

Your support of the Hospital Research Home Lottery is helping our researchers to fight for improved outcomes for patients who are fighting diseases each day.

Visit our website to check out the photos of the stunning house and to also order tickets: https://bit.ly/2M3qeRP Good luck!

Sharpen your media skills!

Have you ever thought about discussing your research on radio? All you have to do is ask! THRF has a regular segment on community radio station Coast FM, occurring on the first Thursday of every month at 11am. This is a great way for you to practice speaking about your research to a very engaged and interested lay audience!

This week Chelsea Thorn, a PhD student with Dr Nicky Thomas (ENT Surgery, UniSA), will be discussing her research with radio presenter Dave Hearn. You can hear Chelsea's interview this Thursday 5 September on Adelaide's Coast FM 88.7

If you are interested in sharing your research on radio, get in touch with Sarah from THRF's Communications team, squartuccio@hospitalresearch.com.au

