School of Health and Human Sciences Research Projects
1 Jan 2016 – 31 December 2016

In 2016, staff of the School of Health and Human Sciences were involved in a broad range of research projects and collaborations with international and local partners.

Names in bold indicates Southern Cross University Researchers.

Christina Aggar

**Project Title:** Evaluation of the Graduate Certificate in Australian Nursing program for internationally qualified nurses

**Investigators:** Ms Christina Aggar, Associate Professor Lynette Stockhausen, Ms Lucy Shinners, Ms Anna Foster, Ms Tamsin Thomas

**Description:** The Graduate Certificate in Australian Nursing is a Nursing and Midwifery Board of Australia (NMBA) approved program accredited by the Australian Nursing and Midwifery Accreditation Council (ANMAC) for internationally qualified registered nurses (IQNs). The program builds on prior knowledge, skills and nursing experience to develop a deeper understanding of nursing in the Australian health care context. The aims of this study are to evaluate the Graduate Certificate of Australia Nursing program at Southern Cross University from the perspective of the IQNs enrolled in the program and clinical facilitators and nurse preceptors, supervising the IQNs professional experience placement

**Project Title:** Social prescribing for individuals living with mental illness

**Investigators:** Ms Christina Aggar, Ms Tamsin Thomas, Ms Jacqueline Bloomfield, Mr Christopher Gordon, Mr James Baker

**Funding Body:** Primary and Community Care Services Pty Ltd

**Description:** This project evaluates the existing, de-identified dataset provided by Primary and Community Care Services Australia (PCCS). The aim is to evaluate the clinical and economic outcomes of a Social Prescribing and Linking (care co-ordination) program targeting patients with persistent mental illness. This includes a large number of patients with a history of high frequency, high cost hospital admissions. This analysis will include examining the impact of the program in terms of participant wellbeing, quality of life, self-managed care, (self-report and proxy measure for health improvement), clinical indicators, health perception, self-efficacy, and hospital utilisation.

**Project Title:** The partner’s experience and perception of inpatient rehabilitation service delivery following a catastrophic injury

**Investigators:** Ms Christina Aggar, Mr Murray Fisher, Ms Julie Pryor

**Description:** The aim of this study is to critically review the research literature investigating the experiences of providing care to a spouse or partner during inpatient rehabilitation following a catastrophic injury (namely, stroke, traumatic brain injury [TBI] or spinal cord injury [SCI]) and their perceptions of inpatient rehabilitation service delivery.
Project Title: Development, implementation and evaluation of a Transition to Professional Practice Program (Community)

Investigators: Ms Christina Aggar, Ms Tamsin Thomas, Ms Jacqueline Bloomfield, Mr Christopher Gordon

Funding Body: NSW Health and Northern Sydney Local Health District (NSLHD)

Description: The aim of this project was to evaluate new graduate registered nurses’ intention to stay in the community nursing workforce upon completion of the Community Transition to Professional Practice Program. A Quasi-experiment, mixed-methods approach was applied. Graduate nurses in the Community Transition to Professional Practice Program were compared to graduate nurses in a traditional acute-care hospital transition program. Graduates and their preceptors completed questionnaires regarding job satisfaction, confidence, competence, and a program evaluation after each rotation (6 and 12 months). Graduates also completed a follow-up questionnaire about intention to stay in community nursing (18 months). Semi-structured interviews are currently being conducted.

Project Title: Developing a Graduate Nurse Transition Program to Primary Health Care

Investigators: Ms Christina Aggar, Ms Tamsin Thomas, Ms Jacqueline Bloomfield, Mr Christopher Gordon

Funding Body: Northern Sydney Medicare Local

Description: Increases in ageing, chronic illness and complex co-morbidities in the Australian population are adding pressure to the primary care nursing workforce. Initiatives to attract and retain nurses are needed to establish a sustainable and skilled future primary care nursing workforce. We implemented a transition to professional practice program in general practice settings for graduate nurses and evaluated graduate nurse competency, the graduate nurse experience and program satisfaction. This study aimed to determine whether a transition to professional practice program implemented in the general practice setting led to competent practice nurses in their first year post-graduation.

Alex Barwick

Project Title: An investigation of the relationship between neural and microvascular function in Charcot neuroarthropathy

Investigators: Dr Alex Barwick, Associate Professor Vivienne Chuter, Dr Peta Tehan

Description: Charcot neuroarthropathy (CN) is a debilitating condition that produces permanent foot deformity and is associated with ongoing ulceration, amputation and death. It affects a proportion of people with diabetes induced neuropathy, thought to be caused by associated neurovascular disturbances on bone density. A lack of clarity surrounding the pathogenesis of the condition hampers early diagnosis and treatment. This study aims to compare specific types of nerve dysfunction, small blood vessel function and foot bone density in people with diabetes and a history of CN and people without these clinical conditions, to guide preventative strategies, diagnosis and future research into the pathogenesis of the condition.
Joanne Bradbury

*Project Title:* Patient-centered total healthcare: Exploring the factors that enable and prevent patients in the safe and effective integration of their healthcare

*Investigators:* Dr Joanne Bradbury, Associate Professor Sandra Grace, Dr Cathy Avila, Professor Susan Nancarrow, Ms Anna du Chesne

*Funding Body:* DVCRC seed funding grant

*Description:* The aim of this study is to explore how healthcare consumers integrate their total healthcare (primary, allied and complementary health) needs and to explore the extent to which this could be enhanced using digital technologies. This project conducted several focus groups to help inform the design of an online survey. SCU investigators collaborated with a digital specialist, Tony da Costa, to recruit participants for the survey through social media.

*Project Title:* The lived experience of involuntary transport under mental health legislation

*Investigators:* Dr Joanne Bradbury, Associate Professor Marie Hutchinson, Associate Professor John Hurley, Dr Helen Stasa

*Funding Body:* CRN Collaborative Research Network seed grant

*Description:* First study to explore the lived experience of involuntary transport under legislation from multiple perspectives. Sixteen interviews were conducted and analysed from consumers, carers, mental health nurses, police, and paramedics. Collaboration was between SCU, USyd, NSW Police, NSW Ambulance, NSW Health (NSWNHD). Invitation to present verbal and written evidence to the Federal Senate hearing on “Indefinite detention of people with cognitive and psychiatric impairment in Australia” in March, 2016.

*Project Title:* Chronic Psychological Stress Was Not Ameliorated by Omega 3 Eicosapentaenoic Acid (EPA)

*Investigators:* Dr Joanne Bradbury, Professor Stephen Myers, Associate Professor Barbara Meyer, Dr Jonathan Peake, Professor Con Stough, Professor Andrew Sinclair, Dr Lyndon Brooks

*Funding Body:* NHMRC Project grant

*Description:* This study was a collaboration with leaders in their fields from Swinburne University, University of Melbourne, Deakin University, and Queensland University of Technology. It was a publically funded RCT to test for an effect of the omega 3 fatty acid, eicosapentaenoic acid (EPA) in chronic work stress. The trial recruited 90 people from the Northern Rivers community and randomized them into two groups (2.2 g/d EPA or olive oil) and monitored their stress levels for 10 weeks. At the end of the supplementation period, there was no difference between the groups in the primary outcome, stress levels. However, those in the fish oil group had lower levels of denial, a destructive coping mechanism.
**Project Title:** Curriculum design from first principles: deriving shared learning outcomes for undergraduate health research

**Investigators:** Dr Joanne Bradbury, Associate Professor Wendy Gillear

**Description:** This project is part of a review of undergraduate research teaching and learning requirements for the School of Health and Human Sciences. All academics across multiple health disciplines (nursing, midwifery, sports and exercise science, osteopathy and allied health) within the School were openly invited to attend and contribute towards a series of brainstorming meetings that aimed to derive a set of common graduate capabilities and the scaffolds required throughout the various courses to achieve them. A thematic analysis was undertaken on the meeting notes to identify emergent themes. The capabilities themes were also checked for alignment with the institutional graduate attributes and the thresholds of learning outcomes (TLOs) stipulated by the Australian Government Office of Learning and Teaching. All course coordinators and academics across the school were invited to collaborate in the project.

**Suzanne Broadbent**

**Project Title:** Development of a National Fitness Survey

**Investigators:** Dr Suzanne Broadbent, Professor Shi Zhou

**Funding Body:** Southern Cross University 2015 Research Seed Grant

**Description:** There is currently no physical fitness normative data of Australians across the age continuum despite the growing problems of inactivity and lifestyle diseases. We presently compare Australian fitness levels to norms from other countries, which may have different social and regional influences. The aims of this project are to review and develop the most appropriate methods to assess physical fitness (cardiorespiratory, muscle strength and flexibility) in adult Australians aged 18 to 60 years via literature review.

**Paul Butterworth**

**Project Title:** Clinical decision-making recommending extracorporeal shockwave therapy for the treatment of chronic lower limb ulcers: a qualitative study.

**Investigators:** Mr Paul Butterworth, Ms Dominique Carney

**Description:** The primary aim of this study was to explore the clinical decision-making process used by an expert wound care nurse in recommending ESWT as an intervention for lower limb ulcers. The secondary aim was to investigate and describe the decision-making processes of the wound care nurse both prior to and post experience using ESWT as an intervention. Consequently, this study has also aimed to answer the following research question: what factors influenced decision-making when deciding on using a new technology as an intervention for lower limb ulcers.

**Project Title:** Prevention of venous thromboembolism by Australian podiatric surgeons

**Investigators:** Mr Paul Butterworth, Ms Jemma Matthews
**Description:** VTE causes significant mortality and places a strain on our health system with substantial economic costs. VTE results in more deaths than breast or bowel cancer or acquired immune deficiency virus [AIDS], and the combination of falls and transport accidents. In Australia in 2008, there were an estimated 14,716 cases of VTE and 5,285 resulting deaths. In addition, the financial cost to Australia was $1.72 billion, and in Australian hospitals, VTE deaths equate to approximately 7% of total mortality. VTE is a potentially life-threatening complication and patients undergoing foot and ankle surgery are at a higher risk, thus making this well worthy of further research. The practice of Australian podiatric surgeons in the prevention of VTE has not been previously assessed. The aim of this research therefore, is to investigate the strategies used to prevent VTE by Australian podiatric surgeons and compare their practices against best-evidence guidelines.

**Andrew Cashin**

*Project Title:* Nursing and midwifery prescribing: exploratory literature review

*Investigators:* Professor Andrew Cashin, Associate Professor Tom Buckley,

*Funding Body:* Australian Health Practitioner Regulation Agency (APRHA)

*Description:* Currently the Nursing and Midwifery Board Australia (NMBA) does not have sufficient background evidence to determine whether there is a need to expand the role of registered nurses and midwives to include prescribing. This research initiative will contribute to ensuring there is a current evidence base to inform the NMBA in decision making about educational and regulatory requirements for prescribing by nurses and midwives.

**Sonja Coetzee**

*Project Title:* Aquatic exercise as an intervention for Chronic Fatigue Syndrome: a pilot study

*Investigators:* Dr Sonja Coetzee, Dr Suzanne Broadbent, Ms Rosalind Beavers

*Funding Body:* SCU DVCR Seed Grant

*Description:* This 5 week pilot trial investigates, firstly, the effects of a single session of gentle aquatic exercises and stretching on reported fatigue, tiredness, pain and other CFS symptoms; and secondly, the effects of a four-week block of twice-weekly aquatic exercise on fatigue, tiredness, pain, cardiopulmonary fitness, upper and lower body strength and upper and lower body flexibility in individuals with Chronic Fatigue Syndrome.

**June Colgrave**

*Project Title:* Exposure of undergraduate students to the paediatric population in a community setting: An innovative clinical education model

*Investigators:* Ms June Colgrave, Dr Kolleen Miller-Rosser

*Description:* This research project has examined nursing students’ perspectives of attending Kidney Camp Australia as their clinical placement. As this camp is predominantly for children, and nursing
students are exposed to minimal paediatrics throughout their degree, we have been interested to uncover what they perceived their experiences to be.

**Project Title:** Innovative professional experience clinical placement: a study of the lived experience of undergraduate nursing students in a primary care setting

**Investigators:** Ms June Colgrave, Dr Kolleen Miller-Rosser

**Description:** The aim of this study was to explore nursing students’ experiences of their engagement in an innovative primary care setting: ‘Kidney camp’. The research was undertaken using a three stage approach to explore the students experience within this primary care setting. Face-to-face interviews focus groups and questionnaires, and using semi-structured questions. The findings demonstrate immersion of nursing students in a primary care setting provides them with a powerful, rich and a broader perspective of the patient being the centre of care.

**Rosanne Coutts**

**Project Title:** Evaluation of a schema for the learning of reflective practice in clinical nursing

**Investigators:** Associate Professor Rosanne Coutts, Ms Pauletta Irwin

**Description:** This research project aims to evaluate the educational effectiveness of utilizing SPROUT as a schema for the teaching or reflective practice to first year undergraduate nursing students. SPROUT is a mnemonic device developed by the researchers to teach the skill of reflective practice. As a process the design conceptually sits within a learning ecology where past experiences and current situations are blended to find meaning and potentiate learning. Towards the goal of professional and personal growth, becoming a reflective learner is theory driven and SPROUT contributes a practical pathway. During 2015, SPROUT was introduced in a first year philosophy unit and integrated into the undergraduate clinical experience units in Nursing. This project evaluates the educational impact; utilising an embedded strategy where reflective skill and confidence will be assessed via the use of a pre and post a modular teaching approach.

**Jim Donnelly**

**Project Title:** You can do it! The effect of audience support on physical and perceptual-cognitive performance in cyclists.

**Investigators:** Dr Jim Donnelly, Dr Chris Stevens, Ms Bethany Bradhurst

**Description:** Research has shown that audience support can have both positive and paradoxical effects on physical performance. Evidence also suggests that audience effects can be tempered by anxiety, although this evidence is not consistent. Little is currently known about how supportive audiences influence physical and perceptual-cognitive performance concurrently. This study tested the effects of an interactive and supportive audience on cycling and concurrent cognitive performance. It was concluded that cycling and concurrent cognitive performance were neither enhanced nor debilitated by the presence of a live or recorded supportive audience. Implications for sport performance and recommendations for future research are discussed.
**Project Title:** Test-retest reliability of a single-channel, wireless EEG system.

**Investigators:** Dr Jim Donnelly, Mr Peter Wilson, Mr Jeffery Rogers, Mr Stuart Johnstone, Ms Anna Aminov

**Description:** This study investigated the test-retest reliability of a wireless EEG recording device that would be appropriate for some research settings. Recording systems to acquire electroencephalogram (EEG) data are traditionally lab-based. However, there are shortcomings to this method, and the ease of use and portability of emerging wireless EEG technologies offer a promising alternative. A previous validity study demonstrated data derived from a single-channel, wireless system (NeuroSky ThinkGear, San Jose, California) is comparable to EEG recorded from conventional lab-based equipment. The current study evaluated the reliability of this portable system using test-retest and reliable change analyses.

**Project Title:** Factors mediating dysphoric moods and help seeking behaviour among Australian parents of children with autism.

**Investigators:** Dr James Donnelly, Mr Matthew Snow

**Description:** This study compared levels of state affect, dysphoric mood, and parenting sense of competence in Australian parents of children with or without autism. The effects of personality and location on the parents’ experience were also examined, while controlling for current affect. Possible relationships among personality, location factors and help-seeking behaviour were also explored in parents of children with autism. Prior findings of higher dysphoric mood levels in parents of children with autism were supported, as was the positive correlation between dysphoric moods and Neuroticism levels. Parenting Sense of Competence did not differ across locations, and there were no parent type by location interactions. Access to services among parents of a child with autism did not moderate dysphoria levels. (PsycINFO Database Record (c) 2016 APA, all rights reserved)

**Project Title:** Using the Montessori approach in community dementia respite centres

**Australian Journal of Dementia Care, Vol 6, Number 1**

**Investigators:** Dr Jim Donnelly, Mr Andrew Hanna, Ms Margaret Allen

**Funding body:** Hastings District Respite Care

**Description:** This project is a longitudinal study of the effects of a Montessori approach to non-residential respite aged care on clients, staff and carers. Hastings District Respire Care Services funded a PhD scholarship.

**Project Title:** To C or Not to C: The Relationships among Birth Preferences, Body Image Influences, Fear of Pain and Erroneous Knowledge

**Investigators:** Dr Jim Donnelly, Dr Elaine Jefford, Ms Michelle Scott,
Description: The rate of caesarean delivery has soared over recent decades, and is associated with increased maternal and infant mortality and morbidity. The relationships among elective caesarean preference, body image influences, fear of pain, erroneous knowledge and information sources were investigated. Also, an attempt was made to shift reported caesarean preference by making the scarring aspect of caesarean surgery salient. The findings have implications for how to best support women in their birthing decisions, especially those who hold misinformation about caesarean delivery.

Project Title: Effects of social marketing on attitudes and bystander behaviour towards intimate partner violence.

Investigators: Dr Jim Donnelly, Ms Jodi Wittenberg

Description: Intimate partner violence (IPV) has been identified as a global social dilemma. Bystander intervention in IPV situations has the potential to reduce harm to the victim and decrease the likelihood of future violence. This study examined the effects of Australian community service announcements, one being 'bystander focused', on viewers’ attitudes to IPV and behavioural intentions. Additionally, we explored the potential effects that neighbourhood proximity, community interaction, personal experience and use of informal social control methods, had on participants’ attitudes towards IPV and willingness to intervene as a bystander. The results indicate that video focused on the role of the bystander had no greater immediate effect on viewers’ reported attitudes or bystander intentions than the other videos. However, participants who had more frequent interactions with their neighbours reported higher bystander intentions compared to participants who had less interaction with their neighbours.

Project Title: Observer Effects on Cognitive and Physical Performance

Investigators: Dr Jim Donnelly, Dr Chris Stevens, Ms Bethany Bradhurst

Description: The presence of observers has been reported to have both positive and paradoxical effects on skilled performance. This review examined empirical evidence and relevant theories to elucidate the observer-performance association. It was concluded that observer effects interact with a complex mix of factors including observer characteristics, individual difference factors, and characteristics of the task in influencing performance outcomes. The reviewed evidence revealed a predominant pattern of physical performance being enhanced and cognitive performance debilitated in the presence of observers. Studies of cognitive performance during exercise were also reviewed to clarify the effects of exercise on cognition independent of observer effects. The current evidence indicated that cognitive performance was generally enhanced during acute exercise. Implications for future research are discussed.

Michelle Donnelly

Project Title: Moving and Doing: functional outcomes of neuro developmental treatment. A randomised controlled trial

Investigators: Associate Professor Michelle Donnelly, Dr Kate Bain (SCU Adjunct), Ms Suzanne Davis, Dr Chris Chapparo, Professor Dina Reddihough, Dr Robert Heard
**Funding Body:** NDTA (Neuro-Developmental Treatment Association)

**Description:** The research project investigates whether there is a significant difference in the functional performance of children with moderate to severe cerebral palsy who participate in a multi-modal intervention program in comparison to those who are involved in an alternative treatment program. Multi-modal intervention utilises three interventions to improve functional performance: (1) task specific training; (2) use of targeted physical cues and (3) instruction in the use of cognitive strategies to teach, apply and control movements in a way that fits the task and task context.

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**Frances Doran**

**Project Title:** Nursing student’s knowledge and attitudes towards domestic violence

**Investigators:** Dr Frances Doran, Associate Professor Marie Hutchinson

**Description:** Domestic violence, is a significant public health issue and a fundamental breach of women’s human rights. Nurses have an important role in identifying people who are victims of domestic violence through screening and facilitating their access to assistance and support. Undergraduate nursing education is key to shaping attitudes and providing students with a comprehensive understanding of domestic violence. Little research has been undertaken exploring nursing students attitudes towards domestic violence. The aims of this study was to explore undergraduate nursing student attitudes and views towards domestic violence: and employ the findings to inform undergraduate curriculum development and appropriate responses to domestic violence presentations.

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**Elizabeth Emmanuel**

**Project Title:** Evaluation of use of eportfolio and Blackboard Collaborate among students in the EN/RN Pathway

**Investigators:** Dr Elizabeth Emmanuel

**Description:** Eportfolio and Blackboard Collaborate are electronic innovative platforms that add another dimension to learning. This is particularly important for students who undertake a flexible mode of delivery and rely on online strategies and distance learning as those in the EN/RN Pathway. These platforms provide an innovative approach to tying learning experiences together while demonstrating continual development of personal qualities, competencies and experiences that are essential to professional practice. Popularity of ePortfolios and Blackboard Collaborate continues to increase, but there is limited evidence to confirm their effectiveness specifically to enrolled nurses entering tertiary studies for the first time. This pilot study is essential to understand the uptake of these innovative approaches and its effectiveness in teaching and learning.

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**Sandra Grace**

**Project Title:** Osteopathic students' perceptions of peer physical examination.

**Investigators:** Associate Professor Sandra Grace, Mr Brett Vaughan
Description: The aim of the project was to investigate the perceptions of first year osteopathy students about performing physical examinations on their peers. Participants were asked to complete a brief demographic questionnaire, the Examining Fellow Student (EFS) questionnaire and the Peer Physical Examination Questionnaire (PPEQ), developed by Consorti et al. (2013). The participants were then asked to complete the EFS and the PPEQ at the end of session/semester. Inferential statistics were used to examine any differences between the questionnaires at the two time points, and for any differences between the demographic items and the EFS and PPEQ scores. Correlation statistics were used to examine the relationship between the scores on the EFS and PPEQ. Internal consistency statistics were generated for both questionnaires.

Project Title: Reliability of a viva examination of clinical reasoning.

Investigators: Associate Professor Sandra Grace, Mr Paul Orrock, Mr Raymond Blaich, Mr Brett Vaughan

Description: Clinical reasoning (CR) is the process by which a health professional gathers information about a patient, synthesises that information then develops and implements a treatment and management strategy. There are a range of methods by which the CR of a student can be assessed. The use of an oral exam based on simulated cases has been reported to be a reliable method for assessing clinical reasoning when the case scenarios and marking criteria are consistently applied. Previous research by the investigators of the present study has developed a viva (oral) examination of clinical reasoning in osteopathy. The aim of the project is to investigate the reliability of the previously developed exam.

Project Title: Patient-centered healthcare: How do patients integrate natural medicine with primary and allied health care services?

Investigators: Associate Professor Sandra Grace, Dr Joanne Bradbury, Dr Cathy Avila

Funding Body: Australian Traditional Medicine Society (ATMS)

Description: In this project, focus groups of digitally-literate consumers of natural medicine are currently being conducted to explore how people manage their healthcare service providers, particularly in relation to digital technologies. This project also investigated how consumers integrate their healthcare, particularly how they integrate their use of natural medicine (NM) products and services with mainstream health services. A Facebook (Fb) page was set up as a platform for engaging an audience of consumers and practitioners who were interested in NM research and evidence. A two-stage methodology was used: (i) a series of focus groups of consumers, and (ii) an online survey of people who included NM as part of their healthcare. Participants will be asked how they manage their healthcare including the types of practitioners they consult and frequency of consultations. Outcomes will include a visual map of the network of the practitioners around the individual. This research provides a better understanding of the types of risks and benefits involved in the combinations of treatments used, and the changes consumers perceive as necessary to advance patient-centred healthcare delivery.
**Project Title:** The effect of manual therapy and exercise on age-dependent lung function: a randomised controlled trial

**Investigators:** Associate Professor Sandra Grace, Dr Suzanne Broadbent, Mr Paul Purchase, Ms Sophie-Anne Bruce, Mr Matt Meadows, Mr Holger Honum, Ms Inaki Ruiz, Mr Anthony Wrigley, Dr Roger Engel (Macquarie University)

**Description:** Ageing is associated with a range of anatomical and physiological changes that include the respiratory system. These changes begin as early as 40 years of age and include stiffening of the spine and chest wall. This stiffening has an impact on breathing mechanics and is a cause of the progressive decline in lung function typically associated with ageing. The aim of this trial was to investigate whether reducing stiffness in the spine and chest wall improved lung function in people over 50 years of age. The trial was designed as a randomised controlled trial with 306 healthy people between the ages of 50 and 65 years randomly allocated to one of three equal groups. Group 1 (Control) received a standardised exercise program performed on a treadmill. Group 2 received a mobilisation protocol designed to increase joint mobility in the thoracic spine and ribs followed by the same exercise program. Group 3 received a manipulation protocol designed to increase joint mobility in the thoracic spine and ribs followed by the same exercise program. Each participant received six intervention sessions over a period of three weeks. Outcome measurements included non-invasive lung function measurements, chest expansion and a respiratory function questionnaire. Lung function was measured using spirometry (exhaling into a tube) and chest expansion measured using a tape measure.

**Project Title:** The utility and effectiveness of the ‘Breathing Basics for Asthma Program’ for osteopathic management of patients with asthma and dysfunctional breathing: A pilot study

**Investigators:** Associate Professor Sandra Grace, Ms Gabrielle Biland, Ms Anna Ryan, Ms Rachel Gordge, Ms Rosalba Courtney

**Description:** Breathing retraining has been shown to assist symptoms and quality of life in asthma sufferers. It is most likely to be helpful for asthmatics who have poor breathing habits such as mouth breathing or who have dysfunctional breathing. Training asthmatics to breathe through their nose rather than their mouth has been shown to reduce severity of asthma symptoms and decrease asthma exacerbations. Research evidence suggests that breathing retraining that improves dysfunctional breathing patterns improves breathlessness and other symptoms that may exist in asthma sufferers.

Dr Rosalba Courtney developed the ‘Breathing Basics for Asthma Program’ (BBAP), a four week intervention that combines breathing retraining with manual therapy. The three main components of the BBAP are patient education, breathing exercises and manual therapy. This pilot study investigated the utility and effectiveness of the BBAP for osteopathic management of patients with asthma and dysfunctional breathing.

**Project Title:** Generating practice-based evidence: N-of-1 trials for natural medicine

**Investigators:** Associate Professor Sandra Grace, Dr Joanne Bradbury, Dr Cathy Avila

**Funding Body:** Australian Traditional-Medicine Society (ATMS) funding grant

**Description:** We are collaborating with the Australian Traditional Medicinal Society on this project.
Our proposal aims to implement a pilot program for capacity-building of natural medicine practitioners in Australia to undertake N-of-1 trials. This includes:

- rigorous training for natural practitioners in N-of-1 methodology
- academic support, including publishing findings, for natural medicine practitioners
- a template for N-of-1 studies, with standardised data collection methods
- a pathway for ethics applications for natural practitioners
- a repository for trial data for primary and secondary statistical analysis

**John Hurley**

*Project Title:* Integrating Emotional Intelligence in Clinical Decision Making Processes within Hospital Settings: A Multi Case Study Project

*Investigators:* Associate Professor John Hurley, Professor Iain Graham, Associate Professor Marie Hutchinson, Ms Leann Whitehair

*Funding Body:* SCU DVCR Seed Grant

*Description:* Errors in clinical decision making are highly costly in terms of both human and financial considerations. Current frameworks for clinical reasoning fail to include Emotional Intelligence. By developing an evidenced theoretical model of clinical decision making reflecting of effective Emotional Intelligence behaviours the occurrence of such instances should be diminished. This research project aims to inform multi-disciplinary clinical decision making within hospital settings to improve patient outcomes. By developing a new theoretical model of clinical decision making that incorporates Emotional Intelligent (ET) capabilities, this study also seeks to develop an outcome measure suited to further assessment of effectiveness through Randomized Control Trial.

**Peter Hassmen**

*Project Title:* Treating Major Depression with Physical Activity

*Investigators:* Professor Peter Hassmen, Professor Per Carlbring (Stockholm University, Sweden), Professor Greg Neely (Umeå University, Sweden), Professor Gerhard Andersson (Linköping University, Sweden), Mr. Markus Nyström (Umeå University, Sweden)

*Description:* Major depressive disorder is one of the most common diseases today and is the second most common cause of disability in the world. Although depression can “self-heal”, those who recover without support have an increased risk of relapse, with the time between relapses decreasing over time. In contrast, those who have received psychological treatment run a significantly lower risk for relapses. This project aims to compare traditional psychological treatments with regular physical activity.

*Project Title:* Adherence to Lifestyle Interventions in Obese Adults

*Investigators:* Professor Peter Hassmen, Associate Professor Kate Pumpa (University of Canberra), Ms. Emily Burgess (University of Canberra)
Description: Lifestyle intervention programs are efficacious in the management of obesity, but often report poor adherence rates that hinder treatment effectiveness and health outcomes. The purpose of this project is therefore to investigate the determinants of adherence in obese adults and how healthcare professionals and obesity management services can better assist the implementation of sustainable lifestyle changes.

Project Title: Mental Health in Elite Sport

Investigators: Professor Peter Hassmen, Assistant Professor Richard Keegan (University of Canberra), Dr. Kirsten Peterson (Australian Institute of Sport), Dr. Renee Appaneal (Australian Institute of Sport), Mr. Joshua Sebbens (Australian Institute of Sport)

Description: Poor mental health is relatively common in the general population, and elite athletes are no exception. Our vision is to foster systems within elite sport in which people have the skills and confidence to effectively identify and respond to someone with poor mental health. This research project is an effort toward realising this vision by developing and evaluating a sport specific mental health awareness program to increase the mental health literacy of key persons within the sport system.

Project Title: Resilience in Elite Sport

Investigators: Professor Peter Hassmen, Assistant Professor Richard Keegan (University of Canberra), Dr. Kirsten Peterson (Australian Institute of Sport), Dr. Renee Appaneal (Australian Institute of Sport), Mr. Umut Dogan (Australian Institute of Sport)

Description: High performance sport demands that athletes be highly resilient at benchmark events. Resilient athletes are those that can respond positively and productively in the face of challenges, adversity and even failure, and who can consistently deliver to their potential. We seek to explore how resilience can be enhanced through psychological techniques: an area of research still in its infancy.

Project Title: Sport coaches Interpersonal Style and Athletes Wellbeing

Investigators: Professor Peter Hassmen, Professor Magnus Lindwall (Gothenburg University, Sweden), Dr. Andreas Stenling (Umeå University, Sweden), Dr. Andreas Ivarsson (Halmstad University, Sweden).

Description: We aim to increase our knowledge of the leadership process using Self-Determination Theory. Particularly how coaches’ autonomy-supportive and controlling interpersonal styles longitudinally are associated with young athletes’ motivation and ill-/well-being. The dominating leader-centric perspective will be complemented by a follower-centered perspective, in which both leaders and followers are jointly considered to affect the leadership-process. This enables us to gain increased insight into the role of followers in the dynamic and interactive leadership process.
**Project Title:** Overtraining, Underrecovery, and Burnout in Elite Sport  

**Investigators:** Professor Peter Hassmen, Associate Professor Göran Kenttä (Swedish School of Sport and Health Sciences, Sweden; PhD 2001), Associate Professor Henrik Gustafsson (Karlstad University, Sweden; PhD 2008), Dr. Sören Hjälm (Örebro University, Sweden; PhD 2014), Dr. Erik Lundqvist (Umeå University, Sweden; PhD 2015).

**Description:**
Burnout is a multidimensional response to stress afflicting also athletes and coaches in elite sport. Relatively much is known about determinants of burnout, but less about recovery from burnout. This is a longitudinal project in which all above named collaborators have successfully defended their individual doctoral thesis with Dr. Hassmen as Primary Supervisor.

**Project Title:** Motivational Climate and Social Networks in Elite Sport  

**Investigators:** Professor Peter Hassmen, Assistant Professor Richard Keegan (University of Canberra), Dr. Kirsten Peterson (Australian Institute of Sport), Mr. Craig Appaneal (Australian Institute of Sport)

**Description:** Social support research on elite athletes has primarily focused on dyadic relationships, for example between the athlete and the coach, parents, or peers, respectively. Thereby not acknowledging complex interactions and the dynamic nature of an elite athlete’s total social support system. By using personal network analysis, we aim to assess the athletes’ social networks and how they affect motivation and sport-performance.

**Marie Hutchinson**

**Project Title:** Psychometric testing of the Inventory on Beliefs and Attitudes towards Domestic Violence  

**Investigators:** Associate Professor Marie Hutchinson, Dr Frances Doran

**Description:** Domestic violence (DV) is an international public health issue associated with adverse health outcomes for adults and children. There have been widespread calls to increase nurses’ capacity to respond to DV and improve undergraduate nursing education in this area. There are few valid, reliable and contemporary measures of nursing attitudes and beliefs towards DV suited for use in evaluating education programs. This study aimed to develop and validate the psychometric properties of a newly developed inventory designed to measure student nurses beliefs and attitudes towards domestic violence. Cross sectional survey of undergraduate nursing students (n=503) enrolled in a three year degree at a regional university in Australia.

**Project Title:** Self-reported patient safety confidence and competence among Australian nursing students: a cross-sectional survey

**Investigators:** Associate Professor Marie Hutchinson, Ms Kim Usher, Dr Glenda Parmenter, Dr Tamara Power, Ms Wendy Chaboyer, Ms Sharon Latimer, Ms Jane Mills, Ms Lesley Siegloff, Ms Debra Jackson, Ms Judy Mannix, Ms Cindy Woods

**Description:** Patient safety is critical to the provision of quality health care and thus should underpin nurse education. This study examined undergraduate nursing students’ self-reported patient safety
confidence and competence during their education program. Undergraduate nursing students enrolled in seven Australian universities completed the 15 item Health Professional Education in Patient Safety Survey (H-PEPSS) between September and December 2015. Patient safety dimension scores were compared across learning settings (classroom and clinical), year of nursing course, and previous healthcare experience.

**Project Title:** Australian nursing students’ knowledge and attitudes on pressure injury prevention

**Investigators:** Associate Professor Marie Hutchinson, Ms Debra Jackson, Ms Susan Barnason, Mr William Li, Ms Judy Mannix, Mr Stephen Neville, Ms Donella Piper, Ms Tamara Power, Mr Graeme D Smith, Ms Kim Usher

**Description:** The main aim of this study is to investigate attitudes and knowledge of Australian nursing students on pressure injury prevention. Pressure injury incidence is widely accepted as an indicator for the quality of care. Poor knowledge and negative attitudes toward pressure injury prevention could undesirably affect preventive care strategies. Conversely, extensive knowledge of pressure injury is essential to enable good prevention. It is important to identify widely spread misconceptions, and evaluate educational needs, about pressure injury prevention in order to develop strategies for improving the quality of pressure injury education and prevention.

**Project Title:** Workplace bullying in the Australian public sector

**Investigators:** Associate Professor Marie Hutchinson, Associate Professor John Hurley, Dr Joanne Bradbury, Dr Graeme Browne

**Funding Body:** CRN Collaborative Research Network

**Description:** A large cross sectional survey of public servants in Australia were surveyed about their exposure to bullying. A total of 3345 completed the survey, of which 798 provided extensive open-ended, narrative responses about their experiences. From this survey, several papers have arisen including the validation of an instrument to measure workplace bullying and a qualitative analysis of the bullying experiences.

**Elaine Jefford**

**Project Title:** Validation of the Australian version of the Birth Satisfaction Scale – Revised (BSS-R)

**Investigators:** Dr Elaine Jefford, Professor Caroline Hollins Martin (UK), Professor Colin Martin (UK)

**Description:** Birth satisfaction represents a woman’s subjective and uniquely personal appraisal of her birth experience. This complex multi-faceted construct includes elements of perceived quality of care, coping efficacy and reflections of the birth experience as a whole and in context. The BSS-R has been found to be a valid and reliable measure of birth satisfaction and has been validated in a number of countries including the UK, the USA, Greece and Turkey (Barbosa-Leiker et al., 2015; Cetin et al., 2015; Fleming et al., 2016; Hollins Martin and Martin, 2014; Vardavaki et al., 2015).

The purpose of the current investigation is to develop and validate an Australian version of the BSS-R and evaluate its psychometric properties in terms of key indices of validity and reliability.
**Project Title:** Midwives decision-making & prevention of perineal trauma.

**Investigators:** Dr Elaine Jefford, Ms France Guy, Professor Julie Jomeen (UK), Professor Colin Martin (UK)

**Funding Body:** Mid North Coast Local Health District – Research Support Program

**Description:** In 2015 a collaborative research project with Southern Cross University Midwifery was undertaken. It explored how midwives make decisions about perineal management and factors that may or may not contribute to that decision-making. Findings demonstrated unjustified and at times un-evidenced midwifery decision-making and illustrated some poor midwifery practice, thus some midwives clinical practice could be improved. To address this problem a midwifery specific, interactive online learning package was developed with the aim to improve midwives clinical decision-making around perineal management. This is called Enhancing Decision-making & Assessment in Midwifery (EDAM) Perineal Management Module.

**Project Title:** Midwifery decision-making process when assisting women to maintain perineal integrity during active second stage labour.

**Investigators:** Dr Elaine Jefford, Mrs France Guy, Professor Julie Jomeen (UK), Professor Colin Martin (UK)

**Description:** Midwives are held legally and professionally accountable for their clinical reasoning and decisions; however, no models are available that outline a midwife’s process of clinical reasoning and decision-making during second stage labour. The study aimed to give transparency to midwifery clinical reasoning and decision-making processes when used to achieve a desired outcome, in this case perineal integrity. In providing this transparency, the potential of improving quality, safety and midwifery accountability will be enhanced.

**Project Title:** Enhancing Student Midwifery Clinical Reasoning Processes and Decision-Making Skills

**Investigators:** Dr Elaine Jefford, Mrs France Guy, Mrs Belinda Newcombe

**Description:** This pilot study aimed to develop and evaluate the educational effectiveness and acceptability of a midwifery specific clinical decision-making learning package. The study engaged two higher education institutions offering undergraduate programs leading to midwifery registration and critical stakeholders in the development a midwifery specific, pedagogically sound and engaging clinical decision-making on-line learning package for student midwives. The critical stakeholder group developed and evaluated the on-line learning package which enhanced the potential for narrow systemic adoption of a clear, pedagogically sound, educational standards for undergraduate midwifery students.
Beverly Joffe

Project Title: Small Talk: Identifying communication problems in maltreated children

Investigators: Dr Beverly Joffe, Associate Professor Margarita Frederico, Ms Annette Jackson, Ms Carlina Black, C.M., Dr Allison Cox,

Funding: Department of Health and Human Services, Victorian Government, Australia

Description: The aim of this study was to develop a tool for non-speech pathologists to assist in identifying a child’s need for assessment by a speech pathologist so that there could be early identification of problems. A culturally sensitive tool developed to be completed by the child’s carer included questions on language, speech and hearing, voice, fluency, understanding sentences, vocabulary and expression. Sixty-five children aged between 4-8 years, who had experienced abuse and/or neglect participated in the study. The tool was found to be high in sensitivity but low in specificity.

Project Title: A survey of Australian preschool teacher’s perceptions of school readiness

Investigators: Dr Beverly Joffe, Dr Chyrisse Heine, Dr Tanya Serry, Associate Professor Elspeth Froude

Funding: La Trobe University Small Grant

Description: This study investigated preschool teacher’s views and perceptions of school readiness, the factors that determine a child’s school readiness and the processes used to determine whether a child should be ‘held over’ in preschool or transition to formal schooling. Participants were 103 preschool teachers who responded to a mailed questionnaire. Data was analysed descriptively and thematically. Results suggested that the majority of teachers described school readiness as a child having appropriate skills in all areas, and being socially-emotionally mature.

Project Title: Using mindful reflection in Speech Pathology

Investigators: Dr Beverley Joffe, Mr Jonathan Purdy

Description: Learning within a theory subject and within a combined theory/practical subject are explored. Data included written reflections completed by two student in their first year of a 4-year undergraduate course. De-identified documents were analysed qualitatively and interpreted via inductive coding and themes. Findings from the research provide a perspective of students’ thoughts about aspects of their chosen profession and in relation to the clients for whom they will be expected to provide assessment and treatment in future. Further highlighted in the findings, are students’ thoughts about their learning around particular skills required to practice within this profession, as well as about their thinking about learning.

Project Title: The developmental profile of young children identified with speech and language concerns through developmental surveillance and screening within the early childhood education and care setting

Investigators: Dr Beverley Joffe, Ms Danielle Roan, Dr Beth Mozolic-Staunton
**Description:** Children facing early developmental challenges are not identified within the current early detection (ED) procedures of primary care. This project aimed to promote ED in the setting of early childhood education care centres (ECECs) in the Gold Coast community as part of a larger research study. Thirteen children identified with speech and language concerns were assessed on the Bayley Scales of Infant and Toddler Development or the Developmental Indicators for the Assessment of Learning. The children’s assessment subtest values were considered ‘average’ 57% of the time. Five children identified by educators received speech pathology referrals based on speech fluency, unintelligibility and expressive communication challenges.

**Project Title:** Parent-child interactions around television and other on-screen content: Considering communication and social skills

**Investigators:** Dr Beverley Joffe, Ms Claire Lusted

**Description:** Reported interactions of parents and their pre-school and young school aged children around television and other forms of on-screen content were investigated and associated and predictive factors that impact on the quality of these interactions were considered in relation to the development of children’s communication and social skills. A mixed methods approach was used to analyse online survey responses of 163 Australian parents/carers of pre-school and early school aged children.

**Project Title:** Coaching parents to implement strategies to help their child with speech difficulties

**Investigators:** Dr Beverley Joffe, Ms Emily Freiermuth

**Description:** The research explores qualitatively parent experiences and perceptions as they attend a seminar pertaining to speech sounds and then implement learned intervention strategies for their young child with speech concerns.

**Desirée Kozlowski**

**Project Title:** The (limited) effect of psycho-education on women’s attitudes to labiaplasty

**Investigators:** Dr Desirée Kozlowski, Dr Stephen Campbell Provost, Ms Shauna Byrne

**Description:** Despite a lack of data on the complications associated with labiaplasty, demand for the surgery has been increasing at least since 2005. However, between 2014 and 2015 there was a 28% decrease in labial surgeries funded by Australian Medicare. This drop has been attributed to guidelines recommending general practitioners provide education to women seeking surgery. This study investigated the effect of psycho-education about genital diversity and the possible complications of labiaplasty on women’s genital appearance satisfaction and their attitudes towards labiaplasty. Despite receiving education on the possible negative outcomes of labiaplasty and the diversity in female genital appearance, women’s subjective dissatisfaction with their own genital appearance appears to be the main driver of their attitudes towards undergoing labiaplasty. The efficacy of education to deter women from undergoing unnecessary labial surgery is thus, and not for the first time, brought into question.
**Project Title:** Getting to the bottom of backlash: the social cost of sex role violation

**Investigators:** Dr Desirée Kozlowski, Dr Stephen Campbell Provost, Ms Harriet Hulme

**Description:** Females in stereotypically masculine careers can experience discrimination. Role Congruity Theory proposes that this results from negative evaluations formed by a perceived incongruity between the gender traits (personal characteristics) females are conceived as holding, and the requirements of specific careers. The aims of the study were twofold; firstly to investigate whether males are also subject to negative social evaluations as a result of transgressing stereotypically gendered careers. Secondly, to test whether transgression at different levels of normative gender traits and jobs impacts observers’ judgments of them. Simple effects revealed that sex/trait congruent females (female/feminine trait) were perceived as more likable and competent than females with masculine traits. Interestingly, males were rated as significantly more likable and competent when they exhibited at least one sex-incongruent (i.e., feminine) aspect.

**Project Title:** Precarious perceptions of men and masculinity

**Investigators:** Dr Desirée Kozlowski, Dr Stephen Campbell Provost, Ms Jessica Gillies

**Description:** Precarious Manhood theorem suggests that ‘manhood’ is a tenuous and socially bestowed state. Beliefs in precarious manhood have been linked to male anxiety, violence, gambling decisions, and attitudes towards homosexuality. However, the influence of such beliefs on visual perceptions of others has not directly been explored. Kozlowski, van der Zwan, and Brooks (2016) found that observers judged target walkers significantly more often to be male than masculine while female and feminine judgements did not differ. When observers were given the option to respond neither male nor female, walkers were consistently judged male more often than masculine and female more often than feminine regardless of PMBS scores.

**Gopi McLeod**

**Project Title:** Work-related musculoskeletal injuries among Australian osteopaths: A preliminary investigation

**Investigators:** Dr Gopi McLeod, Mr Michael Murphy, Te Marana Henare, Bernadette Biblik

**Description:** This research sought to collect preliminary data to establish the prevalence and types of WRMIs among Australian osteopaths. Previous research has shown that WRMI is a significant risk for registered manual therapists from other professions, including physiotherapists, occupational therapists and chiropractors. The physically demanding nature of manual therapy has been identified as the common factor in WRMIs among these professions. All members of the professional association Osteopathy Australia were invited to participate via an online survey. A total of 160 surveys were completed. The incidence of WRMI was high, with 58% of respondents having sustained one or more injuries. Results indicated that the wrist and the fingers are the most frequently injured areas, with the prevalence of injury highest in recent graduates (less than five years’ experience). This research identified implications for those involved in the profession of osteopathy, including practitioners, educators and regulators. Research to benchmark training in work-related injury prevention across Australian pre-registration and continuing education courses is recommended.
**Project Title:** Exploring the experiences of Australian osteopaths who have sustained a work-related musculoskeletal injury (WRMI)

**Investigators:** Dr Gopi McLeod, Ms Katarina Annels, Ms Jessica Cohen, Mr Sam Edwards, Mr Daniel Hodgins

**Description:** This qualitative research was the second arm of a larger survey study investigating the prevalence of work related musculoskeletal (WRMI) injuries in Australian Osteopaths. Thirteen osteopaths who had sustained an injury during clinical practice were interviewed revealing that apart from a small number of work injury insurance claims, most WRMIs in osteopaths go unreported, and many practitioners find themselves alone in their struggle to continue working while managing their injury. Participants in this current research offered numerous suggestions for injury prevention and risk minimisation that reflected their awareness of causative factors and the need for attention to safe work practices. All participants agreed that employing general self-care and health-seeking behaviours was key to minimising the risk of injury. In addition to matching work-ready fitness to hours worked in clinical practice, exercise, stretching, addressing poor ergonomic work postures and reducing prolonged and static loading were the most frequently mentioned strategies. However, from participants’ comments, it appears that risk minimisation strategies were often realised post injury.

**Project Title:** Perceptions of senior student osteopaths of learning to be a reflective practitioner

**Investigators:** Dr Gopi McLeod, Ms Tess Shannon, Ms Isabel Carey, Ms Emma Winn

**Description:** The aim of this project is to explore the perceptions about reflective practice among senior student osteopaths. Reflective practice has only recently been embedded into the osteopathic curriculum. Findings from this survey research will assist educators to gather recommendations for improving student engagement with the reflective practice strategies as well as informing the broader osteopathy community of student osteopaths’ experiences of learning to become a reflective practitioner. The survey data was gathered at the end of 2016 and work on the analysis and dissemination of the results will take place in 2017.

**Rudi Meir**

**Project Title:** The development and validation of the Adolescent Sport Doping Inventory

**Investigators:** Dr Rudi Meir, Dr Adam Nicholls (University of Hull)

**Funding Body:** The World Anti-Doping Agency with support from the School of Health and Human Sciences

**Description:** The purpose of this World Anti-Doping Agency funded project is to develop and validate a cross-culturally valid questionnaire to assess factors that predict doping among adolescent athletes. In order to achieve this aim, athletes and coaches from the United Kingdom, United States, Australia, and Hong Kong were recruited across all phases of this three year project, which will allow the research team to identify cultural differences. This project commenced in late 2014 and is due for completion in 2017.
**Project Title:** Does shank-to-foot length ratio influence knee-to-wall ankle DROM performance?

**Investigators:** Dr Rudi Meir, Dr Zachary Crowley-McHattan, Dr John Whitting, Dr Sonja Coetzee

**Description:** The aim of this study was to establish if a shank-to-foot length ratio had an influence on the knee-to-wall assessment score. Ankle dorsiflexion range of motion (DROM) is often assessed to establish functional ROM of this joint. Ankle mobility is an important factor in influencing performance during squatting, jumping and landing, movements of daily living and balance (1-4). Findings suggest that neither the length of the foot, length of the shank, nor their ratio, had any influence on the knee-to-wall assessment of ankle joint flexibility in the sample analysed. It is reasonable to conclude therefore, that the knee-to-wall technique provides valid information about ankle joint DROM, an important factor in a range of lower body functional movements.

**Project Title:** Is a digital smartphone app a reliable and valid method for assessing ankle dorsiflexion ROM?

**Investigators:** Dr Rudi Meir, Dr Zac Crowley-McHattan, Dr John Whitting, Dr Sonja Coetzee

**Description:** The aim of this study was to compare three weight-bearing ankle dorsiflexion range of motion (DROM) assessments, performed by an experienced rater. The aim was to test the reliability and validity of a freely available smart phone app’ inclinometer against two commonly used clinical assessment techniques. This study established that a digital smart phone app inclinometer is a reliable and valid method for assessing ankle DROM and would be appropriate for use in both clinical and non-clinical settings.

**Project Title:** Shod versus barefoot effects on force and power development during a conventional deadlift

**Investigators:** Dr Rudi Meir, Mr Mark Hammer, Dr Zachary Crowley-McHattan, Dr John Whitting

**Description:** The aim of this research was to identify possible kinetic benefits of performing a conventional deadlift in a shod or unshod condition. Strength and conditioning researchers, and a range of industry practitioners, have stated that weightlifting shoes, non-compressive soled shoes, or unshod (socks only or barefoot) conditions are essential in providing a stable platform and effective force transfer from the ground to the bar. In contrast it is claimed that soft soled shoes, such as cross trainers, produce instability and indirect ground reaction force (GRF) transmission, potentially reducing performance. Preliminary findings revealed no statistically significant differences between shod and unshod conditions for the kinetic and balance variables analysed. Future testing should enlarge the sample size to investigate any possible trends for load effects or shoe × load interactions.

**Gail Moloney**

**Project Title:** Developing the efficacy of the Immediate Registration Opportunity paradigm

**Investigators:** Dr Gail Moloney, Dr Michael Sutherland, Ms Anne Judd

**Funding Body:** NSW Donatelife and SCU DVCR Seed Grant

**Description:** Donation intent is now recorded on the Australian Organ Donor Register AODR (the Driver’s License was phased out in 2012). However, in December 2015 only 22% of the eligible population had
registered their donation intent. The aim of this project was to develop the Immediate Registration Opportunity paradigm. Our previous research demonstrated that the attitudinal endorsement that currently exists towards organ donation can be successfully translated into registrations when people are provided with an immediate as opposed to a delayed registration opportunity (the latter mirrors Australia’s current registration practice). The project empirically investigated various factors integral to its success with both mainstream and culturally and linguistically diverse communities.

**Project Title:** Enabling success in higher education for culturally and linguistically diverse students from low socio-economic backgrounds

**Investigators:** Dr Gail Moloney, Dr Thomas Roche, Dr Suzi Hellmundt

**Funding Body:** Higher Education Participation and Partnerships Program (HEPPP)

**Description:** The project piloted a new educational pathway at SCU College for culturally and linguistically diverse students from low-SES who are currently not eligible for study at SCU. The pathway consists of 15 weeks of SCU College’s English Language Program tuition (5 weeks General English followed by 10 weeks English for Academic Purposes); followed by SCU College’s Preparing for Success Program. This pathway facilitates the acquisition of both general and academic language skills and develops academic literacy and study skills enabling access to and success in undergraduate study at SCU.

**Beth Mozolic-Staunton**

**Project Title:** Right Kids, Right Time, Right Services: developmental surveillance in early childhood education settings

**Investigators:** Beth Mozolic-Staunton, Associate Professor Michelle Donnelly, Dr Jacqui Yoxall, Dr Josephine Barbaro

**Description:** Children who are at risk for autism spectrum disorder (ASD) and other developmental challenges would benefit from early identification and access to early intervention, as this takes advantage of children’s early brain plasticity. Valid and reliable tools have recently been developed to accurately detect early signs of ASD and other developmental challenges in children as young as 12-18 months of age. The aim of this project is to implement and evaluate a prospective developmental surveillance program by providing professionals and carers in early childhood settings with reliable and valid tools and training to accurately identify and refer children at risk to appropriate support services as well as follow-up comprehensive developmental assessment and referrals through the SCU Health and Wellbeing clinic.

**Susan Nancarrow**

**Project Title:** Victorian Allied Health Workforce Research Program

**Investigators:** Professor Susan Nancarrow, Dr Joanne Bradbury, Ms Gretchen Young, Ms Katy O’Callaghan, Ms Kegan Barlow

**Funding Body:** Victorian Department of Health and Human Services
Allied health plays an important contribution to health and wellbeing. In Victoria, the allied health workforce comprises approximately 42,000 health professionals in over 27 separate registered and unregistered disciplines across a range of sectors. The 3 year Program aims to provide an up-to-date evidence base of the allied health workforce size, location, profession and profiles, including patterns of workforce turnover, and an understanding of the main aspects of workforce attrition and retention. This data will help inform workforce policy and planning in Victoria.

Project Title: Assessing availability and cost of same-day general practice appointments for adults and senior patients within Northern NSW

Investigators: Professor Susan Nancarrow, Dr Joanne Bradbury, Dr Cathy Avila, Dr Frances Doran, Dr Sabrina Pit, Professor Gary Freed

Funding Body: DVCR seed funding grant

Description: This study was a collaboration with NNSWHD and Prof Gary Freed, University of Melbourne. It used secret shopper methodology to measure the prevalence of same day availability at GP clinics around our region. It was a cross-sectional, census study that included all 184 general practices across 12 local government areas in northern NSW. Practices were phoned in a randomized sequence on weekday mornings by a researcher.

Project Title: Patient Perspectives: Understanding and engaging with patient preferences for different approaches to health care delivery using social media

Investigators: Professor Susan Nancarrow, Dr Joanne Bradbury, Dr Cathy Avila, Dr Frances Doran, Associate Professor John Stevens

Funding Body: DVCR seed funding grant

Description: This study was a collaboration with Australian Musculoskeletal Network (AMN). It established and promoted a Facebook page to engage with healthcare consumers about what they want from healthcare service integration. The Facebook page linked to a survey that collected data about what was important for consumers.

Jenny Parratt

Project Title: A qualitative analysis and interpretation of a qualitative research question from The First 30 Minutes After Birth research

Investigators: Dr Jenny Parratt

Funding Body: Australian Midwifery Scholarship Fund

Description: The research project aims to understand women’s preferences for care in the first 30 minutes after birth; ultimately to optimise caregiver practice, reduce postpartum hemorrhage (PPH) rates and improve women’s satisfaction.
Joanne Rowley

**Project Title:** Glycaemic Control to Treat Foot Ulcers

**Investigators:** Dr Joanne Rowley,

**Funding Body:**
Mid North Coast Local Health District

**Description:** To determine whether controlling blood glucose intensively in people with Type 2 Diabetes who have diabetic foot ulcers prevents the incidence of amputation.

**Project Title:** Mental Health Young Men’s Suicide

**Investigators:** Ms Joanne Rowley, Mr Graeme Browne

**Funding Body:** Mid North Coast Local Health District

**Description:** Phenomenology project aims to understand specific mental health care needs for suicidal young men.

Golam Sorwar

**Project Title:** Intelligent In-Home Health Monitoring

**Investigators:** Dr Golam Sorwar

**Funding Body:** SCU DVCR Seed Grant

**Description:** Modern healthcare systems are undergoing a paradigm shift from in-hospital care to in-home monitoring, leveraging the emerging technologies in the area of bio-sensing, wireless communication, mobile computing, and artificial intelligence. In-home monitoring promises to significantly reduce healthcare spending by preventing unnecessary hospital admissions and visits to healthcare professionals. In this project, we viewed the problem of in-home monitoring from the perspective of caregivers and present a framework that supports various monitoring capabilities while making the complexity transparent to the end users. We presented an initial prototype of the system designed according to the proposed framework.

Chris Stevens

**Project Title:** Does training in additional clothing induce heat acclimation and improve endurance performance in the heat?

**Investigators:** Dr Chris Stevens, Dr Jim Donnelly

**Funding Body:** SCU DVCR Seed Grant

**Description:** Southern Cross University’s School of Health and Human Sciences is teaming up with local triathletes to improve their performance and minimise the risk of heat illness when they head to Hawaii for the Honu Half-Ironman Triathlon in hot and humid conditions. In preparation for the event,
Researchers in sport science are trying to find ways that the athletes can become accustomed to these hot conditions, even though they will be forced to finalise their training in the Australian winter months. The effects of wearing extra clothing during their training across a two week program were investigated. The use of this strategy may be able to lower the core body temperature and make sweating more effective when it comes to racing in the heat. It is also hoped that such heat acclimation can minimise the risk of hyperthermia and exertional heat illness on race day.

**Project Title:** Exercise and Sports Science Australia Graduation Destination Report

**Investigators:** Dr Chris Stevens, Professor Susan Nancarrow

**Funding Body:** Exercise and Sports Science Australia, $17,050

**Description:** The popularity of higher education courses in exercise and sport science in Australia has increased exponentially in the last 20 years, with 72 courses across 28 Universities holding the status of full accreditation with Exercise and Sport Science Australia (ESSA). Anecdotally however, careers in exercise and sport science are thought to be limited. Nevertheless, graduates may have a wide scope of career possibilities from health, recreation and sport development through to high performance sports programs. While a career as an Accredited Exercise Physiologist (AEP) is known to be the most well defined career pathway, only a small percentage of exercise and sport science graduates complete the postgraduate study required and obtain membership with ESSA as an AEP. Therefore, this project aims to identify the number of students that graduate each year with a degree in exercise and sports science in Australia, and their subsequent career destination, development and progression through an online national survey.

**Winskel, Heather**

**Project Title:** Building greater cultural knowledge and understanding in regional universities

**Investigators:** Dr Heather Winskel

**Funding Body:** Australia-Korea Foundation

**Description:** The aim of the project was to foster closer linkages, engagement and cultural understanding between psychology at Southern Cross University and Kyungnam University, both regional universities. This has been achieved through (1) a series of workshops/meetings conducted at Kyungnam and Southern Cross Universities, (2) an exchange program between academics/students at the two institutions, (3) joint collaborative projects/studies investigating language and intercultural communication and understanding in Australians and Koreans, (4) internationalization of the curriculum – innovative ways of embedding cross-cultural skills, knowledge and understanding into the undergraduate curriculum, and (5) innovative ways of using social media to build closer linkages and ties between students, so that they can share, engage and exchange ideas, knowledge and experiences.

**Andrew Woods**

**Project Title:** Bachelor of Nursing clinical nursing laboratories student peer support program (COMPASS) pilot
**Investigators:** Mr Andrew Woods, Mr Michael Grande, Ms Fiona Lotherington, Ms Paula Steffensen, Ms Theane Theophilos

**Funding Body:** Southern Cross University Higher Education Participation and Partnership Programme (HEPPP) Project Funding 2016

**Description:** This project involves the establishment of a new student peer support program aimed at improving the retention and success of students commencing the Bachelor of Nursing (BN) at SCU. A large proportion of BN students are from low SES, first in family and ATSI backgrounds. The project spans the administration and evaluation of a pilot trial including the creation of associated sustainable resources. The project is designed to complement existing student support programs and resources.

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**Shi Zhou**

**Project Title:** A preliminary investigation on the effects of intermittent exposure to hypoxia on glucose homeostasis

**Investigators:** Professor Shi Zhou, Associate Professor Allan Davie, Dr Suzanne Broadbent, Ms Yun Wang, Mr Charl Neuhoff, Mr Erich Wittstock

**Funding Body:** Altitude Training Systems (a division of Pulford Air and Gas) and Southern Cross University 2015 Research Seed Grant.

**Description:** The aim of this research project is to examine the efficacy of intermittent exposure to moderate hypoxia as an intervention for individuals with hyperglycaemia in a clinical trial. There have been recent reports in the literature that intermittent exposure to hypoxia (ie. breathing air with oxygen levels lower than normal), with or without exercise, may have beneficial effects of lowering blood sugar in individuals with type 2 diabetes, as well as in weight control. The aim of this research is to conduct a preliminary study on whether intermittent exposure to hypoxia has an effect on blood sugar level in individuals with impaired fasting glucose.

The research has two phases:

Phase One is to investigate the acute effect of hypoxia intervention. Participants will be given one hour intervention session per week, for four weeks.

Phase Two is to determine the effects of eight weeks intervention with three one-hour sessions per week.

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**Project Title:** Assessing Football Skill: An Ecological Dynamics Approach

**Investigators:** Professor Shi Zhou, Dr Rosanne Coutts, Dr John Whitting, Mr Jamie Hetherington

**Description:** This project aims to determine how changing the experimental task and information constraints of a football skill test affects the perceptual-motor performance and coordination of junior representative level football players. The research utilises 3D motion analysis to determine the relationship between football players’ performance outcome and production measures in response to progressively more complex tasks. Using the ecological dynamics approach to evaluate skilled performance and perceptual-motor skill in football represents an important step forward in
understanding best practice for the evaluation of perceptual-motor skill. This has implications for talent identification and skill testing and training in football.

Project Title: Effects and molecular mechanisms of acute and intermittent exposure to hypoxia environment and endurance exercise on glucose homeostasis and insulin resistance in obese mice with Type 2 diabetes.

Investigators: Professor Shi Zhou, Associate Professor Allan Davie, Dr Suzanne Broadbent, Ms Yun Wang, Professor Yong Zhang, Professor Li Wen, Mr Xinhao Wang, Ms Youyu He (TUS)

Funding Body: Internal research funds from Southern Cross University and Tianjin University of Sport.

Description: This project, continuing from 2014, aimed to determine the effects of acute and intermittent exposure to a hypoxia environment during both non-exercise and exercise conditions, on glucose homeostasis and insulin resistance, and to examine the mechanisms underlying these effects, for potential new interventions for diabetes. The research is conducted in collaboration with Tianjin University of Sport, China.

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