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Head of School Foreword

Professor Iain Graham

It is with pleasure that I once again write this foreword. Over the last year much has happened for the School of Health and Human Sciences (SHHS) and its context in which research activity occurs and evolves. Research is an important force in generating a body of scientific knowledge that adds a vital perspective to the delivery of the nation's healthcare and for the benefit of society.

Once again the reader will become struck by the multi-disciplinary integration of the School’s research activity and output, all done in an attempt to create robust science and better learning for our students.

This last year has seen the further evolution of various research themes that the School is contributing output to:

1. Nursing gained a 5 in the latest ERA ranking
2. Complementary and Alternative Medicine gained a 5 in the latest ERA ranking
3. Medical and Health Science gained a 4 in the latest ERA ranking
4. Human Movement and Sports Science gained a 4 in the latest ERA ranking
5. Education gained a 3.

We have done well with our ERA results but next time around we will be measured on different metrics. I believe we will move to measuring impact of our research on the fields of health and wellbeing and associated pedagogy. That is where building strong community engagement to support our applied research activity is essential. The need to evaluate the translation of research findings into policy, practice and development will be fundamental.

Increasingly it is necessary to integrate basic, applied and health services research utilising a broad range of qualitative and quantitative approaches; the agenda is translation and impact on health and society. The disciplines represented in the SHHS are playing a major role, regionally and nationally, in this integration with promotion of a collaborative approach to research. We are actively drawing upon various disciplines and professional groups to bring the perspectives of diverse knowledge areas to bear on the complex issues of the human condition. The need for new approaches to evolve the pedagogy associated with preparing the health workforce is also receiving more of our attention.

The collaborations we have and are establishing with colleagues in the aged care sector, the health and hospital local health districts, primary health networks and the Indigenous community continue to be a driver in our efforts. Built upon mutual interest, respect and desire to develop knowledge so to aid a better understanding of prevention, treatment, care and wellbeing, including a peaceful death, remains our goal. This includes social and cultural contexts of health along with knowledge of the determinants of health to enhance the capacities of communities and individuals to become directly involved in promoting the health of its members.
Over the last two years the School has participated in a number of relationship building activities – how we will capitalise on these will be our challenge. Examples of these established and evolving initiatives include:

- Mid North Coast Local Health District – Patient Safety Development and Innovation Unit
- North Coast Local Health District – Collaborative Practice Unit Nursing and Midwifery
- Lismore City Council – Healthy Cities; Goonellabah Community Plan
- Lismore Education Authority – Healthy Schools Initiative with Goonellabah Public School
- North Coast Primary Health Network – Practice Nurse and Allied Health Professional Development scheme.

The School’s journey in establishing a research identity is growing, and we continue to advance with many staff being increasingly research productive. The next two years will see the evolution of clinical research centres and of the University Clinic focusing upon primary care research activity in partnership with other bodies.

I hope you enjoy reading the next step in our journey.

Congratulations to those who have contributed to this report and thank you to our service partners for helping to make it happen.

Prof Iain Graham, PhD RN FACN
Dean & Head of School
Director of Clinical Services
School of Health & Human Sciences
Southern Cross University
Welcome to the School of Health and Human Sciences’ third Annual Research Report, in which we present an overview of the School’s research activities in 2015, its demonstrable contribution to scientific advances and its benefits to individuals and organisations in Australia and beyond. Southern Cross University aims to create research and research training that has global and regional relevance and impact. It has a large regional footprint that extends from Coffs Harbour to the Gold Coast and brings expertise from researchers in the School to the promotion of health in individuals and communities, and to the delivery of regionally focused person-centred health care.

In 2015 we had outstanding successes in our ERA rankings: ERA 5 (well above world standard) in Nursing and Complementary and Alternative Medicine; ERA 4 (above world standard) in Medical and Health Sciences, and Human Movement and Sports Science; and ERA 3 (at world standard) in Education. We produced 88 publications. Our grant successes include a Victoria Health grant awarded to Professor Susan Nancarrow to conduct allied health workforce research, and an Australian Institute of Sport grant to Associate Professor Wendy Gillear and Dr Alison Alcock to develop an early talent detection scheme for prospective elite athletes.

The School has continued to develop interdisciplinary health care research and practice, drawing on its range of disciplines and methodological expertise and capitalising on the extensive research infrastructure available to it, which includes neuropsychology laboratories in Coffs Harbour, exercise science laboratories at Lismore, Gold Coast and Coffs Harbour campuses and a pedorthic laboratory at Gold Coast campus. Increasingly, our research activities have been aimed at prevention, treatment and rehabilitation of a full range of long-term conditions, as well as understanding the physiological bases of the treatment and management of disease. We have explored new technologies for understanding and measuring health conditions to help health services, professionals, patients and carers manage the effects of illness and disability and maximise independence and quality of life.

Through our partnerships we have introduced several innovations to promote the translation of knowledge into practice and to guide the development of industry-relevant research, including our Professors-in-Residence program which develops research for improving nursing and midwifery practice. We have collaborations with local and regional health service organisations, sporting institutions and peak bodies, with private providers like Feros Care, where we are investigating protocols for testing telehealth technologies, and with Goonellabah School as part of the Healthy School’s initiative.

We have established a strong foundation of research in health workforce development and redesign, with a particular focus on community-based practitioners and the non-medical workforce. Our nursing research focuses on creating and translating evidence of mental health strategies that enhance the practice of nursing and midwifery, and the preparedness of their workforces. This applied research has a direct effect on practice and education in our region and both nationally and internationally. Programmatic research is being developed that involves clinicians, beginning researchers, and honours and postgraduate students. In exercise, health and human performance our research has implications both for the treatment and management of chronic diseases like diabetes, and for elite athlete training. Our psychology research includes the effects of mild traumatic brain...
injury, reading and language acquisition, and the scientific determinants of human behaviour, health and wellbeing from social, cross-cultural, cognitive, physiological and neuroscientific perspectives.

Our focus will continue to be on translating research into practice. In particular, we aim to incorporate our research expertise into our educational programs. We also explore educational research in its own right, through innovation in educational technologies, clinical placements, interprofessional teaching and learning, and our emerging focus on clinical scholarship. For up-to-date information on research projects, new publications and other research activities please visit the School of Health and Human Sciences Research facebook page.

Assoc. Prof. Sandra Grace
PhD, MSc, GradCertSportsChiro, DO, DC, DipAcup, DBM, DipEd, BA
Director of Research
School of Health and Human Sciences
Southern Cross University
In 2015 the School continued to focus its research activity on strategic priority areas and on cultivating collaborations and innovations of regional, national and international relevance. These research snapshots demonstrate the diversity of the School’s research activities.

Health Workforce Development

Project title

Mapping service integration for primary healthcare patients: Lessons from a regional GP Super Clinic

Project team

John Brice and Ken Stockley, owners of the Lismore GP Super Clinic (LGPSC) which provides primary care to disadvantaged groups in the local community, including the Aboriginal and Torres Strait Islander community, approached Professor Nancarrow to establish a research collaboration. A project team was subsequently assembled in collaboration with the LGPSC to deliver this Australian Primary Health Care Research Institute (ANU) project.

Team members from the SCU School of Health and Human Sciences included project lead, Professor Susan Nancarrow, a health services researcher with 15 years’ experience evaluating and researching complex and multidisciplinary community-based services; project manager and the project’s primary researcher Dr Catharine Avila, a public health researcher with a background in epidemiology, clinical trials and biostatistics, but more recently, in qualitative research methods; Dr Joanne Bradbury, a biostatistician with expertise in quantitative and qualitative research design; Dr Frances Doran, a qualitative, primary care researcher with specific expertise working with Aboriginal populations and chronic disease management; and Kegan Barlow, a professional member of staff who provided project support. The project team also comprised collaborations with SCU’s School of Business and Tourism, including Dr Daniel Chamberlain, an expert in social network analysis and service integration and Professor Robyn Keast, an internationally recognised expert in social network analysis and service integration. External expertise was provided by team member A/Professor Peter Hill from the University of Queensland. Peter is a public health physician and academic in international and Indigenous health based at UQ’s School of Population Health.

Funding

Australian Primary Health Care Research Institute, Australian National University; $101,621
Overview

This research collaboration examined primary healthcare integration through the lens of the LGPSC to investigate drivers and barriers at the clinical (micro), professional (meso) and system (macro) levels, and to develop a person-centred framework for integration. The study was a single and perhaps unique case study of a regional General Practice Super Clinic with strong ties to local Indigenous communities. Grounded in a strong theoretical framework, the longitudinal, mixed methods design incorporated expert interviews, surveys of patient and practitioner views of integration and a social network analysis based on patient referral patterns of a random sample of patient chronic care plans. Social network analysis provided network maps and metrics, while themes extracted from interviews combined to describe the nature and strength of integration at clinical, organisational, professional and system levels. Findings workshopped by the LGPSC, healthcare community stakeholders and researchers facilitated the development of the Patient Centred Integration Framework.

Conclusions, outcomes and impact

There is no clear understanding of what ‘good’ integration looks like. Existing models of integration focus on integration around the clinician, the service and the system, but largely ignore the patient. Health care integration needs to start from the perspective of the patient, not the system. True integration should be underpinned by four principles:

1. Communication between the patient and practitioner, and between the practitioners involved in patient care
2. Accessibility of services in terms of cost, appropriateness and geography
3. Clinician cooperation to coordinate care
4. Patient participation and involvement in their decision making around their care.

Systems level integration should acknowledge the key role of personal relationships in fostering effective integration and aim to facilitate these principles. If these principles are in place, it is possible for patient-centred integration to develop, regardless of the wider organisational systems and structures.


Nursing & Midwifery

Project title

Enhancing decision-making and assessment in midwifery (EDAM)

Project team

In response to the lack of a clear framework for decision-making incorporating clinical reasoning specifically orientated to a midwifery context, Dr Elaine Jefford developed a clinical reasoning framework (measurement tool) as part of her PhD. While presenting her work at a national midwifery conference in 2011 she met Professor Julie Jomeen (Hull University UK) with whom she formed a collaborative working relationship to extend her PhD work and take it in a new direction. Professor Colin Martin (Buckinghamshire New University UK) joined the collaboration in 2012.

Overview

The aim of this project was to develop and evaluate the educational effectiveness, acceptability and application of a midwifery specific clinical decision-making learning package in undergraduate midwifery education. Two Australian universities and two English universities agreed to participate.
There are no published models of midwifery clinical reasoning processes which require specific analytical thinking skills. In Australian higher education and around the world, there are no standards on how to teach midwifery clinical decision making. Higher education institutions’ approach to clinical reasoning teaching can be sporadic, inconstant and insensitive to the philosophy of midwifery in the undergraduate curriculum. Assessment and student learning in this area is unpredictable and may be detrimental to the student learning experience and the effectiveness and application of (student) midwives’ education to practice. It was of concern to the research team that undergraduate midwifery students were not well prepared for independent clinical reasoning that autonomous practice requires.

The online learning package design aimed to facilitate, through reflection, the acquisition of highly salient and context relevant clinical practice knowledge in contrast to ‘rote’ approaches. The reflective component was of particular relevance, since this psychologically anchors learning within the contemporary clinical context thus facilitating learning relevance and retention of knowledge dynamically. The online learning package needed to inspire students through innovative learning activities that have potential to increase their engagement.

Conclusions, outcomes and impact

Data obtained will permit assessment of EDAM’s usability and acceptability. Data analysis will also assist with interrogating the complex interaction between knowledge acquisition, confidence and effective shared clinical decision making. It will also enable evaluation of EDAM’s effectiveness in supporting students of midwifery in the decision-making process across the four research sites. Thus demonstrating EDAM’s transferability and reliability of delivery and potential for improving safety and quality for childbearing women and/or health outcomes. Data will enable recommendations on how EDAM can be adopted within the four research sites and other educational settings across Australia and the UK.

Interest in EDAM has been forthcoming from several Australian and international midwifery education institutions and maternity service facilities. The Australian College of Midwives, Australia’s midwifery professional body, has agreed to endorse the tool. Two Australian universities have embedded EDAM in their undergraduate midwifery curriculum with the rollout to begin in 2016. In addition, a further two Australian universities have requested to purchase EDAM and six Australian maternity service providers have requested to be research clinical sites for introducing EDAM to midwives in the clinical arena.

Publications available online


Brain, Behaviour and Cognition: Social Perceptions

Project title

Ageing, cognition and eye-movements

Project team

Dr Alison Bowling was the project lead, bringing several years’ experience using eye-tracking technology through her research aimed at identifying potential biomarkers in schizophrenia. The team also included Dr Jim Donnelly who contributed his expertise on neuropsychological testing; PhD student Belinda Smith who provided expertise on Alzheimer’s Disease; research assistants Emily Hindman, Sue-Anne Fitzgerald and Leigh Grant who were responsible for recruiting participants and collecting data; and various contributions from the School’s Bachelor of Psychological Science with Honours students, including Anja Draper, Peter Lindsay, Kerrie Storok, Leni Schmidt and Damien Erohin.

Funding

SCU internal grant of $4,000 from the Associate Dean’s Research Support Scheme. These funds were used to employ a research assistant (Emily Hindman). The School of Health and Human Sciences also purchased an Eyelink 1000 eye-tracker, without which this research project would not have been possible.

Overview

On average, performance on a number of cognitive tasks declines with age. These include measures of executive function, of which inhibitory control is a major component. This is controlled by the frontal lobes of the brain. Older adults also process information more slowly. There are considerable individual differences between healthy older adults, with cognitive function ranging from that comparable to much younger adults, to those showing a substantial decrement. Cognitive function in older adults may be assessed by means of a range of neuropsychological tests, including the Repeatable Battery for the Assessment of Neuropsychological Status (RBANS). Methods of measuring inhibitory control include eye-movement paradigms, in which participants must suppress a reflexive saccade (a rapid eye-movement) in order to look at another stimulus or location in space. This research project used two such tasks – the antisaccade and oculomotor capture tasks. In general, older participants make a greater proportion of reflexive saccades on both these tasks than younger participants, indicative of poorer inhibitory control.

The goal of the research was to assess how performance on these tasks changes with healthy ageing, and also to determine whether the proportion of reflexive saccades is correlated with performance on various neuropsychological assessment measures. In addition, the research team aimed to determine whether difficulty inhibiting reflexive saccades may be an early indicator of cognitive decline leading to dementia, and if this was found to be the case, there is a possibility that eye-movement tasks could be used as a means of detecting early cognitive decline.

Although the antisaccade task has been well utilised, the team’s recent research has focussed predominantly on the oculomotor capture task. In this task, an irrelevant distractor is presented at the same time as a stimulus to be looked at. The research team conducted experiments to determine which stimulus properties and cognitive factors affect the proportion of saccades towards the irrelevant stimulus.
Conclusions, outcomes and impact

Dr Bowling and her team have discovered that the tendency to make reflexive saccade errors was weakly correlated with cognitive processes, including the attention and visuospatial/constructional indices of the RBANS. However, a recent unanticipated finding has been that this correlates relatively strongly with the speed of information processing, as measured by choice reaction time. The effect of age on proportion of reflexive saccades is mediated by speed of information processing.

Publications available online


Exercise Health and Human Performance

Project title

The influence of gender and anatomical structure on the body weight only and loaded squat pattern

Project team

The project team comprises staff and students from the School’s exercise science discipline, including Dr John Whitting, Dr Rudi Meir, Dr Zachary Crowley-McHattan, Dr Sonja Coetzee, and current PhD student Jamie Hetherington.

Funding

This project is being supported by the School of Health and Human Sciences using the extensive facilities available at the School’s Lismore biomechanics laboratory.

Overview

The squat movement pattern is required for essential activities of daily life, such as sitting, lifting and most sporting activities, and is considered to be critical to good, healthy functional movement of the lower body across the lifespan. This movement is also used in sports training, rehabilitation and wellbeing programmes to help build injury resilience.

In 1991 the National Strength and Conditioning Association of America (NSCA) developed a position statement for the squat technique, which has informed the NSCA’s current coaching points related to the barbell back squat exercise. More recently a comprehensive description of the functional deficits and technical factors that limit
barbell back squat performance has been published (Myer et al., 2014). This publication identifies essentially the same key coaching points for the squat as identified by the NSCA in 1991, albeit with some slight differences. Several of the coaching points for the barbell back squat exercise appear to be intuitively derived although not necessarily evidence-based. What is not evident from the current literature is what impact limb segment lengths and joint flexibility may have on one’s ability to squat in accordance with these coaching cues, and is commonly cited as being representative of correct technique. Further, it is not clear if there are differences in the squat pattern displayed between genders or based on the level of exercise experience in the loaded barbell back squat movement. As a result, this project aims to answer these questions and to also inform the coaching literature as it relates to the squat movement pattern.

The research involves a comprehensive analysis of lower body anthropometrics. These measurements will help the research team to determine the interplay between limb segment length and squatting performance. Participants in the project are asked to complete a series of 7 repetitions of the squat movement, firstly with body weight only and then with additional load equivalent to 50% of their body weight. These movements are performed on dual force platforms in order to measure ground reaction forces throughout each repetition while also being recorded using a VICON three-dimensional motion capture system.

Conclusions, outcomes and impact

Not everyone naturally performs the squat movement while complying with all of the recommended key coaching cues e.g. maintaining the knees over or slightly forward of the toes; keeping the trunk and lower leg in synchronous alignment at the bottom of the movement; descending to a point where the hip crease is lower than the knees while also keeping the heel of the foot in contact with the ground. This may be due to a range of factors that include having limited ankle and hip mobility, lack of flexibility in the lower leg (calf), short foot segment relative to the length of the tibia (shinbone) or other yet to be identified factors. As a result, this research hopes to establish the impact of relevant anatomical parameters on squat performance and whether the standard coaching cues need modifying to take these into consideration. Ultimately this research may lead to a change in coaching practice when teaching athletes and exercisers of all ages to perform the barbell back squat as part of a structured training programme.

Pedagogical Research

Project title

Academic skill needs and competency of first year health science students with diverse entry profiles: Views of educators

Project team

This collaboration brought together expertise from SCU’s School of Health and Human Sciences (SHHS), Centre for Teaching and Learning and the Library. It combined the knowledge and expertise of educators and curriculum coordinators in the discipline as well as expertise of academic skills, academic practice and library specialists working with SHHS portfolios.

The project team consisted of Dr Joanne Munn, Lecturer in Academic Skills (SHHS portfolio); Dr Rosanne Coutts, SHHS Director of Teaching and Learning; Dr Airdre Grant, Lecturer in Academic Practice (SHHS portfolio); Janice Knopke, Reference Librarian and SHHS Liaison Librarian; Elizabeth Bartlett, SHHS Curriculum Development Coordinator.

This collaboration was established from work with the SHHS Director of Teaching and Learning on teaching and learning initiatives. The group identified that there was a need to better understand what academic and information literacy skills are expected from first year health and human science students.
Overview

Evidence in the higher education literature identifies that many students commence university with academic skill deficits. With a focus on educator expectation, this research investigated perceptions about academic skills commonly required for first year health science students. First year health science educators at SCU were surveyed using a questionnaire with closed and open responses, about what academic skills they believe students need and what is their perceived level of student skill competency. In addition, educators were asked to report any academic skill development strategies embedded in their units and the perceived effectiveness of these approaches.

The project explored perceptions about academic skills commonly required for first year health science students. By surveying first year SCU SHHS educators, this research aimed to determine:

- specific academic skills considered as important
- educator perception of current student academic skill competency
- the types of strategies currently being adopted to support development of academic skills.

The rationale for this project was to provide insight into the academic skill needs of first year students and potential discrepancies between educator expectations and perceived skill sets. This information would be useful to provide insight for targeting and embedding academic skill development strategies and ultimately provide clarity for first year students about what is expected.

Conclusions, outcomes and impact

Overall, findings showed that a broad range of academic skills are deemed important, yet the general educator perception of student skill competency was that it is mostly poor. Academic integrity skills, finding information, writing skills, and reading and understanding skills were generally rated as important, yet competency was rated poor. Findings for numeracy were inconsistent. In contrast, digital literacy skill was rated adequate or above. In terms of embedding academic skills, just over half of the educators who responded reported implementing these, with nearly all who implemented these identifying they were helpful.

The findings from this study helps clarify the expectations educators have of students in terms of what skills are important and the mismatch between these expectations and perceived skill level. Furthermore, it adds insight about which skills need to be supported and can help better direct academic practice when embedding information literacy and academic skills within the first year curriculum.

Publications available online

Research Projects and Collaborations

In 2015, staff of the School of Health and Human Sciences were involved in a wide range of research projects and collaborations with international and local partners. The School received over one million dollars in research funding.

*SCU School of Health and Human Sciences researchers are listed in bold.

### Funding Body: Victorian Department of Health and Human Services

### Total Grant: $455,785 (plus an additional $180,000 optional)

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

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

Allied health plays an important contribution to health and wellbeing. In Victoria, the allied health workforce comprises approximately 42,000 health professionals working in over 27 separate registered and unregistered disciplines across a range of sectors. Allied health services represent a significant but underutilised component of primary, community and acute health care. There is currently no reliable source of allied health workforce data. Challenges include inconsistencies in the classification of allied health; a lack of consistent information available about the number, location, qualifications, skill set, and recruitment and retention issues for the AH professions; and an inability to capture accurate data on unregistered allied health professions. To help address these issues and to support realisation of the potential allied health contribution to the challenges facing Victoria’s health system, the Department of Health and Human Services, Victoria (DHHS) commissioned the Victorian Allied Health Workforce Research Program (the Program). 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.

### Funding Body: Australian Research Council (ARC Linkage) and the Prostate Cancer Foundation of Australia

### Total Grant: $350,000

### Partner Institution/s: Deakin University, Southern Health, Eastern Health, Peter MacCallum Centre, Victoria University, Epworth Healthcare, North Eastern Metropolitan Integrated Cancer Service, YMCA Victoria

### Project Title: The Efficacy of a referral and physical activity program for survivors of prostate cancer: the ENGAGE project (project continuing from 2011)

### Investigators: Prof Trish Livingstone, Dr Melinda Craike, Prof Jo Salmon, Prof Mari Botti, Dr Caderyn Gaskin, Dr Suzanne Broadbent, Dr Steve Fraser, Prof Kerry Courneya

This project investigated the efficacy of 12 weeks of individualised exercise (2 gym-based, 1 home-based sessions of mixed-model aerobic and strength exercise), with primary outcome measures of physical capacity and physical activity, adherence, wellness, quality of life, success of referral pathways and physician involvement. This project has continued since 2011 with ongoing publications.
**Funding Body:** Hastings District Respite Care (HDRC)  
**Total Grant:** $100,000 (approximately)  
**Partner Institution/s:** Hastings District Respite Care (HDRC)  
**Project Title:** _Applying a Montessori Model in Non-Residential, Aged Care Respite Centres_  
**Investigators:** Dr James Donnelly

I have developed with the Centre staff a survey tool for assessing client, staff and family carer wellbeing and stress, as well as indicators of client clinical outcomes (medication use, behavioural crises, transfer to full residential care). The project will continue over the next 3 years and will be the basis of a PhD scholarship to be funded by HDRC under my supervision through Psychology/SCU.

**Funding Body:** Mason Trust and Wicking Foundation  
**Total Grant:** $82,000  
**Project Title:** _Comparing intermittent to graded exercise and usual care in Chronic Fatigue Syndrome_ (pilot study continuing from 2014)  
**Investigators:** Dr Suzanne Broadbent, Dr Rosanne Coutts

A pilot study to investigate the effects of intermittent and graded exercise to usual care on exercise capacity, immune function and fatigue over 12 weeks. The primary study was completed in 2015. A 2015–2016 sub-study will validate a novel flow cytometric assay protocol for Natural Killer and CD8 lymphocytes, used in the main study.

**Funding Body:** Australian Institute of Sport  
**Total Grant:** $57,750  
**Partner Institution/s:** Australian Institute of Sport  
**Project Title:** _PhD Scholarship exploring coordination development of pre-elite athletes_  
**Investigators:** A/Prof Wendy Gillear, Dr Alison Alcock

This initiative provides a unique opportunity for PhD candidates to work within the AIS Athlete Pathways and Development Section in conjunction with National Sporting Organisations (NSOs) and contribute to the High Performance sporting pathway in Australia. The research will be part of an exciting new initiative focusing on evidence-based, holistic development of pre-elite athletes. The project supports PhD students to conduct investigations using objective, state of the art measures, the development and refinement of fundamental movement skills.
The project’s purpose is to plan and manage the delivery of skills development workshops in areas where this support is either not provided by the University or is not easily and readily available to all postgraduate students. One area of focus is analytic skills development for health and human science students. The project also involves making extant skills development opportunities accessible to a larger pool of on- and off-campus, domestic and international students; arranging expert trainers to deliver workshops where needed, and; developing and administering research tools to gauge students’ academic needs and perceptions regarding the quality and usefulness of workshops offered.

The aim of this study was to conduct a pilot investigation on the effect of intermittent exposure to normobaric hypoxia, using a hypoxicator, on blood glucose homeostasis and insulin sensitivity in individuals with hyperglycaemia.

A national survey of the natural therapies workforce was conducted by the Australian Traditional Medicine Society in 2014. A total of 3177 responses (22.4%) were analysed. Only 8% of respondents reported an adverse reaction during the previous 12 months. Most were mild and short-lived. The most commonly reported reactions were digestive (36%), integumentary (26%), and neurological (19%). Most (19%) were to ingestive medicine (19%), followed by acupuncture and traditional Chinese medicine, chiropractic and osteopathy (13%). Although 21 reported cases (9.8%) needed to see a GP, only six (2.8%) were reported to the Therapeutic Goods Administration. Further education of practitioners is required to reduce the risk of adverse reactions, particularly when prescribing herbal and nutritional medicines, and about their reporting obligations.
Funding Body: Southern Cross University, Deputy Vice Chancellor of Research 2015 Seed Grant

Total Grant: $9,800

Partner Institution/s: Charles Sturt University

Project Title: Framework for ethical experiential learning in health

Investigators: A/Prof Sandra Grace, A/Prof Ev Innes, Dr Narelle Patton, A/Prof Lynette Stockhausen

This project addresses ethical problems raised during student participation in practical classes in health courses. Students in health science programs often act as models for their peers to practise physical examination and practical techniques. This project aimed to report current practices and perceptions of experiential learning practices in health courses using an online survey of course coordinators and interviews with representatives from professional associations and accrediting bodies. Findings will inform development of a national framework to guide ethical experiential learning in health. The framework will support health educators to develop curricula for ethical practice that aligns with professional codes of conduct.

Funding Body: Southern Cross University, Deputy Vice Chancellor of Research 2015 Seed Grant

Total Grant: $8,000

Project Title: Skin to skin breastfeeding

Investigators: Prof Kathleen Fahy, Ms Carolyn Hastie

No project synopsis available at the time of publication.

Funding Body: Southern Cross University, Deputy Vice Chancellor of Research 2015 Seed Grant

Total Grant: $7,500

Partner Institution/s: Paediatric Therapy and Workshops, University of Sydney, University of Melbourne

Project Title: Randomized controlled trial of intervention to promote the performance of daily living tasks by children with neuro-motor disorders: Pilot

Investigators: A/Prof Michelle Donelly, Dr Kate Bain, Ms Suzanne Davis, Dr Chris Chapparo, Prof Dinah Reddihough, Mr Robert Heard, Ms Sue Treacy, Ms Laura Burritt

The aim of this project is to determine if there is a significant difference in the functional performance of children with moderate to severe cerebral palsy [CP] who participate in a multi-modal therapy program in comparison to those who participate in an alternate treatment group. The multi-modal therapy program integrates: task specific training, use of targeted physical cues and prompts, and instruction in the use of cognitive strategies that are relevant to the relationships and the inclusive contexts of the child’s everyday life. Outcome/Significance: Need for evidence based intervention which addresses goals of immediate relevance to children with significant support needs. Estimated $1.47 billion per annum cost of care, 37% borne by individuals with CP and families.
This was a commissioned research report to define factors that affected attendee interest and satisfaction at the 2015 Minerama Jewellery, Gem and Fossicking Show in Glen Innes, NSW. The Council was attempting to understand the benefits of the Show to the visitor economy and community as a whole. We surveyed attendees over 3 days and solicited input from local businesses and Show vendors. A formal report was submitted. We have now been commissioned to conduct similar research for the Glen Innes Agricultural Show and the Celtic Festival based on the quality of our work. The project allowed us to employ 4 research assistants.

The aim of this project is to capture the patient voice in health service development and delivery. This research will involve two components. The first component is the establishment of a social media presence (Facebook, Twitter and LinkedIn), called “Patient Perspectives”. This will aim to engage with people who use health services to create a forum for a consumer–researcher discussion about what happens in health service delivery, and to identify the sorts of issues that service users want addressed. Our team’s current primary care research has shown that there are few platforms for obtaining a true consumer voice.

This project addressed assessment moderation on work-based learning events in Occupational Therapy. We captured examples of students’ performance in different clinical settings including the SCU clinics and used these as a basis for discussion. In all, seven vignettes were developed to demonstrate examples of good clinical practice and practice that requires improvement.

Vignettes were viewed by three clinical supervisors from the Northern NSW area in one workshop in Lismore. This generated robust discussion on expectations of students’ performance on fieldwork. On completion of the workshop, supervisors reported feeling more confident undertaking the SPEF-R, increased confidence in supervising students and having a greater reflection on their own practice.
This project aimed to explore the perspectives of naturopaths, nutritionists and herbalists who had contributed to a private invitation-only online Facebook discussion forum that had been established to discuss practitioner-only products (POPs). The group had 230 members. According to participants, the practice of allowing any health practitioner who has completed a short training provided by manufacturers and suppliers to prescribe POPs undermined the role of naturopaths, herbalists and nutritionists in Australian health care, encouraged some health practitioners to practise beyond their scope, and potentially placed consumers at risk. Misconceptions about what POPs are, and the legal and regulatory framework associated with their use, needs to be addressed. Participants’ comments also highlighted more fundamental concerns about survival of clinical natural medicine practice.

The aim of this pilot study was to investigate attitudes of GPs towards chiropractors and osteopaths. An anonymous online survey was emailed to Australian GPs. There were 630 respondents, representing a response rate of 2.6%. More GPs believed chiropractic education was not evidence-based compared to osteopathic education (69.5% and 50.0% respectively). A majority of GPs had never referred a patient to either profession (chiropractic: 60.4%; osteopathy: 65.9%). Approximately two-thirds of GPs were not interested in learning more about the education of chiropractors or osteopaths (67.7% and 63.2% respectively). These attitudes, if confirmed, have the potential to impact on health service provision.

This project addresses SCU Graduate Attribute 6 “Communication and social skills” which is defined as “the ability to communicate and collaborate with individuals, and within teams, in professional and community settings. The TeamUP Rubric was developed, implemented and evaluated primarily within the Bachelor of Midwifery. The rubric functions both as a teaching aid and assessment tool. The TeamUP rubric has five domains – Project Planning, Fostering a Team Environment, Team Facilitation, Conflict Management and Individual Contribution. Initial content and construct validation has been established (Parratt et al, 2015). The current Rubric includes 51 items. Uptake of the tool would be enhanced if the measure required less time for students to complete and academics to mark. This project will develop a valid and reliable short form of the TeamUP rubric.
<table>
<thead>
<tr>
<th>Funding Body:</th>
<th>NSW Mid North Coast Local Health District (MNCLHD) and Southern Cross University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Grant:</td>
<td>$4,000</td>
</tr>
<tr>
<td>Partner Institution/s:</td>
<td>MNCLHD Coffs Harbour Base Hospital (Maternity)</td>
</tr>
<tr>
<td>Project Title:</td>
<td>Midwifery decision-making process when assisting women to maintain perineal integrity during active second stage labour</td>
</tr>
<tr>
<td>Investigators:</td>
<td>Dr Elaine Jefford, Ms Frances Guy, Ms Belinda Newcombe</td>
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This study aims to provide transparency to midwifery clinical reasoning and decision-making processes when used to achieve a desired outcome in regards to perineal integrity. This transparency will potentially enhance midwifery accountability as well as quality and safety for the woman.

<table>
<thead>
<tr>
<th>Funding Body:</th>
<th>Southern Cross University, Deputy Vice Chancellor of Research 2015 Seed Grant</th>
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<tbody>
<tr>
<td>Total Grant:</td>
<td>$3,500</td>
</tr>
<tr>
<td>Partner Institution/s:</td>
<td>North Coast Primary Health Network (NCPHN), University of Melbourne</td>
</tr>
<tr>
<td>Project Title:</td>
<td>Same-day appointments for adults and seniors at Northern NSW GP clinics: how do they measure up in terms of availability and costs?</td>
</tr>
<tr>
<td>Investigators:</td>
<td>Prof Susan Nancarrow, Dr Cathy Avila, Dr Joanne Bradbury, Dr Frances Doran, Mr Vahid Saberi, Professor Gary Freed</td>
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</table>

This research aims to assess actual GP appointment availability and costs for adults and seniors with lower-urgency conditions with general practitioners in the community. The research will involve a random sample of GPs within the North Coast Primary Health Network (PHN) who will be telephoned using the “secret shopper” method to collect information on actual appointment availability. The results of this project will determine the actual GP appointment availability and indicate the out-of-pocket cost of such appointments for adults and seniors with lower-urgency conditions.

<table>
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<tr>
<th>Funding Body:</th>
<th>Southern Cross University, Deputy Vice Chancellor of Research 2015 Seed Grant</th>
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<tbody>
<tr>
<td>Total Grant:</td>
<td>$3,400</td>
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<tr>
<td>Project Title:</td>
<td>Development of a National Fitness Survey</td>
</tr>
<tr>
<td>Investigators:</td>
<td>Dr Suzanne Broadbent, Prof Shi Zhou</td>
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</table>

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: (1) 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; (2) document the physical fitness levels of 200 Australian adults as a preliminary trial for national implementation.
Funding Body: Southern Cross University, Deputy Vice Chancellor of Research 2015 Seed Grant
Total Grant: $3,000 (partial funding)
Partner Institution/s: The Armidale School, Cogstate
Project Title: Increasing EEG Lab Capacity
Investigators: Dr James Donnelly, Dr Steve Provost, Dr Tara Kocek

The project compiled, cleaned and analysed data collected over 3 years at The Armidale School. We used online computerised neuropsychological screening and symptom and concussion history questionnaires to assess all children in the school at baseline and post-concussion. The findings are being prepared for publication and will serve as the basis for an NHMRC application. It is the first time that this type of data has been collected on Australian children.

Funding Body: Mid North Coast Local Health District
Total Grant: $3,000
Partner Institution/s: Hull University (UK), Buckinghamshire New University (UK), Australian College of Midwives
Project Title: Enhancing Student Midwifery Clinical Reasoning Processes and Decision-Making Skills
Investigators: Dr Elaine Jefford, Prof Julie Jomeen, Prof Colin Martin

This pilot study aims to develop and evaluate the educational effectiveness and acceptability of a midwifery-specific, clinical decision-making learning package. This pilot study is a collaboration between four higher education institutions offering undergraduate programs leading to registration as Registered Midwives, as well as critical stake holders, in the development of a midwifery-specific and pedagogically sound clinical decision-making online learning package for midwifery students.

Partner Institution/s: Pulford Air and Gas, Tianjin University of Sport (China)
Project Title: The effects of six weeks training or recovery in a hypoxic chamber, on activity states of HIF-1α, key mRNA markers of adaptation, and physiological responses to an incremental treadmill test in Thoroughbred horses (project continuing from 2014)
Investigators: A/Prof Allan Davie, Prof Shi Zhou, Prof Li Wen, Prof Yong Zhang, Mr Tom Fyfe

The aim of this study was to examine the effects of six weeks of hypoxic training on metabolic efficiency of the horses at different galloping speeds on a treadmill. The project was supported by an SCU-Pulford collaborative research grant. Support was also provided by Darren Weir Racing Stables in Victoria, which provided the horses for the study, Pulford Air and Gas in providing use of hypoxia training facility, and Ballarat Veterinary Centre for providing veterinary services during the project.

Project Title: Sex discrimination of point light walkers
Investigators: Mr Graeme Hacker, Dr Anna Brookes, Dr James Donnelly

This program of research assesses the cognitive neuroscientific basis of discrimination of point light walkers based on sex-related structural and kinematic features. Six studies have now been completed. A paper on the first four studies is under review for publication. Studies 5 and 6, both written up, are due to be submitted in 2016.
**Project Title:** Speech Development  
**Investigators:** Dr Debbie James

This work involves revising normative information regarding children’s speech development or pronunciation by grounding them in more contemporary linguistic and phonological theory. It is in response to evidence that the extant normative data underestimates children’s pronunciation skills, which can harm them. This is so because age-inappropriate pronunciation skills impede communication. They can also impede the acquisition of language, literacy, academic, social and emotional skills as pronunciation skills are foundational to all of these areas.

**Partner Institution/s:** University of Adelaide  
**Project Title:** Communication, speech and language development of late pre-term babies  
**Investigators:** Dr Debbie James, Dr Julia Pitcher

This work is examining the communication, speech and language outcomes of children born late preterm (32 to 36 weeks). This is in response to the evidence that these children are more vulnerable to inferior outcomes relative to their term counterparts. The results to date imply that communication, speech and language outcomes in childhood are compromised relative to those of their peers.

**Partner Institution/s:** Various schools in the Coffs Harbour region, Australian Catholic University, Headminder Inc, New York (USA)  
**Project Title:** Internalising and externalising problematic behaviour: The role of executive functioning and social information processing  
**Investigators:** Dr Tara Kocek, Dr James Donnelly, Dr Jeffrey Rogers (ACU), Dr Tony Yeigh (Education/SCU)

This program of research is an extension of the work completed in the PhD of Tara Kocek. We have now generated three papers for submission for publication and analysed additional data not initially included in the doctoral project.

**Project Title:** Primary care as a clinical placement from student nurses’ perspective: A Kidney Camp experience  
**Investigators:** Dr Kolleen Miller-Rosser, Ms June Colgrave, A/Prof Lynette Stockhausen

Professional experience placements are becoming increasingly competitive as the number of nursing students increases. Academics in the BSN program at Southern Cross University were approached by staff at Kidney Camp Australia. The proposal was to provide nursing students an opportunity to undertake a Primary Health Care placement with the recipients of Kidney Camp. Second year nursing students were identified as being ideal participants, as they had completed their Primary Care theoretical unit. The aim of the study is to explore the student nurses’ subjective insights and awareness of a primary health care clinical experience, utilising a qualitative design. Two cohorts of students were recruited with semi-structured interviews used for both cohorts. One cohort underwent one-on-one interviews, while the second cohort participated in focus groups. Theme-based analysis and reporting is being applied to the research.
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<tr>
<th>Partner Institution/s:</th>
<th>Coffs Harbour Base Hospital, Mid North Coast Local Health District</th>
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<tbody>
<tr>
<td>Project Title:</td>
<td>Increasing Organ Donation Rates</td>
</tr>
<tr>
<td>Investigators:</td>
<td>Dr Gail Moloney, Dr Michael Sutherland (ICU and Organ donation specialist, CHBH), Ms Anne Judd (Clinical Nurse Specialist Organ and Tissue Donation, MNCLHD)</td>
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In 2015, Ms Emily Sharpe, an Honours student in psychology supervised by Dr Gail Moloney, worked closely with Dr Michael Sutherland and Ms Anne Judd to design and implement a pilot study that aimed to increase registration on the Australian Organ Donor Register. Following the success of the study, we plan to seek funding in 2016 in order to expand the research. Dr Michael Sutherland is also an external supervisor for Ms Ashlee Pennington’s PhD research (Supervisor Dr Gail Moloney SCU; Co-supervisor Dr Heather Winskel, SCU) investigating “Is the Whole Greater than the Sum of its Parts? Issues Related to Body Integrity, Next-of-Kin Donation Decisions and Social Representations Theory”.

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<tr>
<th>Partner Institution/s:</th>
<th>Olga Tennison Autism Research Centre, La Trobe University</th>
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<tr>
<td>Project Title:</td>
<td>Right Kids, Right Time, Right Services: Developmental Surveillance in Early Childhood Education Settings</td>
</tr>
<tr>
<td>Investigators:</td>
<td>Ms Beth Mozolic-Staunton, A/Prof Michelle Donelly, Dr Josephine Barbaro, Dr Jacqui Yoxall</td>
</tr>
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</table>

Current evidence suggests that 25% of children in the region have significant developmental delays when they begin primary school. The Right Kids, Right Time, Right Services project aims to implement and evaluate a system to monitor the development of all young children who are enrolled in early childhood education centres in order to facilitate early detection of developmental challenges and promote access to support and services for children and families in our regional communities. By providing training and resources in the most evidence-based developmental surveillance tools, access to specialised assessment and collaboration with local early childhood education providers, this project offers solutions to promote access to early intervention and maximise developmental outcomes for young children who are at risk of ongoing learning challenges.

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<thead>
<tr>
<th>Partner Institution/s:</th>
<th>Coffs Harbour Health Club (CHHC) (includes in-kind support)</th>
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<tbody>
<tr>
<td>Project Title:</td>
<td>Do time distortions occur during high level exercise?: The role of fitness and exercise self-efficacy</td>
</tr>
<tr>
<td>Investigators:</td>
<td>Mr Jason Newcombe, Dr James Donnelly</td>
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This study assessed the effects of feedback on performance on exercise self-efficacy and time perception. Participants walked on a treadmill and were asked to make time estimates at various intervals. Their mood, fitness level and VO2max were taken into account. The findings are being prepared for submission.

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<tr>
<th>Partner Institution/s:</th>
<th>Tianjin University of Sport (China)</th>
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<tbody>
<tr>
<td>Project Title:</td>
<td>Symptoms of muscle dysmorphia, eating disorders, and body dysmorphic disorder</td>
</tr>
<tr>
<td>Investigators:</td>
<td>Dr Johanna Nieuwoudt, Prof Yahong Jin, Prof Shi Zhou</td>
</tr>
</tbody>
</table>

The aim of this study was to investigate and compare the symptoms of muscle dysmorphia, eating disorder and body dysmorphic disorder in male weightlifters from Australia and China. The research findings may provide information that leads to the categorisation of muscle dysmorphia as a new disorder in a disease classification system, and prevention and treatment programming for men with disorders.
Partner Institution/s: Victoria University

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

Investigators: *Mr Paul Orrock, Dr Brett Vaughan, A/Prof Sandra Grace, Mr Raymond Blaich*

This project aims to investigate the reliability of a viva examination developed as part of a previous study. A three-hour face-to-face examiner training session was held to enable consistency across examiners. A half-day examination session was conducted with 16 volunteer students from the School osteopathy program. There were four stations of 15 minutes duration. Each student attended all four stations. At each station the examiner presented a different case. Descriptive statistics will be generated for each station and each case. In addition, a generalisability analysis will be undertaken to determine the number of stations/cases required in order to make a reliable decision about students’ performances.

Partner Institution/s: Australian Catholic University

Project Title: *Impaired practice effects following mild traumatic brain injury: An event-related potential investigation*

Investigators: *Dr Jeffrey Rogers, A.M. Fox, Dr James Donnelly*

The project assessed brain responses during learning of a neuropsychological task in those who had or had not suffered a concussion. The findings demonstrated which brain regions indicated persistent processing deficits in the concussed group.

Partner Institution/s: University of Adelaide

Project Title: *The impact of parental responsiveness on their infants and toddlers’ early communication, speech and language development*

Investigators: *Ms Melissa Saliba, Dr David Tivey, Dr Debbie James, Dr Melanie Attard*

For decades, this association has been demonstrated by researchers from many different disciplines; mental health, psychology, linguistics, social work, speech pathology to name but a few. This richness makes distilling the effects difficult because of the diversity of definitions and methods of measurement. To facilitate knowledge transfer, a conceptual framework of parental responsiveness was developed using Conceptual Framework Analysis, which was then used to conduct a meta-analysis and narrative analysis of the literature as appropriate. This confirmed a significant association but notably indicating that is causal. The implication of this is that coaching parents changes their responsiveness to their children which it turn facilitates children’s communication, speech and language development.
Mortality and morbidity rates attributed to tobacco use continue to be higher for Aboriginal and Torres Strait Islander people than they are for other Australians, especially among young people (AIHW 2014). This project analysed prevailing approaches to ‘the social’ in causing smoking among Indigenous Australians and argues that such approaches provide a limited foundation for understanding tobacco use among Aboriginal and Torres Strait Islander people. The paper proposes a critical sociological approach that represents and understands tobacco use as an embodied, collective social practice that persists or ceases according to the opportunities arising in the lives of those engaged in the practice. Such opportunities are not random but socially structured.

This project surveyed 4100 healthcare staff in the region regarding their level of compassion fatigue and factors that influenced their capacity to cope. The findings are being developed for fuller submission as they are the first in Australia to focus on what allows some staff to function well in high stress circumstances.

The study elicited responses from parents of children with and without autism in Australia. We surveyed symptoms of dysphoria and personality types as well as numerous demographic variables to determine parent group differences and also the effects of geographic location, use of services and current mood. The findings have been accepted for publication in a high ranking journal.

Peer physical examination (PPE) is an educational approach whereby students practise their examination skills on each other before commencing clinical practice with actual patients. First year students in the osteopathy programs at VU and SCU completed the Examining Fellow Students and the Peer Physical Examination questionnaires prior to, and at the completion of, their first 12-week teaching session. Results showed that students were generally willing to examine non-sensitive areas before and after the 12-week teaching session. Unwillingness to participate was associated with being female, being born outside Australia, holding religious beliefs, and being older. These findings are relevant for all manual therapy students and reinforce the need for policy and procedures to guide good practice of PPE in all health disciplines.
Partner Institution/s: Victoria University

**Project Title:** Australian osteopathy students’ perceptions of interprofessional relationships

**Investigators:** Dr Brett Vaughan, Dr Keri Moore, Dr Chris Macfarlane, A/Prof Sandra Grace

This project investigated Australian osteopathy students’ perceptions of interprofessional (IP) relationships through a single administration of the Interdisciplinary Education Perception Scale (IEPS) to osteopathy students enrolled at VU and SCU and a demographic questionnaire. Responses from 319 students were analysed. The mean total IEPS score was 246.46 (± 23.79). The perception of Australian osteopathy students towards IP relationships did not differ significantly between universities. Students identified positive aspects such as the need to co-operate with other professions and that osteopaths are well trained. Students were concerned about the status of osteopathy in the eyes of other health professions. The results of the present study could be used to inform the development of IP programs involving osteopaths and osteopathic students.

Partner Institution/s: Tianjin University of Sport (China)

**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:** Ms Yun Wang, Prof Shi Zhou, A/Prof Allan Davie, Prof Yong Zhang, Prof Li Wen, Mr Xinhao Wang, Ms Youyu He

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.

Partner Institution/s: Chulalongkorn University (Thailand)

**Project Title:** Visiting Research Professor in 2015

**Investigators:** Dr Heather Winskel, Dr Theeraporn Ratitamkul

This visiting research professorship was awarded by Chulalongkorn University, the most prestigious university in Thailand. This project on language and reading research continues and extends the collaborative research project funded by the Australia-Thai Institute (DFAT) in 2014. Two submitted joint publications have resulted from the collaboration this year.
The Collaborative Practice Unit (CPU), established in 2013, is a joint initiative between Northern New South Wales Local Health District’s (NNSWLHD) Nursing & Midwifery Directorate and the School of Health and Human Sciences (Nursing). The CPU was initially funded through the Collaborative Research Network (CRN) funding, a SCU post doctorate project and a modest amount of funding from the nursing strategy reserve. The CPU has a strategic focus aimed at enhancing the skills of nurses and midwives to engage in evidence-based practice, building capacity in NNSWLHD educators and clinical educators, supporting advancement of clinical nurse consultant practice and research that will positively impact on patient outcomes and leadership development through coaching training for nursing leaders.

The CPU has been directed by Professor Andrew Cashin until this year when it was determined that, in line with the collaborative nature of the unit, a co-director be appointed by NNSWLHD. Nurse Manager, Rae Rafferty has taken up this position. The unit currently houses two Higher Degrees Research projects: Andrew Woods is working in the strategic stream of educator development (full update provided below) and Rae Rafferty is working in the strategic stream of coaching (see her research profile in the Higher Degrees Research Training section of this report). Professor Cashin primarily supervises both projects. Former SCU Post Doctorate, Dr Greg Fairbrother, remains associated with the unit through co-supervision of Rae’s project.

The CPU also incorporates the Professors in Residence Program, headed by Professor Kathleen Fahy, the School’s Professor of Midwifery. Kathleen has a focus on midwifery research and practice development. She also has a role supporting the Essentials of Care (EOC) in NNSWLHD. This role is provided as in-kind support of the CPU by SCU.

This year, the CPU successfully secured $50,000 capacity building funding from the NSW office of the Chief Nursing and Midwifery Officer to release Rae Rafferty two days per week to co-direct the CPU (Professor Cashin’s time is in-kind support provided by SCU) and to work in the strategic stream of coaching.

Progress on the CPU’s strategic streams this year include:

The Nurse Educators/Clinical Nurse Educators Project: Phase 1 completed including the implementation of 16 key recommendations. Phase 2 is underway, aimed at establishing a collaborative nurse educator framework of professional practice; this action research includes the design and construction of a specialist medical surgical nurse course to be offered in 2016.

The Clinical Nurse Consultant Value Add Project: Phase 1 completed with one publication and an ARC linkage application. Development of a Community of Practice has commenced.

The Randomised Control Trial of Leadership Coaching Training: A pilot project using grounded theory was undertaken regarding skills acquisition and the integration of leadership coaching skills among senior nurses and midwives. Findings indicated that senior nurses and midwives were regularly overwhelmed by the competing demands of their roles and were hungry to effect positive change. This project has been internationally presented and published in the *Journal of Advanced Nursing*. 
The aim of this research, led by PhD candidate Andrew Woods, titled *Exploring the impact of a Community of Practice on the social construction of nurse educator identity and practice through participatory action research*, is to explore whether and how a Community of Practice contributes to a professional framework for nurse educator practice, professional identity, a philosophical grounding, and clarification or enhancement of nurse educator capabilities.

The research, supported through the CPU and supervised by Professor Andrew Cashin, Dr Lynette Stockhausen and Dr Renata Phelps, has followed a first phase of action research (Fairbrother, Rafferty, Woods, Howell, & Tyler, 2015) exploring nursing and midwifery education roles in the NNSWLHD. Nurse or midwifery educator staff from the NNSWLHD have been invited to form a Community of Practice and engage in associated research activities.

Following the establishment of an online Blackboard site, 24 participants engaged in two self-assessment surveys and were interviewed. Further data, including participant reflective journals, will be integrated using an interpretive mixed-methods approach. Several rounds of group meetings (action cycles) over a six month period resulted in the establishment of a Community of Practice (named CONFeR), a charter of shared goals and the initiation of several related activities and projects. These include early work on a formal transition program for new nurse and midwifery educators and a teaching and learning philosophy for NNSWLHD education and workforce development. Work is also underway on the development of new nursing postgraduate curricula for the NNSWLHD.

Andrew Woods received confirmation of candidature in May this year and presented the research-to-date at the *Australasian Nurse Educators Conference* in Auckland, New Zealand. A fellow CONFeR member also presented at this conference. An associated literature review exploring nurse educator professional identity has been published (Woods, Cashin, & Stockhausen, 2015).

To date, this research has resulted in closer collaboration between sector-based educators and between CONFeR members from the NNSWLHD and SCU. The data generation stage is due to finish mid 2016 when the group will be opened up to further membership for which there has already been interest.
Mid North Coast Health Research Collaborative

Dr John Hurley

Background

The Mid North Coast Health Research Collaborative (MNCHRC) was established in 2014 in response to the financial, workforce and service delivery challenges confronting healthcare providers and universities in the Mid North Coast, NSW. Historically regional health care centres focussed on providing quality essential clinical services, while local universities focused primarily on training health professionals. The growing demand to ‘do more with less’ reformed hospital funding arrangements, and budgetary pressure demands on universities warrants innovative, smart solutions.

Recent health and medical research strategic reviews at state and national levels acknowledge that research contributes a vital role in delivering better health outcomes and improving the efficiency and effectiveness of the healthcare system. Large medical research institutes within metropolitan areas have the facilities and capacity to attract specialist researchers and government grants. Regional areas benefit from partnerships between health organisations and universities in order to secure financial support, expertise and the critical mass required for research. The Mid North Coast is realistic in its scope of research capacity and expectations, however also recognise that it offers distinctive natural advantages for locally relevant research endeavours.

The MNCHRC was formalised in 2014 as a commitment to work together to generate, gather and share knowledge by building research activity and capacity across all partners. This initiative is administered through the Mid North Coast Local Health District (MNCLHD) and comprises:

1. Healthcare service providers:
   a. Local Aboriginal Medical Services:
      i. Durri Aboriginal Corporation Medical Services
      ii. Werin Aboriginal Corporation
      iii. Galambila Aboriginal Health Service Inc
   b. North Coast Primary Health Network
   c. Mid North Coast Local Health District

2. Tertiary institutions
   a. University of New South Wales
   b. University of Newcastle
   c. Charles Sturt University
   d. Southern Cross University
Joint Research Activities

During 2015, the MNCHRC set out its strategic directions for research through a series of regular meetings. Key stakeholders include the MNCLHD and SCU, as well as other regional health providers and universities. Potential collaborative research priorities were explored, in line with national and state level strategic priorities, as well as other key areas of work including strategic planning around workforce capability building for research and identifying key funding sources for projects.

The Coffs Clinical Network Research Interest Group (RIG), offering a multi-disciplinary forum for MNCLHD staff to informally explore research opportunities within their clinical practice, convened on a monthly basis throughout the year. Supported by nursing and psychology SCU academic staff and MNCLHD research staff, a number of formal education sessions were delivered for the RIG, and there were also opportunities to showcase many research projects undertaken within the LHD. MNCLHD staff participation in the RIG has been encouraging and has resulted in a growing number of research relationships and cross-fertilisation of research interests between SCU and regional clinicians across a range of disciplines.

Professor Iain Graham initiated and supported the development of a Patient Safety Development and Innovation Unit in conjunction with the peri-operative services in the Coffs Harbour MNCLHD. The centre is a multi-disciplinary venture that seeks to focus on improving patient safety and care. The SHHS will invest its expertise in research and education to promote the integration of evidenced-based best practice into the patient experience, as well as seeking Category 1 research grants in collaboration with the MNCLHD and promoting research focused education opportunities. Dr Jo Sutherland was appointed an honorary post with SCU as part of this initiative and the SHHS has received applications from two of the involved MNCLHD staff to commence PhDs.

A new joint nursing research position was established between the SHHS and the MNCLHD. Shared at 0.5FTE between the two organisations over the next 3 years, the role will develop collaborative research projects and research grant applications, as well as enhance the quality of teaching and learning for nursing at Coffs Harbour.

Two significant conferences held in the region this year supported the dissemination and showcasing of research in the area. SCU staff contributed to the 2015 Mid North Coast Research Conference with Pauletta Irwin on the steering committee and Professor Susan Nancarrow a keynote speaker. The Australian College of Mental Health Nursing held its 5th annual conference at Coffs Harbour Education Campus with both SCU and MNCLHD staff presenting research.

Additionally, a joint research project exploring mental health nurses role in delivering psychotherapeutic interventions was completed and submitted for publication.

Other significant collaborative projects include ongoing research exploring the impact of emotional intelligence on workplace bullying; seminal work surrounding the impact of the Collaborative Nursing Model for patients and MNCLHD staff; and PhD research being undertaken by June Colgrave and Leeann Whitehair on mandatory reporting and patient safety respectively.
Industry Engaged Research

<table>
<thead>
<tr>
<th>Industry Partner:</th>
<th>Feros Care</th>
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<tbody>
<tr>
<td>Sector:</td>
<td>Private industry – aged care</td>
</tr>
<tr>
<td>Research Award:</td>
<td>Commonwealth Department of Industry Researcher in Business Grant</td>
</tr>
<tr>
<td>Other Funding Sources:</td>
<td>Matched funding from Feros Care and in-kind support from Southern Cross University</td>
</tr>
<tr>
<td>Program Duration:</td>
<td>October 2014 – October 2015</td>
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SCU and Feros Care have a long-standing relationship, in part due to geographic proximity, but also due to relationships formed by staff from both organisations around specific aspects of aged care delivery, including work on advanced care directives and a joint evaluation of the National Broadband Network pilot. This strong engagement and a common interest in telehealth research led to a successful Commonwealth Department of Industry Researcher in Business grant bid in late 2014. A School of Health and Human Sciences (SHHS) researcher was placed with Feros Care for a 12 month period, jointly supervised by a member of the Feros Care technology team and a SHHS research professor, to establish protocols for the testing and implementation of new telehealth technology. These protocols were designed to be used by any member of staff involved in new technology testing and application within Feros Care.

The collaboration was driven, in part by the terms of the Researcher in Business funding grant, and specifically designed to help achieve the business goals of Feros Care in establishing decision rules and business models to test and implement new technologies.

While the Commonwealth Grant provided 50% funding of the researcher’s time, Feros Care provided matched funding, a governance framework in which the researcher operated, access to all tools and technology required to deliver the task. SCU provided supervision, support and academic guidance for the researcher; ethics approval; structures to support research governance of the project; guidance around academic publications and report writing; and legal support, including a confidentiality agreement and collaboration agreement.

The project aimed to develop ‘user centred design’ protocols to determine the effectiveness, safety, risks, potential benefits, and specific service parameters of applying new types of technology designed to help keep older people independent in their own home. This study examined the attributes of new technologies, in the context in which they are to be applied, to determine their usability, for example, environmental sensors (smoke, gas and flood sensors); automatic night light with bed sensor (light turns on when the person gets out of bed); sensor mats, pagers and pillow shakers (alerts carer to senior’s wandering through pager or pillow shaker); lively homecare solution which monitors medication...
use, fridge use, outings and activity; inactivity sensors; touchscreen technology for brain games, video calls, photos and reminiscence therapy.

The program established robust and ethical protocols for testing technology which could be adopted by Feros Care and used on an ongoing basis. The impact of the program was to develop and embed a sustainable telehealth technology testing framework.

As a result of the program, Feros Care assessed over twenty products in the 12 month period and adopted three new telehealth technologies to be delivered to the market. The first technology to be tested was a GPS watch which can be worn by people with dementia to stop them wandering outside a defined area. This technology has been adopted in one of the Feros Care aged care facilities for residents with a known history of wandering. This technology helps keep residents safe, while maintaining an unrestrictive perimeter around the aged care facility.

At the conclusion of the program, Feros Care held a technology Boot Camp, which was an exposé of all of their telehealth technology, their approaches to development, implementation and testing. It was well attended by other aged care provider industry members as a way to showcase the technology they have developed and cascade the learning around technology adoption to the aged care industry.

This particular collaboration between SCU and Feros Care brought together an industry partner and academic expertise to achieve the goals of testing technology for end use in a commercial context. The industry partner provided a unique and innovative environment to access new technology alongside an older population, to directly test whether or not the technology can feasibly be used within this population. The university partner provided academic rigour and research governance to ensure that the technology was tested using sound evaluation principles, without posing risk to the target population, and reported in a way that allows translation of the principles into other settings and for other providers.

In its final report on the program, Feros Care remarked on the collaboration as a ‘fantastic opportunity to mix research with internal operations for creating better outcomes for clients’. For SCU and SHHS a key lesson learned from this experience has been the significance of relationships between individuals within organisations in developing and sustaining collaborative partnerships, and that these need to be based on trust, integrity, and delivery of high quality outputs.
School of Health and Human Sciences

Higher Degrees Research Training

Dr Jacqui Yoxall  
Director of Higher Degrees Research Training

Our HDR students and candidates have a diverse background in research and industry. In SHHS we offer comprehensive supervision from continuing and adjunct academics with expertise across the multiple disciplines of health and human science and behaviour.

The Southern Cross University Graduate School formed in 2015, centralising HDR administrative tasks. This change has provided me with greater opportunity to focus on supervisor capacity-building in our School; engagement with industry; engagement with clinicians and health providers; and consideration of new HDR programs that may meet industry needs.

We currently have 43 HDR students in our School (37 PhD and 6 Master of Science by Research). This represents a small reduction in numbers compared to last year which has been driven by two factors. The first factor is the completion of 9 HDRs in this period of time. Congratulations to these graduates (see details below). The second is the process that I undertook in the last 12 months to work with students who had not progressed to milestones during the PhD as had been expected. This process invariably results in some students making a decision to exit their HDR. For those that have made this decision we wish you every success in the future.

As SHHS Director HDRT, my focus is now on recruiting new students, and supporting our current students and candidates and their supervisors to ensure progression to successful and timely completions.

Supervisor capacity is expanding through new academic appointments, PhD completions by staff and appointment of Adjunct Academics. Early career academics are being encouraged to participate in supervisory roles within larger panels to develop skills and confidence. Several staff have completed an HDR Supervision unit of study within the Graduate Certificate of Academic Practice. In continuing their training and development, current and new supervisors in the School completed supervisor training provided by the Office of Research in 2015.

In addition to the showcasing of HDR research at the School’s annual Symposium (see details below), our School has been represented in both the SCU HDR Research Poster Competition during Research Week and in the SCU round of the 3 Minute Thesis Competition (see below). We are also proud to report that two students from our School, Ms Sue-Ann Fitzgerald and Mr Dennis Richards, were successful in the 2015/2016 round of Australian Post Graduate Awards.

I continue to respond to an increasing number of queries from prospective HDR students: whilst many pursue an MSc or PhD as part of the more traditional academic pathway, an increasing number of clinicians are seeking an HDR as part of career transition or progression. With changes to the entry criteria for both MSc and PhD in 2015, we have been able to attract more clinicians who are returning to research. This aligns with our commitment to translational research where research directly responds to and addresses real world problems and impacts practice. As part of this work, our School is committed to participation with various key stakeholders. Collaborations with Mid North Coast Local Health District, the North Coast Local Health District and other services are leading to joint research projects, increased enrolment of clinicians in an HDR and engagement of clinicians as HDR
co-supervisors. Our School had a strong presence at the MNCLHD 2015 Conference in Port Macquarie where clinician engagement in PhDs and MSc was a strong narrative. For these reasons and others, we expect that our HDR cohort will increase and strengthen in the coming year.

Challenges that face HDR training in our School in the future include supervisor capacity; and attraction of a diverse range of HDR students who will engage in research projects which align with both the School’s identified research priority areas and the University’s designated research priorities. One of the overarching goals is the development and enhancement of a culture of clinical scholarship which links our teaching and research with health care providers in the government and private sector across our university footprint. HDR research has a strong role in this.

Another challenge that we face relates to practical support of HDR students throughout their degree. The Australian Postgraduate Awards environment is increasingly competitive and it is important that we look to creative and new ways to partner with industry with the view to developing other opportunities for HDR Scholarships or other funding to support our students.

HDR research in our School is strong, vibrant and diverse. Much of the work is translational in nature. Other projects address health workforce development; teaching and learning in health; and neuroscience, communication and human behaviour. It is widely accepted that HDR research is pivotal to a research culture within a university. As we embrace the new era of innovation in science and research, we will increasingly explore new ways to meet the current and future needs of HDR students in our School to ensure successful and timely completions that have a real world impact.

I would like to take this opportunity to acknowledge the hard work and perseverance that our students, candidates and their supervisors have done in the last year. We look forward to a productive 2016.

Dr Jacqui Yoxall  
BAppSc (Psych); GDipAppSc (Psych); PhD, MAPS  
Director of Higher Degrees Research Training  
Lecturer in Allied Health
Dr Desirée Kozlowski
PhD Graduate Profile

Title
The interplay between self-perceived gender and the perception of the gender of others: An examination of exogenous and endogenous factors contributing to judgements of sex and gender.

Supervisors
Associate Professor Rick Van Der Zwan & Dr Anna Brooks

What is your background PhD story?
I took a long time to complete my undergraduate degree because I only took one or two units at a time to fit study in with the rest of what was a pretty full life – managing a business, travelling, family and all those other things we do. When it came time for Honours I decided to immerse myself in the experience and I studied full-time that year (still working, still prioritising family, so in other words: juggling). I loved that so much, that process of research, especially the idea of being able to discover something brand new about the way we work as humans, that I knew I wanted to go on to do a PhD. The Honours year showed me that research is accessible, important, and incredibly rewarding. My supervisors had been fantastic during that year too, and they supported me wholeheartedly in applying for entry to the PhD program.

What were the highlights and key findings from your PhD studies?
The highlights of the research process were in the peripheral skills I developed. Key among these was the ability to cut through a bunch of somewhat complex information to identify and communicate the essence of it. I have discovered this is a valuable transferable skill, as are many others that a long-term research project might draw out.

The research itself centred on how our self-perceptions influence our perceptions of others and vice versa. I focussed on gender – by this I mean our levels of masculinity and/or femininity. My findings provided support for a dynamic, interactive account of gender perception. I reported five key findings including a demonstrated disconnect between perceived ‘maleness’ and masculinity, but not between ‘femaleness’ and femininity. This is consistent with the idea of manhood being a somewhat more precarious, socially-conferred state compared to womanhood.

To me this is highly relevant, particularly given current concerns such as the fact that men are less likely to seek help for physical and mental ill-health and the high male suicide rate. I think more conversations about whether or not our social expectations of men are still serving us as a society and men as individuals are needed. Perhaps my research could play a part in advancing that kind of discussion.

What advice would you give to a newly enrolled PhD student?
I would encourage a newly enrolled student to focus on their long-term goals. This is probably most difficult when you start out because it feels as though you have lots of time, time enough to pursue all kinds of shiny distractions. I would suggest you work from early on with the Career Development Service to identify your goals beyond the PhD. Think about your values, skills and objectives and position yourself according to those. Make contacts with people in the field you want to enter, write a lot and get your name out there, but do only as much as you can without losing energy and enthusiasm for your research. If you stay focussed and persevere then finishing is enormously satisfying.

What are your future research directions and/or aspirations?
I am very keen on pursuing research collaborations in the broad areas of human health and flourishing. Right now I am working with several cross-disciplinary research teams from Southern Cross University and the University of Canberra on topics including mental health and emotional intelligence. I have found that I really enjoy working across different projects with people from various disciplines and I plan to continue to do that. The possibilities from here feel very exciting.
Ms Shelley Barlow  
Current Confirmed PhD Candidate

Title
Working at the edge: What are the lived experiences of physiotherapists when encountering people with chronic pain?

Supervisors
Professor Susan Nancarrow, Associate Professor Sandra Grace, Dr Ian Edwards

PhD research
The research I am doing has emerged from the ground of clinical management of chronic pain. Chronic pain is a multidimensional experience that affects 1 in 3 people over 65 and 1 in 4 in the general population. Physiotherapists work with people with chronic pain. However, the older models of care taught in undergraduate physiotherapy training are no longer considered adequate in the face of chronic pain. Therefore physiotherapists struggle with integrating the new understandings of care into current practice. It is not fully understood what the reasons are for this.

This research uses a phenomenological approach to inquire into the lived experiences of physiotherapists working with people with chronic pain. Semi-structured in-depth interviews are being undertaken to discover how it is for physiotherapists to work with people with chronic pain. These interviews provide the data for thematic, narrative and reflexive analysis.

Future research goals
I would like to look further into what organises physiotherapy to work with people with chronic pain in the current changing landscape. Physiotherapy as a profession has been a strong force in many aspects of health care. However, there are differences in conceptual frameworks used and how clinical practice is constructed. I am interested in how the humanistic aspects of physiotherapy care in chronic pain management are embodied and embedded in current practice. Finally I would be interested in exploring what physiotherapists need to bring a humanistic approach into the foreground of chronic pain management.

Ms Rae Rafferty  
Current Confirmed Masters of Science by Research Candidate

Title
Leadership Coaching Training: Which type of follow-up yields the best results: A randomised controlled trial.

Supervisors
Professor Andrew Cashin & Dr Greg Fairbrother

Masters research
This study will be the first randomised controlled study in healthcare in the field of leadership coaching. The results of this study will assist organisations to make more informed choices regarding whether or not to engage their leaders in leadership coaching training and how to invest their often small training and development budgets to support the sustainability of practice changes, to ensure the maximisation of any training investment.

This study aims to assess the outcomes of leadership coaching training as compared to a waitlisted control group and to assess the outcomes of competing follow-up options after training. The study employs a parallel group, randomised controlled trial (RCT) design among 96 enrolled participants.

The outcome measures include six psychometric measures and two pragmatic measures. The results are currently being analysed. SPSS v21.0 is being used to conduct inferential statistical analyses of differences by group in relation to each of the outcomes of interest.
Future research goals
As part of the study, I designed a new tool for the measurement of leadership coaching skills, the Leadership Coaching Skills Questionnaire (LCSQ). Use of this tool in the study indicates that it yields good variation in scores across samples and by-group analyses indicates that the tool appears to be responsive to change. In my view internal consistency (reliability) and validity studies should be undertaken as an extension of this study in order to statistically validate the LCSQ.

I would also like to explore any link which might exist between uptake and use of these skills among clinical leaders and patient outcomes.

Higher Degrees Research Symposium
In November 2015, the 2nd Annual HDR Symposium was held to coincide with the inaugural Southern Cross University Research Week. The theme of the HDR Symposium in 2015 was Research Methodology – the How? of Research. This was a successful event. We enjoyed insightful and engaging presentations from our Head of School, Professor Iain Graham, and our Director of Research, Associate Professor Sandra Grace. Dr Joanne Bradbury, (Evidence Based Lecturer) gave a Keynote Presentation on Research Methodology and Associate Professor Ev Innes, (Allied Health Discipline Lead) gave a Keynote Presentation of Single System Designs.

Nineteen HDR students and candidates gave presentations about their chosen research methodology and the benefits and challenges that they have encountered in regard to methodology to date. Ms Shelley Barlow, Ms Yung Wang and Mr Dennis Richards received certificates for best presentations. Students, candidates, supervisors and other academic staff reported that it was an interesting an enjoyable day which allowed informal networking and promoted research ideas and discussion. We are now planning for the 2016 symposium.

Higher Degrees Research Poster Competition
As part of the Southern Cross University’s Research Week the Graduate School held a Higher Degrees Research poster competition. HDR participants from all schools and disciplines were invited to present their research poster and were give two minutes to discuss it.

Dennis Richards
The 2015 poster winner was PhD Candidate, Mr Dennis Richards, from the School of Health and Human Sciences.
Title
Chiropractic: An Exploration of Vitalism and Value

Supervisors
Dr Elizabeth Emmanuel, Associate Professor Sandra Grace and Dr Phil Ebrall

Abstract
Modern approaches struggle to effectively address global epidemics of non-communicable diseases. Might application of ancient concepts in contemporary forms assist in this challenge?

In founding chiropractic, Palmer proposed an ontology based on ancient Greek concepts of intelligence acting on matter to create the perceived world. In living beings, the nervous system transmits this intelligent vital force to maintain all body parts in a state of tone. Physiologically, tone meant that organs have the correct amount of functional energy to precisely perform their contributions to body function and health. Too much or too little energy could cause abnormal physiology and disease.

This project will first examine Palmer’s writings to identify and clarify these concepts. What exactly are the philosophical, scientific and technical bases of chiropractic, according to him? What are the gaps and links in his model? Can relevance to contemporary chiropractic be established?

Second, chiropractic thought-leaders will be interviewed and practitioners surveyed, to investigate whether and how vitalistic thinking and practices might contribute to a practice wisdom that could add value to chiropractic services, in addressing global health challenges.

Three Minute Thesis Competition
The three minute thesis is a research communication competition developed by the University of Queensland which challenges HDR students to present a compelling oration on their thesis and its significance in just three minutes in language appropriate to a non-specialist audience.

Jeffery Hodgins
The School of Health and Human Sciences’ representative for 2015 was Mr Jeffery Hodgins.

Title
Mutuality of acceptance and a sense of belonging in Australian national identity

Supervisors
Dr Gail Moloney and Dr Heather Winskel

Abstract
Australia’s future social and economic success depends upon all its diverse peoples intrinsically experiencing a sense of belonging. A sense of belonging increases personal resilience, develops social capital and strengthens social cohesion in society. Not belonging, or even the threat of not belonging, induces feelings of isolation, produces psychological distress and lowers social engagement. Australian national identity is a socially constructed identity offered by Australia’s multicultural-based social system and proposed as the superordinate social identity offering all people a common membership in which to experience a sense of belonging. A national identity is described as a perceived alignment between a person’s self-concept and a nation concept.

A sense of belonging is proposed as resulting from one’s personal involvement and commitment to social memberships within a social system, in which one feels accepted, socially legitimate, valued, integrated and secure. Theory suggests that an intrinsic sense of belonging, however, requires mutuality of acceptance in the social identities that represent social memberships. Mutuality of acceptance means a person experiences both acceptance from others in a social identity and self-accepts themselves in that identity. This study will explore the concept of mutuality of acceptance in Australian national identity using a quantitative, self-report questionnaire within a cross-section of Australian citizens and permanent residents.
Higher Degrees Research Graduates 2015

The School of Health and Human Sciences celebrated a total of 9 HDR completions in 2015; seven of which were awarded PhDs and the remaining two were awarded Master of Science by Research. Congratulations to the following:

Doctor of Philosophy (PhD)

Dr Justin Gaetano

Title  
The stimulus invariance of human sex cue processing: a cross-cultural study using non-face stimuli.

Supervisors  
Dr Anna Brooks, Associate Professor Rick Van Der Zwan

Dr Tara Kocek

Title  
The influence of executive function on externalising and internalising behaviours in middle childhood.

Supervisors  
Dr Jim Donnelly, Dr Tony Yeigh

Dr Desiree Koslowski

Title  
The interplay between self-perceived gender and the perception of the gender of others: an examination of exogenous and endogenous factors contributing to judgements of sex and gender.

Supervisors  
Associate Professor Rick Van Der Zwan, Dr Anna Brooks

Dr Shahla Meedya

Title  
Increasing breastfeeding rates up to six months among primparous women: a quasi-experimental study of the effectiveness of the Milky Way Program.

Supervisors  
Professor Kathleen Fahy, Dr Jacqui Yoxall, Adjunct Associate Professor Jenny Parratt

Dr Siti Muda

Title  
Maintaining women’s perineal integrity: participatory action research study.

Supervisors  
Professor Kathleen Fahy, Ms Carolyn Hastie

Dr Johanna Nieuwoudt

Title  
An investigation of the characteristics of muscle dysmorphia in a non-clinical population of adult male weight lifters in Australia.

Supervisors  
Professor Shi Zhou, Dr Rosanne Coutts, Mr Ray Booker

Dr Richard Summerhayes

Title  
Exposure to trihalomethanes in drinking water and small for gestational age births in New South Wales, Australia.

Supervisors  
Adjunct Professor Geoff Morgan, Professor Susan Nancarrow, Dr Nel Glass, Dr Steven Kermode
**Master of Science by Research**

Ryan Holding

**Title**  
Assessing the acute effects of a video-based warmup on the perceptual and decision-making components of agility in rugby football using 3D motion analysis.

**Supervisors**  
Professor Shi Zhou, Dr Rudi Meir

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Katrina Reeve

**Title**  
Is darkfield microscopic examination of fresh capillary blood a valid point of care screening to assess metabolic syndrome risk factors?

**Supervisors**  
Professor Shi Zhou, Dr Jacinta Arrelano

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**Confirmation of PhD Candidature 2015**

We offer our congratulations to the following students who have successfully completed their Confirmation of Candidature:

Ms Shelley Barlow, Ms Joanne Cooper, Ms Natalie Doring, Mr Leigh Grant, Ms Jacalyn Hall, Ms Carolyn Hastie, Ms Beth Mozolic-Staunton, Ms Ashlee Pennington, Ms Leeann Whitehair, Mr Royce Willis and Mr Andrew Woods.
Graduate Profile

Karen Coatsworth, the first student to submit a thesis and complete the School’s Nursing Honours program at Coffs Harbour campus, shares some insights on her research experiences and investigations on volunteer nursing in Nepal.

Tell us about your Honours research

My research, titled ‘A Phenomenological Study of Student Nurses Volunteering in Nepal: have their experiences altered their understanding of Nursing?’ was aimed at gaining an understanding of the experiences of student nurses who have volunteered as health care workers in Nepal, as well as the effect that delivering health care within the context of a low socio-economic setting had on the volunteer student nurses’ perceptions of nursing. I interviewed five student nurses on their return to Australia following a twenty-six day volunteer experience in Nepal.

The key findings of this study were that the experience had a significant impact on the personal and professional identities of the majority of participants, and that engaging in overseas volunteering assisted the student nurses to reconnect with their empathy and compassion, enact their nursing skills to the very boundaries of their capabilities, to be more innovative, to engage in leadership and to become more autonomous practitioners. The findings of this study also reinforce that nursing identity has a vitally important identity role within primary health care.

What were some of the highlights and challenges of your Honours experience?

For me the most significant highlight of my study was to be able to listen to the volunteer student nurses’ experiences during interviews and hearing what it was like for them to volunteer in this type of environment. As well as this, every stage of my research I completed was a highlight for me. From the initial interviewing process through to submission, each phase was a landmark achievement in the project’s development.

The greatest challenge I found was to keep momentum and continue to work on the writing of the thesis, because at times it becomes overwhelming and you begin to feel you will never finish!

What advice would you give to a new Honours student undertaking research for the first time?

The best advice I could give to any student considering undertaking a research project is to choose a subject you are absolutely passionate about. This passion and drive will keep you going across the line to completion!

Also make sure you have a great rapport with your supervisor/s. I had great support and encouragement from John (Hurley) and Kolleen (Miller-Rosser) and it makes all the difference.

Now that you have graduated, what’s next?

Since graduating I have been working in primary health. Currently I am working in the aged care sector, specifically with dementia and Alzheimers’ patients and their families offering support and education. In the future I am contemplating further study, either in research or in social services.

Completing my Bachelor of Nursing and then my Honours project were two of the greatest achievements of my life, and I feel now I could do anything and go anywhere!
Annual Honours Psychology Research Conference

A standout event on the School of Health and Human Sciences’ Psychology calendar is the Annual Honours Psychology Research Conference, held each year in Coffs Harbour.

The 2015 Annual Honours Psychology Research Conference was another outstanding success. Now in its 12th year, this engaging event was an opportunity to showcase the exceptional level of emerging research amongst the cohort of students completing either their Bachelor of Psychology with Honours or the Bachelor of Psychological Science with Honours. Each student completes 50% coursework and 50% research as part of their Honours program, the latter constituting a research project which forms the basis of presentations at the annual conference.

Held over two days in September, twenty-eight students participated in the conference, each delivering a 12-minute presentation and responding to 3 minutes of questioning from staff and students, members of the community, psychologists, allied health professionals, family and friends.

A notable new feature of this year’s conference was that all students published their conference abstracts with Frontiers publishing. Thanks to the generous support of the event sponsors, all publishing costs were covered on behalf of the students.

Major sponsorship this year was provided by Baringa Private Hospital; Elizabeth Ruthnam, Baringa CEO, delivered the opening address, along with Head of School, Professor Iain Graham.

Honours course coordinator Dr Gail Moloney was once again supported by a wonderful conference committee of students, who worked tirelessly through the year in their own time to organise and promote the event, as well as raise significant sponsorship to ensure the delivery of yet another high quality conference.
The School congratulates all of the participating students on their dynamic Honours research and professional contributions to the conference. The diverse research undertaken by the 2015 Honours cohort can be glimpsed in this listing of the year’s outstanding research projects:

- Friends, Family, Social Belonging, and Loneliness as We Age (Alice King)
- The Effect of Attitudes and Registration Opportunity on Organ Donor Registrations (Emily Sharpe)
- The Effect of Natural Scenes on Delay Discounting (Frances Chodkiewicz)
- Physical Fitness and Exercise Self-efficacy Do Not Influence Time Estimation During Moderate Exercise (Jason Newcombe)
- Individuation Instructions Reduce the Cross-Race Effect in a Face-Matching Task (Prachi Batra)
- Assessing the Universality of the Modified Receptive Field Theory: Evidence from Sinhala Script (Ravini Gunaseela Jayawardena)
- Instant and Automatic Detection of Auditory Syntactic Errors (Russell Fennell)
- Is Social Connectedness Key to Wellbeing in Older Adults? (Zoe Moore)


