



# ABSTRACT BOOK

Rural Health and Collaborative Research Symposium 2017

Centre for Rural Health,  
School of Health Sciences

## Welcome address

Welcome to the Rural Health and Collaborative Research Symposium 2017.

The Centre for Rural Health is very pleased to be hosting this symposium, which will feature two keynote speakers, a research workshop and more than 35 diverse and cutting-edge research presentations from our colleagues, research students and collaborative partners.

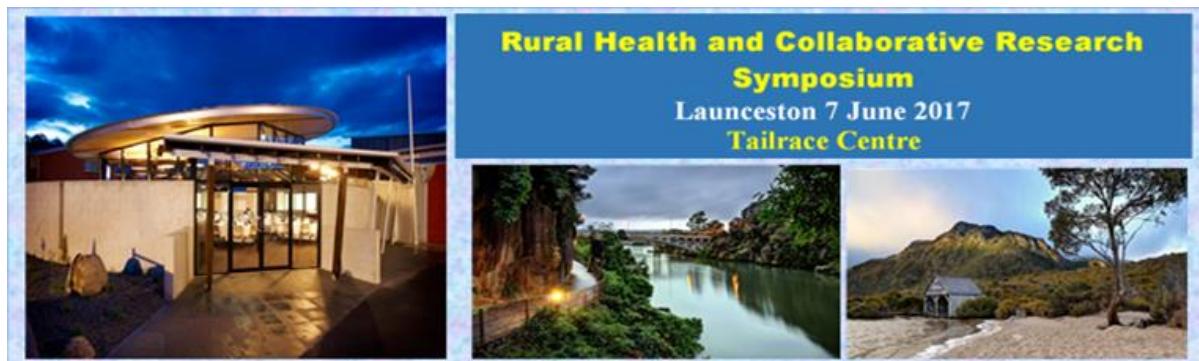
We would like to express our sincere gratitude to all of our speakers for their presentations, as well as the symposium participants for attending. Without you, this symposium could not happen!

In addition to the research learnings, the symposium will provide a great opportunity for the attendees to meet, network and collaborate.

Once again, we warmly welcome you to our Rural Health and Collaborative Research Symposium 2017 and hope you will enjoy the event!

Sincerely,

Symposium organisers: Drs Ha Hoang, Chona Hannah, A/Prof Tony Barnett, Drs Merylin Cross and Simone Lee.



## Contents

Welcome address .....	1
Centre for Rural Health: celebrating 20 years of service and engagement.....	5
Keynote speaker 1.....	5
Increasing importance of rural health research .....	5
Concurrent session 1 .....	6
Theme: Innovative Rural Service Delivery Models.....	6
After-hours rural urgent care Telehealth.....	6
Great and Good Gardening .....	7
The Royal Flying Doctor Service Tasmania.....	7
Concurrent session 2 .....	8
Theme: Research that has the potential to improve rural health .....	8
Haemostatic responses to exercise .....	8
The Traitor of the Immune System: Anti- $\beta$ 2GP1 Antibodies.....	8
The effect of zinc on insulin resistance .....	9
Concurrent session 3 .....	10
Theme: Rural Health Workforce Development .....	10
Dental care in rural & remote Australia .....	10
Keeping nurses rural: factors that matter .....	10
Rural paramedic practice and interprofessional learning .....	11
Translating evidence into practice: oral health during pregnancy.....	12
Implementing Developmental Surveillance to identify children at risk of Autism Spectrum Disorder.....	12
Identification of type and load of oral microorganisms associated with ill health and aspiration pneumonia in people living in residential aged care .....	13
Concurrent session 4 .....	14
Theme: Innovative Rural Service Delivery Models.....	14
A review of bereavement care standards .....	14
Better Access to Palliative Care: initiatives for rural communities .....	15
The Tragedy of Indian Farmers' Suicides: Lessons for Australia? .....	15
Learn 4 Life: Circular Head Community Literacy Plan Evaluation .....	16
The politics of cancer services.....	16
Telemedicine: Latest trends and opportunities for rural health care .....	17

Research workshop and keynote address .....	17
Research Hub and their support to researchers.....	17
Incorporating Publications in your research thesis .....	18
Publishing in Peer-Reviewed Journals .....	18
Keynote speaker 2.....	18
Why weight loss can be difficult - biological and behavioural compensations to diet and exercise interventions .....	18
Concurrent session 5 .....	19
Theme: Improving the Health of Aboriginal and Torres Strait Islander People .....	19
Australian Aboriginal Suicide in Rural and Remote Regions: a Review .....	19
Can the Tasmanian food please stand up? .....	20
Chronic Obstructive Pulmonary Disease & Endothelial to mesenchymal transition: Evidence and Implications.....	20
Aboriginal health and research .....	20
Concurrent session 6 .....	21
Theme: Research that has the potential to improve rural health. ....	21
Zinc Transporters and Zinc Signaling .....	21
Scapular upward rotation position in swimmers .....	21
Lost in translation: Language, Idioms and the Dilemma of Translating Ethnographic Interviews of Experiences with Schizophrenia in Shona speakers in Zimbabwe ...	22
The correlation of Area Based Socioeconomic Factors with Aneurysmal Subarachnoid Haemorrhage Incidence in the Tasmanian Population .....	23
Concurrent session 7 .....	24
Theme: Rural Training Strategies .....	24
Factors influencing rural placements.....	24
The Rural and Remote Community Friends Alumni Pilot Project.....	25
Healthy Regions Healthy Students .....	25
Interprofessional Education: Perceptions of undergraduate healthcare students at a rural clinical site.....	26
Strengthening engagement of students from a refugee background in pre and undergraduate degree programs at UTAS: an evaluation of existing support.....	27
Concurrent session 8 .....	28
Theme: Innovative Rural Service Delivery Models.....	28

---

The bottom line on bowel cancer screening in Australia: evaluation of the 2016 Rotary Program.....	28
The bottom line on bowel cancer screening in Tasmania: a rural perspective.....	28
Improving homeless peoples' oral health.....	29
Review of headspace clinical pathways.....	30
Understanding the respectable addict: a study exploring over-the-counter codeine addicts' perspectives on their addiction using Q methodology .....	30

## Centre for Rural Health: celebrating 20 years of service and engagement

**A/Prof Tony Barnett**

*Director, Centre for Rural Health, School of Health Sciences, UTAS*

The Centre for Rural Health (CRH) was established in 1997 under the Regional Health Strategy of the Australian Government. This year, we are celebrating 20 years of service and engagement. We aim to improve access for rural and remote communities to appropriate health services by encouraging students to pursue a career in rural practice and supporting health care professionals working in these areas. We support the clinical placement of undergraduate students by maintaining a network of learning and accommodation sites across 16 rural and remote communities in Tasmania. The Centre delivers continuing education to working health care professionals and, through flexible teaching arrangements, offers a range of graduate programs in health informatics to students in Tasmania and elsewhere.

### **Keynote speaker 1**

#### **Increasing importance of rural health research**

**Prof Greg Peterson**

*Deputy Dean (Research), Faculty of Health, UTAS*

As Professor of Pharmacy and former Head of Pharmacy at the University of Tasmania, Greg has held a personal Chair at the University of Tasmania since 2000, awarded on the basis of his research and teaching excellence. Greg has led many state and national projects directed at improving the use of medications and patient outcomes in both community and hospital sectors. Greg has an international standing and record of accomplishment in the area of programs to promote the safe, rational and cost-effective use of medications. He has more than 400 papers published in refereed international and national journals, and has been an editor/chapter contributor for 11 books. His research has received over \$35M of external funds. Greg will talk about the growing importance of rural health research.

## Concurrent session 1

9.40 am-10.25am

Tamar room

Chair: Dr Merylin Cross

### Theme: Innovative Rural Service Delivery Models

#### After-hours rural urgent care Telehealth

**Dr Helen Haines**

*Department of Rural Health, University of Melbourne*

**Introduction:** There is a shortage of general practitioners in rural Australia. High rates of after-hours on-call contributes to this. Telehealth is enthusiastically embraced by health policy makers as a solution to this problem. Importantly telehealth must provide safe and satisfying care to patients. To date, no evaluation of telehealth has assessed patient health seeking behaviour post a consultation. The aim of this study was to determine if low acuity patients treated after-hours via telehealth at Urgent Care Centres are more likely to return to their general practitioner in the week following that care than similar patients who receive standard care at a regional Emergency Department. A further aim was to describe any difference between the groups in treatment patterns and discharge instructions. **Design:** Retrospective cohort study comparing two groups: Australian triage category four patients who used standard face to face ED care and triage category four patients who used ED telehealth between 1/1/15 - 31/12/15. A file audit of ED medical and GP billing databases was undertaken. **Setting:** Sub-regional health service in Northeast Victoria where a video conferencing ED telehealth service was implemented to reduce after-hours GP burnout in outlying urgent care centres. **Analysis:** Descriptive and inferential statistics to compare the telehealth group and standard care group for the outcomes of interest. Proportions were compared using Chi<sup>2</sup> analysis and odds ratios calculated. **Results:** The demographics and presenting problems of both groups were similar. The telehealth group were three times more likely to have a follow-up visit with their GP in the week subsequent to after-hours emergency care than the standard care group. There were differences in the types of treatment received by the patients using telehealth, notably, less investigations, greater prescription of analgesia and anti-emetics and higher frequency of admission. **Conclusion:** Higher rates of general practitioner follow-up could be undermining the overall goal of telehealth to reduce general practitioner patient burden and doctor burn out. Greater use of investigations in the standard care points to a potentially unnecessary burden on medical expenditure. Further research is required to determine why patients return to their general practitioner after a low acuity telehealth consultation.

## Great and Good Gardening

**Dr Pauline Marsh**

*Centre for Rural Health, UTAS*

The strong, well-established Community Garden movement in Tasmania coincides with a time of funding cut backs for community-based preventative health measures. Great and Good Gardening: Innovative Primary Health Care in Rural Community Gardens, explored the roles that Community Gardens, under the auspice of Neighbourhood Houses Tasmania, play in healthcare. Using face-to-face and telephone interviews we asked 35 garden coordinators about their capacity for and interest in therapeutic space activities (e.g. disability care, mental health, informal end-of-life care). We found that on the whole community gardens are well-placed to actively facilitate health-promotion activities, to support carers and people with health and mobility issues and to collaborate with formal healthcare providers. Nonetheless they face two key challenges: firstly, to collaborate in ways that do not compromise their core functions and values; and second, to achieve adequate, sustainable resourcing for community-based primary health care.

## The Royal Flying Doctor Service Tasmania

**A/Prof Len Crocombe<sup>1</sup>, Nicole Henty<sup>2</sup>**

<sup>1</sup>*Centre for Rural Health, UTAS*

<sup>2</sup>*Royal Flying Doctor Service Tasmania*

In December 2016, the Commonwealth Government announced \$1.8m over two years would be allocated to the Royal Flying Doctor Service (RFDS) Tasmania to administer a rural service delivery-based dental program. RFDS Tasmania was given short notice of the establishment of the program and even shorter notice of the funding rules. RFDS Tasmania Board will provide its own financial support in addition to the Commonwealth funding. It has decided to use a community-based approach and focus on rural areas where people have the most difficulty accessing dental care. After consultation with Oral Health Services Tasmania, the Circular Head area was agreed to be the most suitable for stage one of the RFDS Tasmania dental program. The Municipal Council and local community groups, such as Circular Head Aboriginal Corporation, Wyndarra, schools and preschools, health providers and Emmerton Park Aged Care Services, were consulted to increase their awareness, involvement and ownership of the dental program. Oral health promotion are to be incorporated into existing local health promotion services such as the "Mums and Bubs" and "Move Well Eat Well" programs. To ensure RFDS Tasmania does not duplicate the clinical work of OHST or private-sector dentists, it will screen children and eligible adults and aim to provide treatment to those people currently not receiving dental care. Dental care will be provided by dental therapist and dentist teams via the hire of the local private practice surgery and equipment, and the use of portable dental equipment in local community centres.

## Concurrent session 2

9.40 am-10.25am

Chapel room

Chair: A/Prof James Fell

### Theme: Research that has the potential to improve rural health

#### Haemostatic responses to exercise

**Emma Zadow**

*PhD student, School of Health Sciences, UTAS*

**Introduction:** Exercise is recognized to have considerable effects upon haemostasis, with increases in coagulation dependent upon exercise duration and intensity [1]. The time of day that an athlete exercises may impact upon the severity of haemostatic activation, with circadian rhythms present for markers of coagulation and fibrinolysis peaking between 0600 & 1200 h [2]. The aims of this study were to 1) examine acute changes in coagulation activation following short-duration high-intensity exercise and 2) investigate if time of day affected pre-exercise markers of haemostasis.

**Methods:** Sixteen well-trained male cyclists completed a 4km cycling time trial (TT) on five separate occasions at 0830, 1130, 1430, 1730 & 2030 h. All trials were completed in a randomised order with each TT separated by a minimum of two and a maximum of seven days. Venous blood samples were obtained pre- and post-exercise and analysed for tissue factor (TF), tissue factor pathway inhibitor (TFPI), thrombin anti-thrombin complexes (TAT) & D-Dimer. **Results:** A 4km TT significantly increased median plasma concentrations of TF, TFPI, TAT complexes and D-Dimer at 0830, 1130, 1430, 1730 and 2030 h. Furthermore, a pre-TT time of day effect was observed for TF ( $p=.004$ ), with TF greater at 0830 (5.07 (2.08-71.68pg/mL)) when compared to 1730 h (4.01 (0.00-50.43pg/mL)) ( $P=.007$ ). Conclusion: Regardless of the time of day, a short-duration high-intensity bout of exercise results in acute activation of both coagulation and fibrinolysis. Furthermore, a circadian rhythm was present within the pre-exercise marker of TF, but not within TAT, TFPI and D-Dimer, suggesting caution should be applied when completing short-duration high-intensity exercise between 0830-1130 h.

#### The Traitor of the Immune System: Anti- $\beta$ 2GP1 Antibodies

**Yik Chang Ho**

*PhD student, School of Health Sciences*

Anti-beta-2-glycoprotein 1 (anti- $\beta$ 2GP1) antibodies are autoantibodies found in patients with autoimmune diseases such as systemic lupus erythematosus (SLE) and/or antiphospholipid syndrome (APS). In healthy individuals, antibodies are produced to protect the body from intruders such as bacteria, viruses and parasites. However, autoantibodies produced by patients with SLE and APS target the patients' own cells and proteins, rather than foreign bodies. These anti- $\beta$ 2GP1 antibodies target

a small glycoprotein circulating in blood, beta-2-glycoprotein 1 ( $\beta$ 2GP1), forming anti- $\beta$ 2GP1- $\beta$ 2GP1 complexes with high affinity to anionic phospholipids on cells. These complexes are suggested to affect a range of cell receptor(s) and metabolic pathway(s), that possibly leading to excess blood clotting and/or pregnancy complications in patients with SLE and APS. Platelets are one of the targets of anti- $\beta$ 2GP1- $\beta$ 2GP1 complexes. They are crucial for the formation of a localised clot at the vessel injury site to limit blood loss while maintaining normal blood circulation. Normal activation of platelet receptors leads to platelet aggregation, secretion of platelet substances and finally clot formation. However, anti- $\beta$ 2GP1- $\beta$ 2GP1 complexes found in patients with autoimmune diseases may improperly activate platelet receptors, causing excessive clot formation and blockage of blood vessels. Therefore, to investigate the relationship between anti- $\beta$ 2GP1 antibodies and platelets, antibodies removed from the blood of SLE and APS patients will be assessed for their effects on platelets collected from healthy individuals. This study aims to understand the effect(s) of anti- $\beta$ 2GP1 antibodies on platelets to assist in the further development of novel or improved treatments for patients with autoimmune disease.

## The effect of zinc on insulin resistance

**Shaghayegh Norouzi**

*PhD student, School of Health Sciences, UTAS*

Insulin resistance (IR) is a metabolic disorder in which patients present with diminished insulin sensitivity and thus reduced insulin stimulate glucose uptake and glycogen synthesis, particularly in skeletal muscle and liver. This can lead to many disorders and disease states including stroke, cancer, obesity and diabetes. Many factors contribute to IR including gender, age, low socioeconomic status, poor nutrition and lack of physical activity. Zinc, as an essential trace element that plays a critical role in maintaining glucose homeostasis through the regulation of various cell signaling pathways. Evidence suggests that zinc has insulinmimetic properties and activates important signaling molecules implicated in glucose metabolism in skeletal muscle cells. The purpose of this study is to determine the role of zinc in the activation of insulin signaling in normal and insulin-resistant skeletal muscle cells. Skeletal muscle cells were treated with insulin and/or zinc over 0-60 minutes and assayed for the phosphorylation of some important molecules involved in activation of downstream pathways of glucose mobilisation including AKT, SHP-2, ERK1/2, PRAS40 and GSK-3beta. Accordingly, it will be essential to determine the action of zinc in insulin resistant skeletal muscle cells. As IR usually precedes the development of Type 2 diabetes (T2D), defining mechanisms of zinc action in regulating insulin sensitivity may facilitate the development of novel therapeutic strategies to prevent T2D.

## Concurrent session 3

10.45 am-12.15pm

Tamar room

Chair: Prof Leigh Kinsman

### Theme: Rural Health Workforce Development

#### Dental care in rural & remote Australia

A/Prof Tony Barnett and Dr Ha Hoang

*Centre for Rural Health, UTAS*

Co-authors: Jackie Stuart, Len Crocombe and Sally Page

Oral health is a significant problem for many remote communities. Residents experience higher rates of dental caries, report reduced visits to a dentist and are more likely to present to non-dental health care professionals for problems such as toothache, abscesses and trauma for treatment than residents of major cities. Poor oral health can have a broader impact. There are strong imperatives to investigate ways in which these communities can be provided with better oral health services in realistic and cost effective ways. Stronger links and cooperation between primary care providers and dental professionals may improve service provision such that interventions are both timely, effective and result in appropriate follow-up or referral. We interviewed over 100 health care professionals from 15 rural and remote communities across Tasmania, Queensland and South Australia in which there was no resident dentist. We found that little communication occurred between primary care providers and either visiting dental professionals or those located in their nearest larger town. Strategies to improve oral health services included: education and public health measures, improving communication and referral pathways as well as providing more regular and reliable visiting dental services through various mechanisms.

#### Keeping nurses rural: factors that matter

Dr Daniel Terry

*University Department of Rural Health, University of Melbourne*

**Aim:** Rural communities continue to experience significant challenges recruiting and retaining nursing staff. The Nursing Community Apgar Questionnaire (NCAQ) was developed to comprehensively assess the characteristics associated with successful recruitment and retention. The aim of this study was to pilot the US based NCAQ in rural Victoria and to examine community strengths and challenges in terms of nurse recruitment and retention.

**Methods:** The project used the NCAQ consisting of 50 questions to examine 50 factors that impact rural nurse recruitment and retention. All 21 health services in rural

Northeast Victoria were invited to participate in the study. The NCAQs were scored by assigning quantitative values to community strengths and challenges and weighting these factors relative to their perceived importance to create a Nursing Community Apgar score. **Results:** The factors which had the greatest impact on recruitment and retention were perception of quality, hospital leadership, availability of necessary equipment, and a sense of reciprocity between nurses and community. Conversely, the challenges to recruitment and retention included spousal satisfaction, opportunities or ease of socialising for nurses and recreational opportunities. **Conclusions:** Through the NCAQ individual communities gain a better understanding of the factors that are most important to consider when recruiting and retaining nursing staff. The NCAQ identifies both modifiable and non-modifiable factors, while indicating which factors are most important to address with limited available resources. The NCAQ has a role to assist rural communities across Australia to self-evaluate, prioritise workforce plans, inform advertising, and develop negotiation strategies for successful nursing recruitment.

## Rural paramedic practice and interprofessional learning

Peter Mulholland

*PhD student, Centre for Rural Health, UTAS*

The work of paramedics is often thought of in terms of independent practice, usually in areas of emergency medicine such as cardiac arrest or respiratory care. Paramedics however, especially in rural areas, can approach practice from an interprofessional perspective, both working and learning with other professions in roles that incorporate emergency and non-emergency community based care, preventative medicine, aged and social care. Despite this, little is known around the collaborative involvement of paramedics and how interprofessional learning may take place. This presentation describes a grounded theory approach that has utilised Critical Incident Technique, a method that asked participants about effective or less effective elements of practice to examine the work of rural paramedics in relation to interprofessional practice. Voluntary participants were invited from eight local ambulance facilities and related health care services from rural locations in Tasmania. Participants described situations where they had undertaken collaboration with another health professional. A total of 102 critical incidents were identified by participants. Whilst these episodes of care were mostly of an emergency care focus ( $n=77$ ), chronic care and other aspects of collaboration were also presented. Preliminary findings revealed that paramedics in rural areas are involved in processes that foster an environment of interprofessional learning. Three main areas from preliminary findings are the influence of power, personality and personnel. The practice of paramedics is demonstrated as more than operating in isolation from other health professionals, but is one that can both foster and increase understanding of an interprofessional learning environment.

## Translating evidence into practice: oral health during pregnancy

**Dr Ha Hoang**

*Centre for Rural Health, UTAS*

The time during pregnancy is identified as a period of high risk for developing periodontal/gum disease. Nausea and vomiting during pregnancy can result in the loss of tooth enamel caused by acid attack. Gum disease is associated with adverse pregnancy and birth outcomes, including preterm birth. Mothers can *transmit* tooth decay bacteria to their infants increasing risk for early childhood caries. Research universally supports the safety of dental treatment during pregnancy and confirms that maintaining good oral health prior to and during pregnancy is an important factor in achieving health and well-being for women and their infants. However, many women do not access oral health care during pregnancy. To address this issue, a clinical practice guideline developed by the *Department of Health and Ageing* (DoHA) recommends all antenatal health care providers such as GPs and midwives to provide advice on and discuss oral health to pregnant women. However, these recommendations are often not implemented into practice due to a lack of theoretical understanding of the processes involved in changing the behaviour of healthcare professionals. This project will develop and implement a theory-based intervention strategy to increase the implementation of the DoHA guideline by GPs in General Practices. Successful implementation of these guidelines can *improve* maternal oral health, *reduce* mother-child transmission of tooth decay bacteria, and create opportunities for oral health promotion and reducing the significant health care costs associated with adverse maternal outcomes and poor oral health.

## Implementing Developmental Surveillance to identify children at risk of Autism Spectrum Disorder

**Ali Morse**

*PhD student, Centre for Rural Health*

**Background:** Early identification of young children (12 to 24 months) with neurodevelopmental concerns is critical for access to early intervention. The Social Attention and Communication Study-Revised (SACS-R) program utilises a developmental surveillance approach to identify children at risk of Autism Spectrum Disorder (ASD), as well as children with a developmental and/or language delay. The implementation process of the SACS-R into routine clinical practice requires a collaborative approach via the integration of the core perspectives of key stakeholders so that the supports and barriers can be identified, understood and addressed.

**Methodology:** Design Thinking (DT) is a human-centred framework that can be applied to health innovation. Drawing on a DT approach, the current study utilises this structure via an iterative process to understand, develop and evaluate the needs of internal and external stakeholders and their responses regarding

the implementation of the SACS-R project. Primary stakeholders working within the ASD early childhood field will be recruited and in-depth, face-to-face semi structured interviews conducted. All interviews will be audio-recorded, transcribed, and coded to identify themes. **Conclusions:** DT is an innovative method that is useful in addressing a specific community's health needs. This study provides insight into identification of barriers and supports to successful implementation of the SACs-R. Although there are aspects of this research that are particular to Tasmania, there are also features that would be relevant to any Australian state committed to early diagnostics to benefit a child's development.

## Identification of type and load of oral microorganisms associated with ill health and aspiration pneumonia in people living in residential aged care

**Sangeeta Khadka**

*PhD student, Centre for Rural Health, UTAS*

**Background:** Oral health problems are being increasingly reported in older adults who are living in residential care communities. People, who rely on others for care, for example, those with moderate to severe dementia, are particularly vulnerable to poor oral health. Poor oral health is associated with increased tooth loss, dental caries, a higher rate of periodontal diseases and susceptibility to aspiration pneumonia and other ill health conditions. Poor oral health is directly linked to decreased overall health in older adults. **Aims:** To determine the types and load of oral cavity microorganisms in older people with dementia in residential aged care. **Methods:** The study will be conducted in samples obtained from aged care residents (Tasmania) with dementia and having, either teeth or dentures. A total of six hundred eight oral swabs will be collected from the hard palate, tongue, cheek and gum surface of oral cavity by pocket-out collection method. Microbiological analyses (including real-time polymerase chain reaction) will be performed at Medical Science Precinct, University of Tasmania to determine load and type of microorganisms present in the oral cavity following standard procedures. **Significance:** The major significance of the project is the development of a cost-effective indicator kit for oral health diagnosis in older people in residential care as well as understanding the role of load and types of oral microorganisms in causing aspiration pneumonia and ill health in this population.

## Concurrent session 4

10.45 am-12.15pm

Chapel room

Chair: Dr Stephen Myers

### Theme: Innovative Rural Service Delivery Models

#### A review of bereavement care standards

**Dr Katherine Kent, Pauline Marsh, Madeleine Ball, Tony Barnett**

*Centre for Rural Health, School of Health Sciences*

Bereavement care standards (BCS) are statements regarding the care of bereaved individuals, to ensure that care is provided safely, ethically and appropriately. This review aimed to generate a summary of current national and international BCS and to identify key features of standards that may be applicable in a multi-disciplinary, multi-level and multi-sectorial setting. A key word search was conducted in academic databases (CINHAL, Scopus, Medline), relevant websites (e.g. Palliative Care Australia, Australian Government Department of Health) and an internet search engine (google.com). Relevant academic literature was reviewed to identify the reported knowledge gaps related to BCS. Reports detailing BCS were identified, including palliative care standards containing a subsection on bereavement care. The key features of the BCS were summarised, including their setting, target audience, key features, values and principles. The search revealed a paucity of information regarding the development or application of BCS in any setting. The literature identified that bereavement care is under-resourced, which compromises the quality and extent of care, and that more research is needed to influence best-practice guidelines, including BCS. Existing standards are predominantly clinically focussed, with few community-centred standards and none relating to a multi-disciplinary setting. There was little consistency across BCSs, with no accepted definition of standards, inconsistent terminology and no common format. Despite the differences in the BCS there were common values, including respect, dignity and integrity, as well as common principles, including providing high-quality, collaborative, accessible and adequately resourced care. These features may potentially be applied across a multi-disciplinary, multi-level and multi-sectorial setting.

## Better Access to Palliative Care: initiatives for rural communities

**Flora Dean & Anita Reimann**

*Community Planning and Strategy, Department of Health and Human Services*

The Better Access to Palliative Care Program (BAPC) was a four-year initiative by the Australian Government as part of the Tasmanian Health Assistance Package (2012-2016). Three key initiatives were funded: (1) Palliative Care Tasmania to deliver community education and enhance community awareness of palliative care, death and dying; (2) The District Nurses for the Hospice at Home program to provide community based packages to remain at home longer and to die at home; and (3) Department of Health and Human Services (DHHS) to strengthen palliative care services in Tasmania and to increase Tasmania's capacity to provide access to community based palliative care for people with life limiting illness. This presentation will provide an overview of these key initiatives and learnings from the BAPC program, specifically for rural Tasmania, and how these learnings have informed and are shaping new directions in palliative care in Tasmania.

## The Tragedy of Indian Farmers' Suicides: Lessons for Australia?

**Dr Andrew Hamilton, Edward Waters, Gayathri Devi Mekala, Dorin Gupta**

*Department of Rural Health, Melbourne Medical School, the University of Melbourne*

Indian farmers suicides occur at a rate just over two-and-a-half times that of the nation average, which approximates the situation among Australian male farmers, who are at slightly more than twice the risk of dying through suicide than their non-farming counterparts. Two major agrarian changes have been implicated as being responsible for Indian farmers' suicides: (i) neo-liberal economic reforms and (ii) the adoption of genetically modified cotton. This review and a modelling exercise identify that genetically modified cotton is unlikely to be responsible for an increase in suicide rate, and in fact it seems to coincide with a reduced rate. Our review suggests that the economic reforms have had a particularly marked effect on the loans sector, which has led to farmers having to rely on usurious illegal money-lenders, sahukars, ultimately resulting in insurmountable debt and the feeling that there is no way out. Environmental factors, such as the failure of an annual monsoonal rain, often trigger this process, which appears to be a common path to suicide. Despite the success of genetically engineered cotton, the suicide problem will not be solved through improved cotton yields alone. Other measures include crop diversification, decriminalisation of suicide, anti-suicide prevention programs, communal storage facilities for pesticides, irrigation infrastructure schemes, refined crop insurance systems, helplines, and formalised and accessible credit systems with reduced interest rates and a crack-down on the activities of sahukars. These lessons offer much food for thought in tackling the scourge that is suicide among Australian farmers.

## Learn 4 Life: Circular Head Community Literacy Plan Evaluation

**Stuart Auckland** and Prof Sue Kilpatrick  
*Centre for Rural Health, UTAS*

**Background:** The term Learn for Life is synonymous with lifelong learning; it affirms that learning plays an essential role in enabling individuals to adapt to new challenges in their lives and surrounding environment. Lifelong learning frameworks have been utilised in many communities to help build socio-economic wellbeing. Low levels of educational attainment and labour-force skills compromise economic growth and quality of life. The Circular Head Council sponsored the development of the Learn 4 Life Circular Head Community Literacy Plan 2014 - 2019 to help create an environment within which Circular Head residents have the literacy skills to achieve their learning and employment goals. Critical to measuring the success of the Plan is the identification of baseline data used in monitoring progress towards achieving the stated goals. **Methods:** The methodology involved mapping stakeholders, identifying, gathering and reviewing existing baseline data from secondary and local sources relevant to the Plan's goals. A review of quantitative and qualitative data highlighted gaps in baseline data and provided the framework for follow up data collection activities. **Findings:** There appears to have been an improvement in attitudes, recognition and participation in general learning activities since the Plan's implementation in 2014. This was particularly with people who had not previously engaged in learning. Pivotal to building on this outcome is the on-going engagement of relevant stakeholders and community in promoting the benefits of the Learn 4 Life Plan together with improved utilisation of relevant baseline data to assist in monitoring progress against the Plan's goals.

## The politics of cancer services

**Sancia West**  
*PhD student, Centre for Rural Health, UTAS*

Cancer services in North West Tasmania underwent significant change with the recent completion of the North West Regional Cancer Centre in Burnie. The Centre brought radiation therapy to the region for the first time, as well as extending medical oncology and ancillary services. The Centre had a prolonged genesis. General community sentiment for a local radiation therapy service was evident during the 2000s but a full funding commitment did not eventuate until 2010 both major parties made commitments to fund a radiation therapy service in a marginal seat during what was a highly contested election. Using the Advocacy Coalition Framework, research focused on the major actors in this debate and the motivations for this policy change. Documentary analysis identified one coalition that was opposed to a local radiation therapy service, being medical professionals and policy makers, who held concerns

over safety and sustainability; however a coalition lobbying for such a service was not evident, only actions by individuals in isolation. Interviews were then conducted with stakeholders, patients and family members. The resulting data also yielded no identifiable coalition lobbying for this policy change. Therefore, why did such a change proceed despite the express concerns of the medical profession and with little evidence of a concerted campaign by the local community? This paper examines the kinds of coalitions for change that might exist, based on the North West cancer services case study, as well as identifying the possible paths to policy change for application to other areas of rural health.

## **Telemedicine: Latest trends and opportunities for rural health care**

**Dr Raj Eri**

*School of Health Sciences, UTAS*

Telemedicine is essentially the utilisation of telecommunication for health care that has enormous potential for the delivery of equitable health care to rural communities. In my presentation, I will be discussing a brief history of telemedicine, latest methods/trends in telemedicine and provide examples of excellent use of telemedicine from many parts of the world. I will also discuss the role of key stakeholders in a telemedicine delivery system and barriers to effective telemedicine, and finally argue a case for implementation of telemedicine in our rural communities.

## **Research workshop and keynote address**

12.45 pm-2.20 pm

Tamar Room

Chair: Dr Raj Eri

### **Research Hub and their support to researchers**

**Dr Che O'May, Dr Natasha Wiggins and Rose Pongratz**

*Domain Research Hub, UTAS*

The Domain Research Hub provides researchers with strategic research support. Research hub staff also provide researchers with advice and support in: Research grant, fellowship, contract research & consultancy applications; Ethics approval requirements; Risk and mitigation strategies; and Research development opportunities.

## Incorporating Publications in your research thesis

**Prof Dominic Geraghty**

*School of Health Sciences, UTAS*

This presentation will summarise the basic principles of how to seamlessly include publications arising from your research into your thesis in accordance with the University's guidelines. The workshop will also cover the recommended formats (their pros and cons), and how to plan for publication during and after thesis submission.

## Publishing in Peer-Reviewed Journals

**Dr Jon Mond**

*Centre for Rural Health, UTAS*

Publishing in peer-reviewed journals is an increasingly important output for academics and for those seeking academic positions or promotions. Aside from journal home pages and assistance from senior colleagues, there is little in the way of information about the publication process and how best to navigate this process available for junior academic staff. The goal of this presentation is to provide an introduction to the process of publication in peer-reviewed journals, health and health sciences journals in particular, and thereby provide junior academics with greater confidence in their ability to navigate this process.

## Keynote speaker 2

### Why weight loss can be difficult - biological and behavioural compensations to diet and exercise interventions

**Prof Nuala Byrne**

*Head of School, School of Health Sciences, UTAS*

Prof Byrne undertakes mechanistic experimental research and clinically-relevant applied research in the aetiology, prevention, treatment and management of one of the world's greatest current health challenges, obesity. This research is driven by the goal to assist the National agenda to prevent unhealthy weight gain, and to find better ways to help individuals who are already overweight/obese to achieve effective weight loss and to successfully prevent weight regain.

## Concurrent session 5

2.25 pm-3.25pm

Tamar room

Chair: Dr Lyn Goldberg

### **Theme: Improving the Health of Aboriginal and Torres Strait Islander People**

#### **Australian Aboriginal Suicide in Rural and Remote Regions: a Review**

**Dr Andrew Hamilton**

*Department of Rural Health, Melbourne Medical School, the University of Melbourne*

A search of the PubMed database was undertaken using various search terms and selection criteria. Nationally, the suicide rate for Aboriginal Australians is about twice that of non-Aboriginal Australians. The reasons for this high rate are manifold and complex, but interpersonal relationship problems, dissolution of typical societal social or ethical norms, mental health disorders, and substance abuse appear to be important factors, among others. Despite a Royal Commission into Aboriginal deaths in custody and various Government anti-suicide, pro-living initiatives, the Aboriginal suicide rate remains unacceptably high in certain areas, as illustrated by the Kimberley for example, where the most recent year of the survey period (2005-2014) has the highest rate, a rate which is at least twice that of any preceding year. On a broader scale, the most recent statistics on Australian deaths have suicide ranked as fifth among Aboriginal Australians but 13th for non-Aboriginal Australians. The fact that the suicide rate is almost 10 times higher for Aboriginal than non-Aboriginal children drives home the significance of the problem. The National Aboriginal and Torres Strait Islander Suicide Prevention Strategy and the National Suicide Prevention Strategy are laudable efforts to redress the problem and will undoubtedly have impact, but, as noted, the Kimberley region experienced its highest ever suicide rate since the release of these strategies. Pragmatic, on-the-ground, culturally inclusive approaches that draw on Aboriginal leadership are sorely needed, such as the southern coastal NSW gatekeeper programme, which takes strength in Aboriginal involvement, and possibly even the use of technology.

## Can the Tasmanian food please stand up?

**Sharon Dennis**

*Centre for Rural Health, UTAS*

Food belonging to country is limited, endangered and disregarded. Introduced foods dominate the food market and are doctoral in policy in the rights of accessing, gathering and consuming native food. The Aboriginal practices for food have become segregated and a person living in Tasmania will not even have the opportunity or experience to taste the native food in Tasmania. Theories explored in the communal separation of identifying, understanding and protecting Tasmanian native food are based on historical prejudice, policies and financial gains. The constraints and destruction of native food remove the choice to consume native food and the unrealised cultural and health benefits of returning to eating food that is natural to the island and was sustainable for thousands of years. To test the parameters and theories a case study was conducted by an Aboriginal Tasmanian woman of eating native food for one month. The results are both exciting and alarming.

## Chronic Obstructive Pulmonary Disease & Endothelial to mesenchymal transition: Evidence and Implications

**Lawrence Bretag**

*School of Health Sciences, UTAS*

Indigenous and rural Australians are disproportionately burdened by Chronic Obstructive Pulmonary Disease. This is due to higher levels of smoking and less access to respiratory health services. Endothelial to mesenchymal transition (EnMT) is a destructive process which may be induced by tobacco smoking. Cultured human cells exposed to cigarette smoke extract underwent changes evident of EnMT, which may prove a potential therapeutic target.

## Aboriginal health and research

**Drs Terry Cox<sup>1</sup>, Lyn Goldberg<sup>2</sup> and Ha Hoang<sup>1</sup>**

<sup>1</sup>*Centre for Rural Health, UTAS*

<sup>2</sup> *Wicking Dementia Res Education Crentre*

The presentation provides an overview of research projects conducted in partnership with a rural Tasmanian Aboriginal community. The aims of the projects were to examine 1. Older Aboriginal men's health and their engagement with the men's shed, and 2. Community understandings of dementia and dementia care. The projects emerged through conversations with Elders and health workers, and further developed to meet community and research expectations. The research illustrates the value of genuine community engagement to generate beneficial community development outcomes and collaborative research opportunities.

## Concurrent session 6

2.25 pm-3.25 pm

Chapel room

Chair: Dr Silvana Bettoli

### **Theme: Research that has the potential to improve rural health.**

#### **Zinc Transporters and Zinc Signaling**

**Dr Stephen Myers**

*School of Health Sciences, UTAS*

Zinc is an essential trace element that plays a vital role in many biological processes including growth and development, immunity, and metabolism. Recent studies have highlighted zinc's dynamic role as a "cellular second messenger" in the control of insulin signaling and glucose homeostasis. Accordingly, mechanisms that contribute to dysfunctional zinc signaling are suggested to be associated with metabolic disease states including cancer, cardiovascular disease, Alzheimer's disease, and diabetes. The actions of the proteins that control the uptake, storage, and distribution of zinc, the zinc transporters, are under intense investigation due to their emerging role in type 2 diabetes. The synthesis, secretion, and action of insulin are dependent on zinc and the transporters that make this ion available to cellular processes. This suggests that zinc plays a previously unidentified role where changes in zinc status over time may affect insulin activity. This previously unexplored concept would raise a whole new area of research into the pathophysiology of insulin resistance and introduce a new class of drug target with utility for diabetes pharmacotherapy.

#### **Scapular upward rotation position in swimmers**

**Sally McLaine**

*PhD Candidate, School of Health Sciences*

**Introduction:** A history of shoulder pain is common in swimmers and may influence scapular position, possibly increasing the risk of shoulder pain recurring. The aim of this study was to establish and compare bilateral static measures of scapular upward rotation using an inclinometer in pain free swimmers (14-20 years), some with a history of shoulder pain, in two different elevated positions of shoulder abduction.

**Methods:** Scapular upward rotation position was measured bilaterally using a digital inclinometer in 90° and 140° active shoulder abduction. Descriptive statistics were calculated for degrees of scapular upward rotation in both shoulder positions. Differences between shoulders (dominant, non-dominant, history and no history of pain) were explored using one-way ANOVA and paired t tests. Results: A large range of values for scapular upward rotation was found at both positions of shoulder abduction but there were no significant differences between the shoulders: with and without a history of shoulder pain or between the dominant and non-dominant sides.

Further analysis of the subgroup of swimmers ( $n=17$ ) who reported a unilateral history of shoulder pain demonstrated similar scapular UR values for both shoulders. Discussion: A history of shoulder pain does not influence scapular upward rotation position in shoulder abduction in young swimmers without current shoulder pain. In the assessment of scapular upward rotation on swimmers, there is a high variability of measures between swimmers but it is reasonable for the clinician to expect side-to side symmetry within swimmers who are pain-free, despite a history of shoulder pain.

## **Lost in translation: Language, Idioms and the Dilemma of Translating Ethnographic Interviews of Experiences with Schizophrenia in Shona speakers in Zimbabwe**

**Shep Chidarikire**

*PhD student, Centre for Rural Health, UTAS*

How people experience and explain what it is like to live with schizophrenia are influenced by language, culture, traditions and beliefs. This presentation addresses the methodological and linguistic challenges of undertaking a focused ethnography to explore the experiences of people living with schizophrenia in Harare, Zimbabwe. A key focus will be to discuss the challenges encountered in translating interview data from Shona (source language) to English (target language). Despite being an insider-outsider, conversant in the Shona language and culture, cross-language differences emerged during the translation process. Participants' description of their psychotic experiences were embedded in their language and sociocultural contexts. For example, one female participant described her symptoms in Shona as "musoro wangu wadhanganyika" which could literally be translated as "my head felt as if it had been squashed or trampled". What she was trying to convey was that she had reached her limit and felt like she had nowhere else to go because of what was going on in her head. The aim in translating illness expressions should be to achieve cultural/conceptual equivalence to ensure that the essence of meaning from the source language is preserved. Translation driven by the need for literal, reproductive fidelity, risks overlooking the complex nuances of language, importance of cultural applicability and potential to misinterpret the meaning intended. Findings demonstrate the challenges faced by bilingual researchers in retaining the meaning and nuances of illness experiences as expressed by people from other cultures and linguistic backgrounds.

## The correlation of Area Based Socioeconomic Factors with Aneurysmal Subarachnoid Haemorrhage Incidence in the Tasmanian Population

Linda Nichols

*PhD student, School of Health Sciences*

Area Based Socioeconomic Factors Correlate with Aneurysmal Subarachnoid Haemorrhage Incidence in a Regionalised Tasmanian Population. Aneurysmal subarachnoid haemorrhage (aSAH) is a devastating and often fatal stroke subtype. Whilst individual risk factor profiles have been well documented in influencing the incidence of aSAH, the impact of area based socioeconomic disadvantage and its interrelationship with geographical location remains unclear. A retrospective population-based study of all subarachnoid haemorrhages was undertaken within the population of Tasmania from 2010-2014. Data was collected from administrative records and validated through a review of individual medical records. This data was then linked with records from the Registry of Births Deaths and Marriages. Demographic data was recorded for each case and street addresses were geocoded and matched to Accessibility/Remoteness Index of Australia (ARIA) categories with Socio-Economic Index for area (SEIFA) advantage/disadvantage deciles also coded to each case. From a total cohort of 237 known or likely ruptures of cerebral aneurysms, age-standardised incidence (ASI) using the 2001 Australian population (per 100,000 person years) for aSAH was 9.99 (95% CI 8.69-11.29). The incidence ranged from 9.05 (95% CI 7.57-10.54) in areas identified as advantaged to 12.44 (95% CI 9.77-15.11) in areas identified as disadvantaged. Using Poisson regression, a significant socioeconomic-incidence association was observed, with the rate of aSAH in disadvantaged geographical areas being 1.40 times that of advantaged areas (95% CI 1.11-1.82,  $p=0.0119$ ), independent of geographic location. This study presents a contemporary baseline for the incidence of aSAH in Australia. This study identifies area based socioeconomic disadvantage as key risk factors and the focus for prevention and intervention strategies. The increased incidence of aSAH in low socioeconomic areas may be due to a higher risk factor burden. With primary prevention strategies imperative to reduce this inequality.

## Concurrent session 7

3.40 pm-4.55 pm

Tamar room

Chair: Dr Jon Mond

### Theme: Rural Training Strategies

#### Factors influencing rural placements

Dr Merylin Cross

*Centre for Rural Health, UTAS*

**Background:** The University of Tasmania has substantial funding to increase the number of undergraduate health science students that undertake rural placements. However, placement activity in the Centre for Rural Health's rural health teaching sites varies quite markedly and the reasons are unknown. The aims of this study have been to identify the factors that influence rural placement activity in seven of the less well-utilised sites. We adopted an **exploratory design** incorporating semi-structured interviews (n=23). While Tasmania's rural health services vary, most provide a mix of 2-20 sub-acute rural beds, residential aged care and community-based health services.

**Findings:** For placement providers, factors that enabled rural placements were: Rural health services provide authentic learning experiences, the clinical learning environment is student-centred, effective relationships, having time to support student learning and student attitudes and interests. For service providers, capacity to provide placements varies according to the learning opportunities available (size and nature of the service), supervisory capacity (staffing and resources available) and supports provided by the university. For faculty, rural placements are constrained by systemic issues such as regulatory and curricula requirements, process concerns about supervision, students' ability to achieve learning objectives and demonstrate competencies and negative views about rural practice. **Conclusions:** These findings have important implications for faculty and placement providers. To build rural placement capacity in Tasmania, it is vital that rural practice and placements are promoted to staff and students and that faculty work closely with industry to devise suitable placement models geared to making the most of the rich learning opportunities available.

## The Rural and Remote Community Friends Alumni Pilot Project

**Zoe Hingston**

*Honours student, School of Health Sciences, UTAS*

**Introduction:** Rural clinical placements provide an opportunity for students to experience rural life first hand, to work in multidisciplinary teams and to facilitate the development of skills through experiential placements. They are also seen as a mechanism to help address the maldistribution of the health practitioners in rural and regional areas. This study investigates whether allied health students who receive additional social support on their rural clinical placement are more likely to consider working in a rural location once qualified. A second objective of the study was to investigate how engagement with a Community Friend enhances a rural placement experience. **Method:** A mixed method approach was used to collect qualitative and quantitative data through self-completed questionnaires and interview guides. Interviews were recorded and thematically analysed. **Results:** Three students were interviewed and matched with Community Friends. A total of seven Community Friends were interviewed. There was considerable difficulty in connecting the students and Community Friends. Thematic analysis of the interview transcripts provided some explanation as to difficulties in supporting students on placements. This is the first known study that matches allied health students with a Community Friend. **Conclusion:** This study confirms a growing body of evidence that a positive rural clinical placement can influence a student's rural career intention. It has also confirmed that there is value in using a Community Friend to offer additional social support to allied health students.

## Healthy Regions Healthy Students

Stuart Auckland<sup>1</sup>, Sandra Murray<sup>2</sup>,

<sup>1</sup>*Centre for Rural Health, UTAS*

<sup>2</sup>*School of Health Sciences, UTAS*

**Background:** In 2016 the Tasmanian government declared that Tasmania would be the "healthiest State by 2025." This announcement coincided with the release of the Healthy Tasmania Five Year Strategic Plan (the Plan). The Plan highlighted strategies to address high rates of chronic disease and health risk factors within Tasmanian populations. Implementation of the strategies have particular relevance to regional Tasmanians and current/future students of the University. Research identifies health and wellbeing and, specifically, the social determinants of health (SDoH) as having a key influence on the attrition rates of students. The launch of the Plan provides an opportunity to consider the impact the Plan's implementation may have on student attrition rates. Critical to this process is the analysis of the 114 submissions to the Plan's consultation draft. **Methods:** The research adopts a two-stage approach. The first stage involves a scan of the literature to identify key health risk factors and the

SDoH for regional Tasmanians and University students. The scan informed the development of an analytical framework applied to the 114 submissions to the consultation draft. Finding from stage 1 will inform qualitative approaches aimed at identifying impacts and opportunities the Plan may have on priority health needs of the student cohort. **Findings:** A level of disconnect exists between the submissions content and the Plan around prioritisation, intervention and monitoring strategies. The findings revealed support for the proposed adoption of a Health In All Policy framework and broader action on the SDoH to help address student health and wellbeing priorities.

## Interprofessional Education: Perceptions of undergraduate healthcare students at a rural clinical site

**Lorraine Walker**

*PhD student, Centre for Rural Health, UTAS*

Interprofessional education legitimises a personcentred approach in which health care professionals recognise one another's contributions to patient care. Greater collaboration and team work among health care professionals can reduce the problems of fragmentation in health care delivery. This study was conducted to examine the implementation of interprofessional education in rural clinical learning environments. A mixed methods case study approach was utilised to collect data from undergraduate healthcare students during their clinical placement at one site, as part of a larger study. The quantitative data was collected utilising existing validated tools and the qualitative data via survey comments and focus groups. A total of 16 students participated in the study, with the majority of students from medicine (75%). Preliminary findings suggest students relish interprofessional education and value learning about team-working skills. Most are amenable to learning with and from others, value the role that interprofessional teamwork plays in promoting health outcomes and recognise the need to trust and respect each other. Conversely, while students demonstrated a positive attitude to interprofessional education, a significant number identified that understanding of their own role was limited. Despite having undertaken a substantial element of their course, 65% of students identified a lack of clarity about their future health professional role. The study adds to the evolving body of knowledge surrounding interprofessional education. It provides important data regarding interprofessional learning in the rural Australian context and students' perceptions and readiness for their professional roles.

## Strengthening engagement of students from a refugee background in pre and undergraduate degree programs at UTAS: an evaluation of existing support

**Dr Chona Hannah<sup>1</sup>, Heather Bridgman<sup>1</sup>, Ha Hoang<sup>1</sup> and Ella Dixon<sup>2</sup>**

<sup>1</sup>*Centre for Rural Health, UTAS*

<sup>2</sup>*Migrant Resource Centre*

Student support services are key components to successfully support higher education students with refugee backgrounds to remain engaged in pre and undergraduate university degrees. The Centre for Rural Health and UTAS Student Transition and Retention team are engaged in a collaboration with the Migrant Resource Centre Launceston (MRC) with a goal to evaluate the current support and engagement strategies offered by UTAS; identify potential additional support approaches; and evaluate a cultural training workshop offered by the MRC for UTAS staff who are directly involved with students from a refugee background. Using a Community-Based Participatory research approach, this project will recruit students ( $n=8-10$ ) from refugee backgrounds to participate in focus groups to elicit their feedback about current UTAS support strategies and alternate approaches. UTAS Staff ( $n=15$ ) who provide support to students with refugee backgrounds will be recruited by email invitation to participate in a half day cultural training. A pre and post survey will be given to UTAS staff before and after the cultural training. Student focus group data will be transcribed and analysed using an inductive content and thematic analysis. Data obtained from pre and post surveys will be analysed using descriptive statistics and content analysis of verbatim/written comments. Outcomes may provide a template to support students from a refugee backgrounds to engage and thrive at UTAS. The project may benefit UTAS by understanding students from a refugee backgrounds experience, and by strengthening a sustainable, transferable, proactive support program, thereby maintaining student engagement at UTAS into the future.

## Concurrent session 8

3.40 pm-4.55 pm

Chapel room

Chair: A/Prof Len Crocombe

### **Theme: Innovative Rural Service Delivery Models**

#### **The bottom line on bowel cancer screening in Australia: evaluation of the 2016 Rotary Program**

**Dr Simone Lee**

*Centre for Rural Health, UTAS*

Colorectal cancer is the second most common cancer after prostate cancer, with one in 12 Australians developing the disease by age 85. It is also the second most common cause of cancer-related deaths in Australia, after lung cancer. When detected and treated early, the 5-year survival rate is as high as 93%. The ability to detect precursors to bowel cancer, as well as cancers in their early stages, combined with the high incidence rate of the disease, makes population screening a viable option for reducing morbidity and mortality. In response to recommendations by the NH&MRC, and based on results from a pilot study, the National Bowel Cancer Screening Program (NBCSP) was established in August 2006. Participation in the program remains low (37% Australia-wide) but despite this, many Australians are choosing to access bowel cancer screening services through the purchase of commercially available kits. The Rotary Bowelscan and Bowelcare program is a major contributor to this activity. The exclusive national distribution of Rotary-branded Colovantage kits in 2016 provided an opportunity to better understand the socio-demographic characteristics of Australians choosing to screen for bowel cancer outside of the NBCSP. This presentation describes preliminary results of the 2016 Rotary Program evaluation.

#### **The bottom line on bowel cancer screening in Tasmania: a rural perspective**

**Mandy Cooper**

*Centre for Rural Health, UTAS*

Colorectal cancer is the second most common cancer after prostate cancer, with one in 12 Australians developing the disease by age 85. It is also the second most common cause of cancer-related deaths in Australia, after lung cancer. When detected and treated early, the 5-year survival rate is as high as 93%. The ability to detect precursors to bowel cancer, as well as cancers in their early stages, combined with the high incidence rate of the disease, makes population screening a viable option for reducing morbidity and mortality. In response to recommendations by the NH&MRC, and based on results from a pilot study, the National Bowel Cancer Screening Program (NBCSP) was established in August 2006. Participation in the program remains low

(37.3% Australia-wide), with Tasmanian rates ranging from 28.5% to 47.1% across different local government areas. The reasons for these broad differences within Tasmania are unclear. The Bowel Cancer Screening in Rural Tasmania study therefore aims to examine barriers and enablers of participating in the NBCSP using four local government areas as case studies. This presentation will describe the background and methodology of the study, as well as some preliminary results.

## Improving homeless peoples' oral health

**Dr Jacqueline Goode**

*PhD student, Centre for Rural Health, UTAS*

**Background:** In Australia, homeless people suffer disadvantage, poor oral health and often live with dental pain. Despite having priority access to free public dental care, in capital cities, the dental visiting patterns of homeless people remain unfavourable and problem based rather than favourable and focussed on preventative care. Poor oral health is also associated with living outside capital cities. There is a paucity of evidence regarding the dental visiting patterns of non-capital city dwelling homeless Australians. **Aims:** This study aims to explore the dental care pathways, identify factors influencing the uptake of dental services and develop a program that promotes oral health and facilitates public dental service use by homeless people living outside capital cities. **Methods:** A mixed methods approach will be employed and underpinned by a salutogenic conceptual framework. Qualitative data gathered from homeless people, support workers and public dental clinic staff will explore the existing dental care pathways and factors that influence them. This information, along with input from each group, will inform the development of a program to facilitate dental visits and promote oral health. Quantitative data will record the number of interactions homeless people have with dental services and the number of oral health promotion opportunities before and after the implementation of the program. **Significance:** Improving the oral health and quality of life of those living with social disadvantage is a priority of the Federal Government. Promoting oral health and better signposting pathways to dental services for non-capital city homeless people will help achieve this goal.

## Review of headspace clinical pathways

**Josephine de deuge<sup>1</sup> and Miranda Ashby<sup>2</sup>**

<sup>1</sup>*Centre for Rural Health, UTAS*

<sup>2</sup>*headspace Hobart*

The Centre for Rural Health was engaged by the Link Youth Health Service to evaluate the headspace program and clinical pathways in both the North and South of the state. The program review consisted of two phases including the development of a framework and specifications, and the implementation of the framework and conducting extensive interviews and focus groups with staff, stakeholders and clients. A major goal throughout the project was to engage the headspace team throughout to ensure the review reflected the mission of the program and the realties of service delivery. In addition, a collaborative research study emerged from the review process. The study will provide insights on how youth engage with mental health services and ways to improve their reach and effectiveness.

## Understanding the respectable addict: a study exploring over-the-counter codeine addicts' perspectives on their addiction using Q methodology

**Melissa Kirschbaum**

*PhD student, Centre for Rural Health, UTAS*

Addiction to over-the counter (OTC) codeine is recognized as a growing problem, both in Australia and overseas. The high level of concern regarding OTC codeine misuse in Australia is evidenced by the Australian government's decision to reschedule codeine to prescription only status from February 2018. There are few existing studies that specifically focus on addiction to OTC codeine and little is known about OTC codeine misusers themselves. They have been described as respectable addicts, as many aim to maintain their professional, intelligent identity and consider themselves very different to stereotypical illicit drug users. Using Q methodology, this study aims to explore OTC codeine addicts' perspectives on their addiction and to situate their views within the formal theories of addiction. The research will contribute to our understanding of OTC codeine addiction and the findings may be used to inform tailored prevention, risk reduction and treatment interventions for this distinct type of addict. Q methodology provides an evidenced approach for measuring attitudes which is more robust than alternative techniques. A brief overview of Q methodology will be provided. This will be followed by a summary of the progress of the current study, focussing on the methods used to develop the concourse and the use of a Delphi technique with a panel of addiction experts to reduce the concourse and form the Q set.