# Allied Health Professions









## Allied Health Professions



Judith Catherwood Executive Director Allied Health Professions

#### **Overview**

Allied Health Professions became a service line within RBWH in 2011. The service line comprises nine disciplines providing assessment, diagnostic, therapy, rehabilitation and support services across all parts of the hospital campus, including in patient and ambulatory services, emergency and elective care. The contribution of research by each discipline is varied and reflects the diversity of the service provision and the capacity for research within each staff group.

In 2010, Queensland Health funded a number of Allied Health Research Fellows, one of which is located at RBWH. The position is currently vacant but there are plans to recruit to the role, after a review of the focus for the position is completed and an academic partner is identified. The position is professorial and leads the allied health research community in multidisciplinary research working in partnership with others across the campus, across other research collaboratives in Queensland and internationally. The role is key to building research capacity within allied health across all disciplines. The post works across all Health Practitioners (HP) disciplines, encompassing the HPs in other service lines e.g. radiographers, pharmacists, scientists etc.

There is substantial interest within allied health to further develop the research culture and capacity across disciplines. Each discipline has some excellent examples of research showcased in this report, but there are plans to develop this further in the fields of health services innovation, service and workforce development, as well as maintain a discipline specific focus in core practice areas. There are also plans to build a research infrastructure, including further development of joint clinical and academic positions, PhD students and a greater proportion of research active clinicians. Our aim will be to draw on collaborations to increase grants and funding opportunities.

Research in the future in allied health will drive clinical service improvement within RBWH and our vision is to be a world leader in allied health research creation, dissemination and education.

## Key departments

- Department of Audiology
- Department of Nutrition and Dietetics
- Department of Occupational Therapy
- Department of Orthotics and Prosthetics
- Department of Physiotherapy
- Department of Psychology
- Rehabilitation Engineering Centre
- Department of Social Work Services
- Department of Speech Pathology

## Executive and directing staff

- Judith Catherwood Executive Director, Allied Health Professions
- Deborah McKenzie Director, Audiology
- Dr Merrilyn Banks Director, Nutrition and Dietetics
- Susan Laracy Director, Occupational Therapy
- Dr Mark Hollian Director, Orthotics and Prosthetics
- Louise Luparia Acting Director, Physiotherapy
- Anne Clair Director, Psychology
- Peter Slattery Director, Rehabiliation Engineering
- Jan Hinson Director, Social Work Services
- Lynell Bassett Director, Speech Pathology



# Department of Nutrition and Dietetics

#### **Overview**

The Department of Nutrition and Dietetics provides a comprehensive clinical service to inpatients and outpatients of RBWH. Services to inpatients include nutritional assessment, intervention and support. Outpatient counselling services are provided to groups and individuals in clinics within the department and as part of multidisciplinary teams. A home enteral nutrition service is also provided. There is commitment to provide ongoing education to hospital staff, education and support for student dietitians, and support and advice to dietitians and other health professionals in regional areas. Dietetic Assistants in Nutrition Support Services undertake nutrition screening, assist patients with menu choices, organise specialised nutrition products, and monitor nutritional intakes. They also update information on patients' diet orders to ensure the correct menu selections for patients while they are in hospital.

The department has a commitment to research. Major interests are divided into three areas: nutrition support (ICU and burns, malnutrition, pressure ulcers, cancer, bone marrow transplant, tube feeding and food service); chronic disease management (diabetes, gestational diabetes and maternity, obesity management, gastroenterology, heart failure, renal disease and mental health); and education (student placement and collaborative learning). Research is not confined to these areas and depends on the interests of staff and collaborative groups.

The department has developed strong local research collaborations with the Burns, Trauma and Critical Care Research Centre (BTCCRC), Inflammatory bowel diseases Research Group, Internal Medicine Research Unit (IMRU), BAMBINO Research Group, Food Service Research Group and the Pressure Ulcer Project. Statewide and national networks include Murdoch Children's Research Institute, the Parenting Research Centre, National Burns Dietetics Group, Australasian Society of Parental and Enteral Nutrition (AuSPEN), Australian and New Zealand Intensive Care Research Centre (ANZIC-RC) at Monash University. Collaborations with other hospitals include the Princess Alexandra, Prince Charles and Royal Children's hospitals and The Wesley Hospital. Academic partners are Queensland University of Technology (QUT), Institute of Health and Biomedical Innovation at QUT, The University of Queensland (UQ), The University of Queensland Centre for Clinical Research (UQCCR) and Queensland Institute of Medical Research (QIMR).



**Dr Merrilyn Banks**Director, Nutrition
and Dietetics

## Research staff

Name	Qualifications	Position	Interests/specialities
Dr Merrilyn Banks	PhD, BScGradDipEd, GradDipNutrDiet, MHlthSci	Director, Nutrition and Dietetics	malnutrition, pressure ulcers, elderly, critical care, food services
Teresa Brown	BScNutr (Hons), GradDipNutrDiet	Team Leader, Dietitian/ Nutritionist	cancer care, gastrostomy
Christine Chapman-Kiddell	BScNutr (Hons), GradDipNutrDiet, MPhil candidate	Dietitian/Nutritionist	gastroenterology, IBD, Crohn's Disease
Sarah Cohen	BHlthSciNutrDiet	Dietitian/Nutritionist	oncology
Denise Cruickshank	BSc, GradDipNutrDiet, GradDipTeach (Sec), GradCertHlthMg	Senior Dietitian, Statewide Food Service Policy and Planning	food services
Susan de Jersey	BHlthSci NutrDiet (Hons), BAppSci, HMS (Hons), MPH, PhD candidate	Senior Dietitian/Nutritionist	maternal health, maternal obesity, infant feeding, gestational diabetes
Kathleen Dwyer	BHlthSciNutrDiet	Dietitian/Nutritionist	cancer care, pressure ulcers
Philip Juffs	BAppSci, GradDipNutrDiet, GradCertHlthMg	Team Leader, Clinical Dietetics	renal services
Simone Krutil	BSc, MNutrDiet	Dietitian/Nutritionist	gastroenterology, gastrostomys
Belinda Morey	BAppSci, HMS, BHlthSciNutrDiet	Dietitian/Nutritionist	oncology, renal and GDM
Dr Lynda Ross	PhD (BiomedSci), BNutrDiet (Hons)	Research Coordinator	chronic disease management, rare diseases



# Research staff

Name	Qualifications	Position	Interests/specialities
Amy Scott	BHlthSciNutrDiet	Dietitian/Nutritionist	malnutrition, nutrition support
Siobhan Wallin	BHlthSciNutrDiet	Dietitian/Nutritionist	critical care, upper gastrointestinal surgery
Adrienne Young	BHlthSciNutrDiet (Hons), PhD candidate	Dietitian/Nutritionist	malnutrition, elderly

# Supervised postgraduate students

Name	Current studies	Research topic
de Jersey S	PhD	Are we missing opportunities: Understanding health behaviours associated with overweight in pregnancy: New Beginnings Healthy Mothers and Babies Study
Young A	PhD	Improving nutritional care of hospitalised older adults through novel nutritional support strategies
Chapman-Kiddell C	MPhil	Role of diet in the development of inflammatory bowel disease
Al Balushi R	PhD	Effect of intravenous GLutamine supplementation IN Trauma patients receiving enteral nutrition (GLINT Study): a prospective, blinded, randomised, placebocontrolled clinical trial
Agarwal E	PhD	The Australasian Nutrition Care Day Survey: an investigation into the relationship between nutritional factors and clinical outcomes at three months in acute care patients
Roberts S	PhD	Nutrition in prevention of pressure ulcers in hospitalised patients

# Achievements and awards

Award	Event	Recipient
NHMRC Postgraduate Scholarship		Jersey S
Australian Postgraduate Award		Young A
Outstanding Contribution Award for her role in getting malnutrition on the ACHS agenda and the subsequent introduction of the Nutrition Care Standard	29th National Dietitian's Association of Australia Conference, Adelaide	Banks M
Research in Practice Highly Commended oral presentation 'Shifting the macronutrient profile during energy restriction requires structured advice on the composition of meals and snacks	29th National Dietitian's Association of Australia Conference, Adelaide	Ross L
Service line Encouragement Award for 'Nutrition Pathways in Stem Cell Transplant'	RBWH QuARRIE Awards	Cohen S, Brown T
The Judy Bauer Evidence-Based Practice Award	The University of Queensland Student Awards	Wade T

Investigators	Project title	Granting body	Amount awarded	Years of funding
Brown T, Ross L, Banks M	Nutrition outcomes using the RBWH Swallowing and Nutrition Guidelines for Patients with Head and Neck Cancer	RBWH Foundation	\$12,000	2011
de Jersey S,Daniels L, Nicholson J, Callaway L, Ross L	Are we missing opportunities? Understanding health behaviours associated with overweight in pregnancy: The New Beginnings Healthy Mothers and Babies Study	RBWH Foundation	\$28,000	2011

Investigators	Project title	Granting body	Amount awarded	Years of funding
Cohen S, Banks M	A randomised comparison of total parenteral nutrition and enteral feeding as nutritional support during treatment of haematological malignancies	RBWH Foundation	\$15,000	2011
Banks M,Paratz J, Cohen J, Albalushi R	Effect of intravenous glutamine supplementation in trauma patients receiving enteral nutrition: A prospective double-blind randomised clinical trial	RBWH Foundation	\$23,000	2011
Morey B, Campbell K, Ross L, Kark A, Juffs P, Gill E, Healy H, Fassett R, Ash S	Multiphase development of self management model to improve blood pressure management in chronic kidney disease: Preliminary data collection and resource development	Australian and New Zealand Society of Nephrology-Amgen Quality Assurance Grants Programme	\$10,000	2011-2012
Banks M, Mudge A, Ross L, Young A	Managing malnutrition: Identifying and addressing barriers and enablers for an interdisciplinary post hospital nutrition care model to improve clinical outcomes in older medical patients	Model of Care Project Grant, Queensland Health	\$138,000 (\$69,000 per annum for two years)	2011-2013
de Jersey S	Are we missing opportunities: Understanding health behaviours associated with overweight in pregnancy - New Beginnings Healthy Mothers and Babies Study	NHMRC Post- graduate scholarship	\$75,520	2011-2013
Young A	Comparing the impact of ward-based feeding assistance models on energy and protein intake of hospitalised older adults and on staff behaviours and attitudes towards nutrition and feeding	Australian Postgraduate Award	\$68,580	2011-2013

## **Publications**

Agarwal E, Ferguson M, Banks M, Bauer J, Capra S, Isenring E. Nutritional status and dietary intake of acute care patients: Results from the Nutrition Care Day Survey 2010. Clin Nutr. 2011;31(1):41-7.

Al Balushi R, Paratz J, Cohen J, Banks M, Roberts J, Dulhunty J, Lipman J. Effect of intravenous glutamine supplementation in trauma patients receiving enteral nutrition study protocol (GLINT Study): A prospective, blinded, randomised, placebo-controlled clinical trial. BMJ Open. 2011;1:e000334 doi:10.1136/bmjopen-2011-000334.

Brown T, Findlay M. Current issues in the nutritional management of patients with head and neck cancer in Australia. Cancer Forum. 2011;35(2):92-6.

Davies A, Ridley E, Morrison S, McIlroy K, Banks M, Cooper J, Hardy G, Thomson A. A prospective study of the use of enteral and parenteral nutrition in severe acute pancreatitis patients in Australia and New Zealand. Critical Care Medicine. 2011;39(3):462-468.

De Jersey S, Ross L, Himstedt K, McIntyre HD, Callaway L for the BAMBINO group. Nutritional intake and weight gain in obese pregnant women: Some clues for intervention. Nutr Diet. 2011;68(1):53-9.

Findlay M, Bauer J, Brown T, Davidson W, Hill J, Isenring E, Talwar B, Bell K, Kiss N, Kumis R, Joeliger J, Sandison A, Taylor K. Evidence-based practice guidelines for the nutritional management of adult patients with head and neck cancer. Clin Onc Soc Aust. 2011; http://wiki.cancer.org.au/australia/COSA:Head\_and\_neck\_cancer\_nutrition\_guidelines

Isenring E, Banks M, Ferguson M, Bauer J. Beyond malnutrition screening: appropriate methods to guide nutritional care for long term care residents, 2011. JADA. 2011;107:404-412.

Morey B, Brown T. A review of the evidence-based practice in nutrition related complementary therapies: Improving the knowledge of dietitians. Cancer Forum. 2011;35(2):112-21.

Mudge A, Kasper K, Clair A, Redfern H, Bell J, Barras M, Pachana N. Recurrent readmissions in medical patients: A prospective study. J Hosp Med. 2011;6(2):61-7.

Mudge AM, Ross LJ, Young AM, Isenring EA, Banks MD. Helping understand nutritional gaps in the elderly (HUNGER): A prospective study of patient factors associated with inadequate nutritional intake in older medical inpatients. Clin Nutr. 2011;30(3):320-5.



## **Publications**

Orazio LK, Isbel NM, Armstrong KA, Tarnaskyj J, Johnson DW, Hale RE, Kaisar M, Banks MD, Hickman IJ. Evaluation of dietetic advice for modification of cardiovascular disease risk factors in renal transplant recipients. J Renal Nutr. 2011;21(6):462-71.

Ross L, Mudge A, Young A, Banks M. Everyone's problem but nobody's job: Staff perceptions and explanations for poor nutritional intake in older medical patients. Nutr Diet. 2011;68(1):41-6.

Ross L, Tapsell L, Probst Y. Optimising dietary fat in a weight loss-trial requires advice based on a structured "whole-of-diet" model. Nutr Res. 2011;31(9):683-90.



# Department of Occupational Therapy

## **Overview**

The Department of Occupational Therapy provides both secondary, tertiary and quaternary services specialising in burns, hands, lymphoedema, pain and stroke. The Crammond Fellow in Pain Management is a three-year research fellow pursuant to completion of Masters by Research.

Research topics are reflective of the advanced clinical positions and the Crammond Fellow. Further exploration of Honours topics is a goal for 2012-2013 to enhance the breadth of areas of the profession's scope of practice under investigation.

## Research staff

Name	Qualifications	Position	Interests/specialities
Nicole Andrews	BOccThy (Hons I)	Senior Occupational Therapist (Cramond Fellow)	chronic pain management, CRPS, activity patterns in chronic pain
Karl Bagraith	BOccThy (Hons I)	Senior Occupational Therapist	outcome measurement in persistent pain and the clinical application of the International Classification of Functioning, Disability and Health; risk screening in occupational therapy
Tennille Rowland	BOccThy, GradCert (Stroke), MPhil	HP5 Clinical Occupational Therapist	stroke, neurology



**Susan Laracy** Director, Occupational Therapy

## Supervised postgraduate students

Name	Current studies	Research topic
D'Arrigo R	Occupational Therapy Honours Student	Predictors of sleep quality in persons with chronic pain: a momentary with-in persons perspective
Donohue G	Occupational Therapy Honours Student	Adult attachment and approach to activity in chronic pain
Julia Hayes	Occupational Therapy Honours Student	Patient goals and the International Classification of Functioning, Disability and Health (ICF): Evaluating the content validity and the clinical utility of the Low Back Pain Core Sets

## Awards and achievements

Award	Event	Recipient
International Student Travel Award	International Society for Quality of Life Research, 18th ASM, Colorado, USA	Bagraith KS
Finalist Best Student Poster Prize	International Society for Quality of Life Research, 18th ASM, Colorado, USA	Bagraith KS
Best Overall Oral Prize	The University of Queensland Postgraduate Research Conference	Bagraith KS

Investigators	Project title	Granting body	Amount awarded	Years of funding
Andrews N, Meredith P, Strong J	Approach to activity and determinants of daily function in patients with chronic pain: a momentary within-persons perspective	RBWH Foundation	\$20,000	2011
Andrews N, Meredith P, Strong J	Approach to activity and determinants of daily function in patients with chronic pain: a momentary within-persons perspective	Occupational Therapist Board of Queensland	\$15,000	2011-2012



Investigators	Project title	Granting body	Amount awarded	Years of funding
Bagraith KS, Strong J, Sussex R, Gibson E	Using the International Classification of Functioning, Disability and Health (ICF) to define the clinical assessment and measurement of outcomes in patients with CLBP	RBWH Foundation	\$15,000	2011
Laracy S, Foley E, Bagraith KS, Alison R	The value of risk screening patients with differentiated thyroid carcinoma undergoing radioiodine therapy	RBWH Private Practice Trust Fund	\$50,000	2011

## **Publications**

Andrews N, Meredith P, Strong J. Adult attachment and reports of pain in experimentally-induced pain. European Journal of Pain. 2011; 15:523-530.

Chardon L, Bagraith KS, King RJ. Counselling activity in single-session online counselling with adolescents: An adherence study. Psychother Res. 2011 Sep;21(5):583-92.

Bennett S, Hoffmann T, Arkins M. A multi-professional evidence-based practice course improved allied health students' confidence and knowledge. Journal of Evaluation in Clinical Practice. 2011;17(4):635-9.

Rowland TJ, Turpin M, Gustafsson L, Henderson RD, Read SJ. Chedoke Arm and Hand Activity Inventory-9 (CAHAI-9): Perceived clinical utility within 14 days of stroke. Top Stroke Rehabil. 2011;18(4):382-93.

Rowland TJ, Gustafsson L, Turpin M, Henderson RD, Read SJ. Chedoke Arm and Hand Activity Inventory-9 (CAHAI-9): A multicentre investigation of clinical utility. International Journal of Therapy and Rehabilitation. 2011;18(5):290-96.

# Department of Physiotherapy

## **Overview**

The Department of Physiotherapy provides services to both inpatients and outpatients of the Royal Brisbane and Women's Hospital who have or potentially have, an underlying movement dysfunction resulting from injury, disease or life changes.

Physiotherapy treatment is directed towards maintaining and restoring normal function, minimising dysfunction and preventing disability by providing non-pharmacological pain relief, enhancing movement patterns by restoring joint range and muscle function, maximising cardiorespiratory function and achieving functional independence.

Tertiary services are provided for patients with amputations, burns, lymphoedema, persistent pain, oncological and musculoskeletal conditions, respiratory conditions, hand injuries, pelvic floor dysfunction, prematurity and pregnancy.

Research is undertaken by staff members with specific interest in their fields of professional practice and expertise. Key areas of interest in 2011 were burns, heart failure, neurology, neonates and musculo-skeletal conditions.

The joint research position with Griffith University's School of Physiotherapy and Exercise Science was filled in 2011 by Dr Jane Grayson, and Dr Sean O'Leary continues as the Principal Research Fellow in the joint research position with The University of Queensland (UQ).



Louise Luparia Acting Director, Physiotherapy

### Research staff

Name	Qualifications	Position	Interests/specialities
Julie Adsett	BPhty (Hons)	Advanced Clinical Physiotherapist	heart failure, critical care
Praline Choolun	BSc (Phty), GradDip (Geriatrics)	Physiotherapist Team Leader (GARU)	neurological physiotherapy
Dr Jayne Grayson	PhD, BSc (Kinesiology), MA(Ex Physiology), MPhtySt	Research Fellow (RBWH and Griffith University)	musculoskeletal pain and injury, sports injuries
Dr Shaun O'Leary	BPhty (Hons), MPhty(Manip), PhD, FACP	Principal Research Fellow	musculoskeletal conditions
Madonna Puglisi	BPhty (Hons)	Senior Physiotherapist	burns
Hildegard Reul-Hirche	DipPhty	Advanced Clinical Physiotherapist	lymphoedema, breast surgery
Sonia Sam	BPhty	Physiotherapist	neonatal physiotherapy

# Supervised postgraduate students

Name	Current studies	Research topic
Bet-Or, Y	Research Masters Scapular dysfunction in neck pain	
Burke, B	PhD	Prediction of outcome in total knee arthroplasty
Masters group project	Coursework Masters (Research Component)	Cervical spine strength and endurance profiles
Choolun, P	MPhil	Tracking changes in scapular position in acute post- stroke hemiplegia patients: An observational study

Investigators	Project title	Granting body	Amount awarded	Years of funding
Crossley K, Hodges P, Jull G, Vicenzino B, O'Leary S, Brauer S, Cunnington R, Bartlett P, Crozier S, Bennell K, Hinman R, Wrigley T	Gait analysis for clinical research	NHMRC	\$35,000	2011
O'Leary S, Raymer M, Smith D, Hodges P, Jull G	Determinants of success in the non-operative management of three common orthopaedic conditions managed in Queensland Health?	RBWH Research Grant	\$30,000	2011



Investigators	Project title	Granting body	Amount awarded	Years of funding
Puglisi M	Is TENS useful in the management of donor site pain and the improvement of function post split skin graft procedure	RBWH Research Grant	\$15,000	2011
Adsett J	Aquatic versus land based exercise for patients with chronic heart failure	Queensland Health Health Practitioner Research Scheme	\$24,458	2011-2012
Adsett J	Safety of water based exercise programmes for people with chronic heart failure	RBWH Research Grant	\$30,000	2011
Adsett J	Maintenance of exercise performance following a disease specific hospital rehabilitation programme for patients with chronic cardiovascular and pulmonary disease: The effect of a community based structured exercise programme	RBWH Research Grant	\$14,000	2011
McCrae P, Mudge A, Walker P, Dunglison N, Gardiner R, Williams H, de Ruiter C, Cruickshank M, Barnbrook C, Woollett K, Slaughter B	Identifying interdisciplinary care needs in older surgical inpatients	RBWH Research Grant	\$37,000	2011

## **Publications**

O'Leary S, Falla D, Jull G. The relationship between superficial muscle activity during the cranio-cervical flexion test and clinical features in patients with chronic neck pain. Manual Therapy. 2011;16:452-455.

Cagnie B, O'Leary S, Elliott J, Peeters I, Parlevliet T, Danneels L. Experimental muscle pain induces a functional reorganisation of the cervical extensor muscles during a neck extension exercise. The Clinical Journal of Pain. 2011;27:392–397.

O'Leary S, Cagnie B, Reeve A, Jull G, Elliott J. Is there altered activity of the extensor muscles in chronic mechanical neck pain? A functional magnetic resonance imaging study. Archives of Physical Medicine and Rehabilitation. 2011;92:929-934.

Falla D, O'Leary S, Farina D, Jull G. Association between intensity of pain and impairment in onset and activation of the deep cervical flexors in patients with persistent neck pain. The Clinical Journal of Pain. 2011;27(4):309-314.

Vertullo C, Quick M, Jones A, Grayson J. A surgical technique using presoaked vancomycin hamstring grafts to decrease the risk of infection after anterior cruciate ligament reconstruction. Arthroscopy: Journal of Arthroscopic Repair and Related Surgery 2011, Vol 28(3):337-342.

Reul-Hirche H (2011): Manual lymph drainage when added to exercise may not be effective in preventing lymphoedema after surgery for breast cancer. [commentary]. Journal of Physiotherapy. 57:258.

Mudge A, Denaro C, Scott A, Atherton J, Myers D, Marwick T, Adsett J, Mullins R, Suna J, Scuffhum P, O'Rourke P. Exercise training in recently hospitalised patients with heart failure enrolled in a disease management programme: Design of the EJECTION-HF Randomised Controlled Trial. Eur J Heart Fail. 2011;13(12):1370-5.

Adsett J, Mullins R, Hwang R, Hogden A, Gbson E, Houlihan K, Tuppin M, Korczyk D, Mallitt, K, Mudge A. Repeated six minute walk tests in patients with chronic heart failure: Are they clinically necessary? Eur J Cardiovasc Prev Rehabil. 2011;18(4):601-606.



# Department of Psychology

#### **Overview**

The Department of Psychology provides evidence-based clinical psychology services for inpatients and outpatients who are receiving hospital services for physical health problems.

Services provided include:

- Clinical psychology assessment and treatment for inpatients and outpatients on screening or referral
- Screening of specific patient streams based on evidence for relevance of psychological, emotional or behavioural factors for physical health outcomes
- Education of specific patient groups regarding psychological, emotional or behavioural topics relevant to their health self-management
- Assistance for staff with managing difficult patient behaviour
- Treatment modalities include behaviour therapy, cognitive behaviour therapy, counselling and hypnosis applied in an evidence-based manner.

In 2011, research contributions have been made from the Department of Psychology in the areas of obesity, recurrent admissions to hospital and building resilience in children.

Research into obesity looked at psychological factors affecting emotional eating. The study on recurrent admissions examined both psychological and non-psychological factors affecting admission. Both have been have published in 2011. The study into building resilience in children has been accepted for publication. A study on stress and burnout in renal nurses was submitted and accepted for publication.



Anne Clair
Director, Psychology

## Supervised postgraduate students

Name	Current studies	Research topic
Doolan G	Masters (Clinical Psychology)	Stress and burnout in renal nurses

### **Publications**

Andrews R, Lowe R, Clair A. The relationship between basic need satisfaction and emotional eating in obesity. Aust J Psychol. 2011 Mudge A, Kasper K, Clair A, Redfern H, Bell J, Barras M, Pachana N. Recurrent readmissions in medical patients: A prospective study. J Hosp Med. 2011 Feb;6(2).

# Rehabilitation Engineering Centre



Peter Slattery Director, Rehabiliation Engineering

#### **Overview**

The Rehabilitation Engineering Centre has continued to work towards strengthening the evidence base for service delivery through a number projects:

#### Programme theory analysis of custom cushion services for adult clients with spinal cord injury

This is a joint project with Metro South Spinal Outreach Team (SpOT) aiming to map the client journey from referral to six months post discharge to evaluate the outcomes of the current service model. Progress was reported in a paper presented at the Medical Aids Subsidy Scheme (MASS) wheelchair prescriber workshops in August 2011. Principal RBWH Researchers are Peter Slattery and Oliver Mason.

#### Seating simulation mannequin

This project involves developing a mannequin for use both in product development and testing and for use as an 'artefact' in education seminars to assist in cross discipline communication. A final year undergraduate student project was completed in June 2011 as background for this project. The prototype mannequin was completed in July 2011 and the first education sessions delivered in August 2011. Results of feedback have been used to develop a specification for a second iteration of the mannequin planned for completion in 2012. Principal Researcher is Peter Slattery.

#### Life cycle of flexible polyurethane foam in custom seating

Several projects have continued in this field. The primary goal is to better inform clients using custom cushions about the correct way in which to use and manage these devices. The preliminary cyclic testing rig was completed in July 2011. Testing protocols have been developed with full testing scheduled to begin in mid 2012. Progress on this project and outcomes from previous projects on this topic were presented in August 2011 at the MASS workshop. Principal Researcher is Peter Slattery.

#### Research staff

Name	Qualifications	Position	Interests/specialities
Peter Slattery	BE (Mech) (Hons), MEngSc	Director, Rehabilitation Engineering, RBWH;	rehabilitation engineering,
	(Research),CPEng, RPEQ, NPER	Adj. Assoc. Prof. Faculty Science and	engineering design, inter-
	(Biomed), MIEAust	Engineering, QUT	team communication

# Department of Social Work Services

#### **Overview**

The Royal Brisbane and Women's Hospital Department of Social Work Services identifies its mission as assisting patients, their families and carers with the impact of changes in health on individual and family functioning, and achieving maximum benefits from health care services through leadership in service provision, education and research.

The strategic objectives of departmental research programme are to:

- develop a program consistent with the strategic goals of the department
- contribute significantly to research in social work, healthcare practice and service development and evaluation
- maintain a work environment that supports research and evidence-based practice
- actively promote research achievements and raise the profile of social work research
- provide staff with access to a range of education and development opportunities related to social work research
- share professional expertise and knowledge with local, national and international communities
- ensure the social work departmental research program is appropriately funded and supported.



#### Research partnerships:

- Queensland University of Technology School of Public Health and Social Work and the RBWH Patient Flow Unit 'Younger adults with disability: Addressing the social factors and economic costs associated with length of hospital stay' (Investigators: Redfern H, Burton J, Lonne B, Fenn M, Winter E, Hinson J) and the supervision of a social work research scholarship student.
- The University of Queensland School of Social Work and Human Services 'Domestic and family violence during pregnancy and pathways to support and safety in rural, regional and remote communities in Queensland' (Investigators: Walsh D, Hafner D, Hinson J).

## Practice based research:

- 'IMPACT IMproving Psychological health And decreasing Cardiovascular risk in patients post burns' (Investigators: Paratz J, Druery M, Plaza A, Cohen J, Muller M, Stockton K, Younger J); Burns, Trauma and Critical Care Research Centre, RBWH.
- 'Implementing a structured interdisciplinary decision making capacity pathway with vulnerable hospitalised older persons' (Investigators: Winter E, Redfern H [Mentor]), Internal Medicine, RBWH.
- Three doctoral theses progressed: One PhD thesis submitted for examination entitled 'Behind the masks: A study of social work, trauma and the complex hospital organisation' (Hinson, I).
- 'Development of a collaborative intervention model in chronic kidney disease self management for identified Aboriginal and Torres Strait Islander communities' (Redfern H, Glynn H) collaborative project with RBWH Department of Renal Medicine and the Kidney Support Network.
- The 'Thriving not Surviving' project progressed, implementing a capability and support framework for new staff and new graduates (De Ruiter A, Jones K).

## Research staff

Name	Qualifications	Position	Interests/specialities
Jan Hinson	BSocWk (UQ), MSWAP (UQ), MASSW (Acc.)	Director, Social Work Services	trauma and violence, child protection
Helen Redfern	BSocWk (UQ), MASW (UQ), MAASW	Research Coordinator (part-time)	chronic disease, ethics, aged care and disability, clinical education
Wayne Middleton	BSocWk (UQ), Master of Health Science, Health Services Management (QUT)	Social Worker - Advanced	clinical governance



Jan Hinson Director, Social Work Services



# Research staff

Name	Qualifications	Position	Interests/specialities
Hayley Parsons	BSocWk, MASW (UQ)	Social Worker	evidence-based practice and professional identity
Anne de Ruiter	MPhil (UQ)	Social Worker	workforce capability
Martha Druery	BA (Psych), BSocWk (Hons)	Social Worker (Advanced)	psychosocial outcomes, burn injuries, family bereavement and trauma
Kerrie Jones	BSocWk (UQ), GradDipInfoSys (QUT)	Social Worker (Advanced)	workforce capability
Harold Glynn	BSocWk	Social Worker (Advanced)	chronic disease
Emily Winter	BSocWk	Social Worker (Advanced)	aged care

# Supervised postgraduate students

Name	Current studies	Research topic
Hinson J	PhD	Behind the masks: a study of social work, trauma and the complex hospital organisation
Middleton W	Doctor of Health Science, HScD (Professional Doctorate)	An analysis of the understanding of and engagement in clinical governance by allied health professionals
Parsons H	PhD	Evidence-based hospital social workers' experience of organisational culture and professional identity

## Achievements and awards

Award	Event	Recipient
Conference presentation 'Motivation and adherence to therapy programs (from adolescence to the Elderly)'	ANZBA Meeting	Druery M
Conference presentation 'Practical care of newborns and neonatal abstinence syndrome (NAS)'	National Foster and Kinship Carer Conference	Waples L, Taylor K
Vacation Research Experience Scholarship, QUT Vacation Research Experience Scholarship Scheme		Seiffert H

Investigators	Project title	Granting body	Amount awarded	Years of funding
Redfern H, Glynn H	A collaborative intervention model (RBWH and Kidney Support Network) in chronic kidney disease self management with Aboriginal and Torres Strait Islander Communities	RBWH Private Practice Fund	\$68,838	2009-2011
Jones K, De Ruiter A	Thriving not Surviving – Phase 2	RBWH Private Practice Fund	\$85,000	2009-2011
Winter E	Implementing a structured interdisciplinary decision making capacity pathway with vulnerable hospitalised older persons	HP Research Scheme	\$10,000	2010-2011

# Department of Speech Pathology

## **Overview**

The Department of Speech Pathology provides tertiary and quaternary level clinical services to adult inpatients and outpatients with swallowing and/or communication disorders of varying complexity and aetiology. Services are provided at RBWH Acute Hospital and the Geriatric Assessment and Rehabilitation Unit (GARU) at Rosemount.

The Department participates in a range of specialist multidisciplinary teams and has a strong commitment to clinical research and speech pathology student education.

In particular, the Department has established key research partnerships with The University of Queensland Centre for Clinical Research and School of Health and Rehabilitation Sciences, resulting in ongoing collaborative research projects and publications.

#### Key research areas include:

- Head and neck cancer intervention, models of care and outcomes of patients following surgery and/or chemotherapy/radiotherapy
- Stroke investigation of aphasia specific information provided to patient's with aphasia and their families
- Dysphagia following thermal burn injury
- Dysphagia screening, swallowing rehabilitation
- Teleheath and telerehabilitation.



Lynell Bassett
Director, Speech Pathology

## Research staff

Name	Qualifications	Position	Interests/specialities
Lynell Bassett	BSpThy	Director, Speech Pathology	tracheostomy, burns
Ann-Louise Spurgin (nee Morton)	BSpPath (Hons), GradCertMgmt	Senior Speech Pathologist	cancer care, head and neck surgery
Jane Crombie	BSpPath, GradCertMgmt	Speech Pathologist (Advanced)	cancer care, head and neck surgery, telehealth
Sonia Baker	BSpPath	Speech Pathologist (Advanced)	tracheostomy, critical care
Clare Burns	BSpPath	Speech Pathologist (Advanced)	telehealth, cancer care
Anna Farrell	BSpPath (Hons), PhD	Senior Speech Pathologist	adult motor speech disorders, dysphagia
Sarah Heaton	BSpPath	Senior Speech Pathologist	dysphagia screening, burns
Prof. Elizabeth Ward	BSpPath (Hons), PhD, GradCertEd	Prof. Centre for Functioning and Health Research (CFAHR), Queensland Health; Conjoint Prof. School of Health and Rehabilitation Sciences, UQ	head and neck cancer, dysphagia associated with thermal burns, telehealth and telerehabilitation, intensive care
Marita Plunkett	BSpPath (Hons)	Speech Pathology Clinical Educator	clinical education, adult communication disorders

## Supervised postgraduate students

Name	Current studies	Research topic
Rumbach A	PhD	Dysphagia following thermal burn injury: Determining incidence, risk factors, treatment targets, and indicators of recovery
Sharma S	PhD	Can dysphagia be adequately assessed online?



Investigators	Project title	Granting body	Amount awarded	Years of funding
Bassett L, Baker S, Hancock K, Ward E, Hyde T	The evaluation of a tracheostomy simulation training program for speech pathologists	Health Practitioner Research Scheme	\$19,301	2011- 2012
Burns C, Ward E, Bassett L, Greenup P, Kenny E	Examination of a telehealth service for the management of swallowing and communication disorders of patients with head and neck cancer	Health Practitioner Research Scheme	\$37,271	2011- 2012
Plunkett M; investigators from Metro North, Metro South and Toowoomba Hospital and Health Services; Royal Children's Hospital, The University of Queensland	A comparative study of paired and single clinical placement models: An activity level analysis	Health Practitioner Research Scheme	\$9,968	2011- 2012

#### **Publications**

Rumbach AF, Ward EC, Cornwell PL, Bassett LV, Khan A, Muller MJ. Incidence and predictive factors for dysphagia following thermal burn injury: A prospective cohort study. Journal of Burn Care and Research. 2011;32(6):608-616.

Rumbach AF, Ward EC, Cornwell PL, Bassett LV., Muller MJ. Physiological characteristics of dysphagia following thermal burn injury. Dysphagia. Online First. 2011; November, 22;s00455-011-9376-7.

Rumbach AF, Ward EC, Cornwell PL, Bassett LV, Spermon ML, Plaza AL, Muller MJ. Dysphagia rehabilitation after severe burn injury: An interdisciplinary and multidisciplinary collaborative. Journal of Medical Speech-language Pathology. 2011;19(1):25-34.

Sharma S, Ward EC, Burns C, Theodoros DG, Russell T. Assessing swallowing disorders online: A pilot telerehabilitation study. Journal of Telemedicine and eHealth. 2011;17(9):1-8.

Ward EC, Christiansen S, Denny V, Harris E, Cheng L, Crombie A. Presentation characteristics and management of dysphagia in patients with Ludwig's Angina. Journal of Medical Speech Language Pathology. 2011;19(2):1-10.