

Internal Medicine Services



Internal Medicine Services



Assoc. Prof. Tony Allworth
Acting Executive Director
Internal Medicine Services



Kate Mason
Nursing Director
Internal Medicine Services

Overview

Internal Medicine Services has a commitment to academic medicine, with areas of outstanding research productivity. To support research there are strong links with the Queensland Institute of Medical Research (QIMR), The University of Queensland Centre for Clinical Research (UQCCR), The University of Queensland (UQ) School of Medicine, Queensland University of Technology (QUT) and a range of other research partners.

Nursing and health professionals actively participate in evidence-based practice and multidisciplinary research across all of the service line. In most areas of Internal Medicine Services Research, assistant roles are fulfilled by highly skilled nursing staff.

We are proud of the fact that over the last year, we had a nine per cent increase in publications and 37 per cent increase in the value of the research grants. This is a testament to the dedication, curiosity and persistence of our staff. The most important benefit of this is that we know that the best patient care occurs in centres where there is a strong culture of research.

Key departments

- Department of Cardiology
- Department of Clinical Immunology and Allergy
- Department of Clinical Pharmacology
- Department of Dermatology
- Department of Endocrinology
- Department of Gastroenterology and Hepatology
- Genetic Health Queensland
- Infectious Diseases Unit
- Department of Internal Medicine and Aged Care
- Department of Neurology
- Department of Nuclear Medicine including Queensland PET Service
- Palliative Care Service
- Department of Pharmacy
- Department of Renal Medicine
- Department of Rheumatology
- Department of Thoracic Medicine

Executive and directing staff

- **Assoc. Prof. Tony Allworth**
Acting Executive Director
Internal Medicine Services
- **Kate Mason**
Nursing Director
Internal Medicine Services
- **Assoc. Prof. John Atherton**
Director, Cardiology
- **Dr Roger Prentice**
Director, Clinical Immunology and Allergy
- **Dr Paul Kubler**
Director, Clinical Pharmacology
- **Dr Ivan Robertson**
Director, Dermatology
- **Assoc. Prof. Michael d'Emden**
Director, Endocrinology
- **Prof. Barbara Leggett**
Director, Gastroenterology and Hepatology
- **Assoc. Prof. Julie McGaughan**
Director, Genetic Health Queensland
- **Assoc. Prof. Tony Allworth**
Director, Infectious Diseases Unit
- **Assoc. Prof. Charles Denaro**
Director, Internal Medicine and Aged Care
- **Dr Robert Henderson**
Director, Neurology
- **Dr William Fong**
Director, Nuclear Medicine
- **Dr Carol Douglas**
Clinical Director, Palliative Care Service
- **Assoc. Prof. Ian Coombes**
Director, Pharmacy
- **Dr Helen Healy**
Director, Renal Medicine
- **Dr Paul Kubler**
Director, Rheumatology
- **Assoc. Prof. Stephen Morrison**
Director, Thoracic Medicine

Department of Cardiology

Overview

The Department of Cardiology has a CCU and telemetered ward beds. Non-invasive services include ambulatory ECG and BP monitoring, exercise ECG, tilt testing, cardioversion and echocardiography (transthoracic, transoesophageal, stress, contrast, 3D). The Department provides multislice CT coronary angiography and cardiac MRI (collaboration with medical imaging department). Invasive services include cardiac catheterisation, percutaneous coronary intervention, intravascular ultrasound, coronary pressure wires, intra-aortic balloon pumps, balloon valvuloplasty, atrial septal device closure, temporary and permanent pacing (including biventricular), electrophysiology procedures (including 3D-mapping capability) and implantable cardioverter defibrillators (ICD). Outpatient clinics include general cardiology, cardiomyopathy, cardiac genetics, cardiac obstetrics, pacemaker/ ICD and preadmission. The Department also conducts indigenous outreach clinics in Rockhampton and Woorabinda.

Other services include cardiac rehabilitation, an accelerated chest pain assessment protocol (collaboration with emergency and internal medicine departments) which includes seven-day stress testing, and a heart failure multidisciplinary program (collaboration with internal medicine department).

The Department of Cardiology has a strong clinical trials research program in acute coronary syndromes, heart failure, pacing and atrial fibrillation. In 2011, and was the lead recruiting site globally for the ATLAS-2 study and in Australasia for PEGASUS, SOLID and TAO.

A broad investigator-driven research focus involves health service delivery and evaluation including chest pain assessment, heart failure disease management, alternative models of cardiac rehabilitation, cardiac genetics (including the National Genetic Heart Disease Registry), cardiac obstetrics and multimodality imaging. Additional research interests includes a dedicated electrophysiology animal laboratory, atrial fibrillation, Fabry disease and heart failure prevention.



Assoc. Prof. John Atherton
Director, Cardiology

Research staff

Name	Qualifications	Position	Interests/specialities
Assoc. Prof. John Atherton	MBBS, PhD, FRACP, FCSANZ	Director, Cardiology	heart failure, cardiac genetics, cardiac rehabilitation, economics
Dr Thomas Butler	MBBS	Cardiology Registrar	
Dr Stuart Butterly	MBBS, PhD	Cardiology Registrar	
Dr Anthony Camuglia	MBBS	Cardiology Registrar	
Dr Karin Chia	MBBS, FRACP	Staff Cardiologist and Electrophysiologist	electrophysiology
Dr Julie Ch'ng	MBBS, FRACP	Staff Cardiologist	echocardiography
Dr David Cross	MBBS FRACP FCSANZ	Visiting Senior Cardiologist	clinical trials, acute coronary syndromes
Dr Mark Dooris	MBBS (Hons2), FRACP, GradDip Sci (Mathematics), FCSANZ	Staff Interventional Cardiologist; Director, Cardiac Catheterisation Laboratory	interventional cardiology, clinical audit, mathematics
Gae Goodman	BN	Clinical Trials Coordinator	clinical trials
Dr Christopher Hammett	BHB, MBChB, MD, FRACP, FCSANZ	Staff Interventional Cardiologist	interventional cardiology, clinical trials, acute coronary syndromes
Dr Samuel Hillier	MBBS, MPhil	Cardiology Registrar	
Linda Hindom	BN	Clinical Trials Coordinator	clinical trials
Dr Cleonie Jayasuriya	MBBS, FRACP	Staff Cardiologist	echocardiography
Dr Arvin Lamanna	MBBS	Cardiology Registrar	
Lydia Lilwall	BN	Clinical Trials Coordinator	clinical trials

Research staff

Name	Qualifications	Position	Interests/specialities
Ada Lo	GradDipAppSci, Masters	Senior Echocardiographer	echocardiography, cardiomyopathies, novel echocardiographic imaging techniques
Dr Paul Martin	MBBCh, MRCPI, FRACP, PhD, FCSANZ	Staff Cardiologist; Electrophysiologist	electrophysiology, atrial fibrillation
Leeanne Palethorpe	BN	Clinical Trials Coordinator	clinical trials
Dr William Parsonage	BMedSci (Hons), MBBS, DM, MRCP (UK), FRACP	Staff Cardiologist	echocardiography, cardiac obstetrics, chest pain assessment, Fabry disease
Dr Rohan Poulter	MBBS, FRACP	Interventional Cardiology Fellow	cardiac CT
Dr Sandy Prasad	MBBS, FRACP	Staff Cardiologist	echocardiography
Prof. Adam Scott	BSc, PhD	Director, Cardiac Sciences	exercise physiology, heart failure, Fabry disease
Dr Rajesh Shetty	MBBS, MD (Internal Medicine), DM (Cardiology), FRACP	Staff Interventional Cardiologist	interventional cardiology, pulmonary hypertension
Dr Peter Stewart	MBBS, FRACP	Staff Interventional Cardiologist	Interventional cardiology
Dr Roger Wilkinson	MBBS, FRACP, FCSANZ	Visiting Cardiologist	
Dr John Younger	MBBCh, MRCP, FRACP	Staff Cardiologist	multimodality imaging including echocardiography, cardiac CT and cardiac MRI

Supervised postgraduate students

Name	Current studies	Research topic
Ingles J	PhD	Establishment of a National Genetic Heart Disease Registry (conferred 2011)
Suna J	Masters of Research	The effect of aerobic exercise on sleep quality in congestive heart failure
Noonan K	Masters of Applied Science	Do anti-inflammatory agents promote linear ablation lesion breakthrough in pigs: An electrophysiological examination (conferred 2011)
Poulter R	Masters of Philosophy	Evaluating the diagnostic performance of dual energy cardiac computed tomography
Stockton K	PhD	Cardiac magnetic resonance imaging in women with systemic lupus erythematosus and no known cardiovascular disease

Achievements and awards

Award	Event	Recipient
Cardiac Society of Australia and New Zealand 2011 Allied Health Affiliate Prize (awarded for presentation 'A cost-effectiveness analysis of genetic testing in the evaluation of families with hypertrophic cardiomyopathy')	Cardiac Society of Australia and New Zealand Annual Scientific Meeting, Perth	Ingles J

Research grants

Investigators	Project title	Granting body	Amount awarded	Years of funding
Mudge A, Denaro, C, Scott A, Javorsky G, Atherton J, Scuffham P, Marwick T, O'Rourke P	A supervised exercise programme following hospitalisation for heart failure: Does it add to disease management?	NHMRC No. 498403	\$698,950	2008-2011
Oldenburg B, Hare D, Taylor CB, Hollingsworth B, Sanderson K, Hawkes A, Atherton J, Jelinek M	An implementation trial of a telehealth program for depression in patients following myocardial infarction	NHMRC Project Grant/ DHA Sharing Health Care Initiative (SHCI) Commonwealth Government Innovation in Chronic Disease Self-management Research Grants Program	\$1,223,463	2009-2011
Hickey A, Javorsky G, Atherton J, Denaro C, Ingram J, Caprenter J, Munns A, Klingberg R, Matthews P, Farlow A, Driver K	Enhancing medication titration in patients with heart failure	Connecting Healthcare in Communities (CHIC). Primary Healthcare Partnerships Council.	\$313,700	2009-2011
Martin P, Noonan K, Scott A	Do anti-inflammatory agents promote linear ablation lesion breakthrough in pigs: An electrophysiological examination	RBWH Foundation 2010 Research Initiative Grant	\$20,000	2011
Brown A, Greenslade J, O'Rourke P, Chu K, Hou X, Parsonage W, Graves N, Than M, Tate J	A clinical decision tool for rapid assessment of cardiac chest pain	Queensland Emergency Medicine Research Foundation	\$581,223	2011-2013
Brown A, Greenslade J, O'Rourke P, Chu K, Hou X, Parsonage W, Graves N, Than M, Tate J	Validation of novel high sensitivity troponin assay in cohort of 1,000 patients presenting with chest pain	Roche Diagnostics	\$29,407 (plus costs of biochemical assays)	2011-2012

Publications

Peer-reviewed authored journal articles:

Greenwood JP, Maredia N, Younger JF, Brown JM, Nixon J, Everett CC, Bijsterveld P, Ridgway JP, Radjenovic A, Dickinson CJ, Ball SG, Plein S. Cardiovascular magnetic resonance and single-photon emission computed tomography for diagnosis of coronary heart disease (CE-MARC): A prospective trial. *Lancet* 2012 Feb 4;379(9814):453-60. E-pub 2011 Dec 22. IF = 33.633, RR 2/153 *Medicine, General and Internal* ISSN: 0140-6736.

Starmer G, Younger JF, Stewart P. Multimodality imaging of isolated left ventricular apical hypoplasia. *Eur Heart J* 2012 Mar;33(5):675. E-pub 2011 Sep 11. IF= 10.046. ISSN: 0195-668X.

Lo A, Foder K, Martin P, Younger JF. Response to steroid therapy in cardiac sarcoidosis: Insights from myocardial strain. *Eur Heart J Cardiovasc Imaging*. 2012 Feb;13(2):E3. E-pub 2011 Oct 11. IF=2.117. ISSN: 2047-2404.

Ingles J, McGaughan J, Scuffham PA, Atherton J, Semsarian C. A cost-effectiveness analysis of genetic testing in the evaluation of families with hypertrophic cardiomyopathy. *Heart* 2012;98:625-30. (E-pub ahead of print Nov 29) IF = 4.708, RR 18/114 *Cardiac and Cardiovascular Systems* ISSN: 1355-6037.

Atherton JJ, Hickey A, Suna J. Striving to achieve best practice in heart failure disease management. *BMJ Qual Saf* 2012;21:263 doi:10.1136/bmjqs-2011-000338 (published online Sep 2011) see <http://qualitysafety.bmj.com/cgi/content/full/bmjqs-2011-000338> IF = 2.856, RR 7/72 *Health Care Sciences and Services* ISSN:2044-5415.

Than M, Cullen L, Reid CM, Lim SH, Aldous S, Ardagh MW, Peacock WF, Parsonage WA, Ho HF, Ko HF, Kasliwal RR, Bansal M, Soerianata S, Hu D, Ding R, Hua Q, Seok-Min K, Sritara P, Sae-Lee R, Chiu TF, Tsai KC, Chu FY, Chen WK, Chang WH, Flaws DF, George PM, Richards AM. A 2-h diagnostic protocol to assess patients with chest pain symptoms in the Asia-Pacific region (ASPECT): a prospective observational validation study. *Lancet* 2011;377:1077-84. IF = 33.633, RR 2/153 *Medicine, General and Internal* ISSN: 0140-6736.

Ingles J, Yeates L, Hunt L, McGaughan J, Scuffham P, Atherton J, Semsarian C. Health status of cardiac genetic disease patients and their at-risk relatives. *Int J Cardiol* 2011 (E-pub ahead of print Sep 17) IF = 6.802, RR 6/114 *Cardiac and Cardiovascular Systems* ISSN: 0167-5273.

Publications

Poulter RS, Younger JF. Cardiac CT imaging for the diagnosis and management of thrombosis in a coronary artery aneurysm. *Heart*. 2011 Jun;97(12):1028. E-pub 2011 Apr 15. IF = 4.708, RR 18/114 *Cardiac and Cardiovascular Systems* ISSN: 1355-6037.

SB Prasad, V See, T Mackay, P Brown, P Kovoor, L Thomas. Impact of duration of ischaemia on left ventricular diastolic properties following reperfusion for acute myocardial infarction. *Am J Cardiol* 2011;108:348-54. IF = 3.681, RR 28/114 *Cardiac and Cardiovascular Systems* ISSN: 0002-9149.

Lamanna A, Atherton J. Prevention and management of heart failure. *Modern Medicine of South Africa* 2011, September 2011:13-19 (selected by Infixion Media Pty Ltd for CPD program).

Mudge AM, Denaro CP, Scott AC, Atherton J, Meyers D, Marwick T, Adsett JA, Mullins RW, Suna JM, Scuffham PA, O'Rourke P. Exercise joins education: Combined therapy to improve outcomes in newly-discharged heart failure patients (EJECTION-HF). *Eur J Heart Fail* 2011;13:1370-5. IF = 4.512, RR 19/114 *Cardiac and Cardiovascular Systems* ISSN: 1388-9842.

Hammett C, Stewart PJ, Atherton JJ. The fall and rise of drug eluting stents. Earlier concerns put to rest as new evidence confirms their safety and efficacy. *Med J Aust* 2011;195:110-11. (commissioned editorial) IF = 2.894, ERA 2010 rank A, RR 21/133 *Medicine, General and Internal* ISSN: 0025-729X.

O'Neil A, Hawkes AL, Chan B, Sanderson K, Forbes A, Hollingsworth B, Atherton J, Hare DL, Jelinek M, Eadie K, Taylor CB, Oldenburg B. A randomised, feasibility trial of a tele-health intervention for acute coronary syndrome patients with depression ('MoodCare'): study protocol. *BMC Cardiovascular Disorders* 2011;11:8 doi:10.1186/1471-2261-11-8 (accepted 25 February, 2011): 1,716 accesses as of 14/6/11- rated as "Highly accessed" relative to age. IF = 2.021, ERA 2010 rank C, RR 56/114 *Cardiac and Cardiovascular Systems* ISSN: 1471-2261.

Krum H, Jelinek MV, Stewart S, Sindone A, Atherton JJ. 2011 Update to National Heart Foundation of Australia and Cardiac Society of Australia and New Zealand Guidelines for the prevention, detection and management of chronic heart failure in Australia, 2006. *Med J Aust* 2011;194:1-5. IF = 2.894, ERA 2010 rank A, RR 21/133 *Medicine, General and Internal* ISSN: 0025-729X.

Poulter RS, Dooris M. Localised pulmonary artery compression due to saphenous vein graft perforation during percutaneous coronary intervention. *Can J Cardiol*. 2011 doi:10.1016/j.cjca.2010.12.031 (published online 1 April 2011). IF = 4.512, RR 50/114 *Cardiac and Cardiovascular Systems* ISSN: 0828-282X

Multicentre clinical trials:

Patel MR, Mahaffey KW, Garg J, Pan G, Singer DE, Hacke W, Breithardt G, Halperin JL, Hankey GJ, Piccini JP, Becker RC, Nessel CC, Paolini JF, Berkowitz SD, Fox KA, Califf RM; ROCKET AF Investigators. Rivaroxaban versus Warfarin in Nonvalvular Atrial Fibrillation. *N Engl J Med* 2011; 365:883-91. IF = 53.48, RR 1/153 *Medicine, General and Internal* ISSN: 0028-4793.

Alexander JH, Lopes RD, James S, Kilaru R, He Y, Mohan P, Bhatt DL, Goodman S, Verheugt FW, Flather M, Huber K, Liaw D, Husted SE, Lopez-Sendon J, De Caterina R, Jansky P, Darius H, Vinereanu D, Cornel JH, Cools F, Atar D, Leiva-Pons JL, Keltai M, Ogawa H, Pais P, Parkhomenko A, Ruzyllo W, Diaz R, White H, Ruda M, Geraldes M, Lawrence J, Harrington RA, Wallentin L; APPRAISE-2 Investigators. Apixaban with Antiplatelet Therapy after Acute Coronary Syndrome. *N Engl J Med* 2011;365:699-708. IF = 53.48, RR 1/153 *Medicine, General and Internal* ISSN: 0028-4793.

Granger CB, Alexander JH, McMurray JJ, Lopes RD, Hylek EM, Hanna M, Al-Khalidi HR, Ansell J, Atar D, Avezum A, Bahit MC, Diaz R, Easton JD, Ezekowitz JA, Flaker G, Garcia D, Geraldes M, Gersh BJ, Golitsyn S, Goto S, Hermosillo AG, Hohnloser SH, Horowitz J, Mohan P, Jansky P, Lewis BS, Lopez-Sendon JL, Pais P, Parkhomenko A, Verheugt FW, Zhu J, Wallentin L; ARISTOTLE Committees and Investigators. Apixaban versus Warfarin in patients with atrial fibrillation. *N Engl J Med*. 2011;365:981-92. IF = 53.48, RR 1/153 *Medicine, General and Internal* ISSN: 0028-4793.

Yeoh T, Hayward C, Benson V, Sheu A, Richmond Z, Feneley MP, Keogh AM, Macdonald P, Fatkin D. A randomised, placebo-controlled trial of carvedilol in early familial dilated cardiomyopathy. *Heart Lung Circ*. 2011;20:566-73. IF = 1.330, ERA 2010 rank C, RR 78/114 *Cardiac and Cardiovascular Systems*.

Fatkin D, Yeoh T, Hayward CS, Benson V, Sheu A, Richmond Z, Feneley MP, Keogh AM, Macdonald PS. Evaluation of left ventricular enlargement as a marker of early disease in familial dilated cardiomyopathy. *Circ Cardiovasc Genet* 2011;4:342-8. IF = 2.224, RR 24/114 *Cardiac and Cardiovascular Systems*.

National clinical guidelines:

National Heart Foundation of Australia and the Cardiac Society of Australia and New Zealand (Chronic Heart Failure Guidelines Expert Writing Panel: Krum H, Jelinek M, Stewart S, Sindone A, Atherton J, Wilson J, Ishami V, Waddell J). Guidelines for the prevention, detection and management of chronic heart failure in Australia. Updated July 2011.

Department of Clinical Immunology and Allergy

Overview

The Department of Clinical Immunology and Allergy provides a consultative service for patients with immunological conditions and allergies.

Clinical immunology patients include those with immunodeficiencies, angioneurotic odema, connective tissue diseases such as systemic lupus erythematosus and vasculitides such as Wegener's granulomatosis. Patients with allergic conditions such as urticaria, angioedema, allergic rhinitis, asthma, eczema, stinging insect allergy and drug allergy are also treated in the area.

The day procedure unit within the Department provides services including gammaglobulin infusions with hypogammaglobulinaemia, an allergy challenge capsule testing for food additive reactions, and skin testing for drugs such as anaesthetic agents.

Facilities located in the Department of Clinical Immunology and Allergy include:

- an injection clinic for the desensitisation of patients with bee, wasp, grass, cat or house dust mite allergy
- patient education for house dust mite elimination
- patient education for self-administration of adrenaline
- a consultative service from the RBWH Department of Nutrition and Dietetics for patients with urticaria and angioedema.



Dr Roger Prentice
Director, Clinical
Immunology and Allergy

Research staff

Name	Qualifications	Position	Interests/specialities
Dr Roger Prentice	MBBS, MSC (Med), MRCP (UK), FRACP	Director, Clinical Immunology and Allergy	house and dust mite allergy, urticaria, angioedema, connective tissue diseases
Dr Graham Solley	MBBS, FACP, FAAAAI, DABIM, DABAI FRCPA	Visiting Medical Officer	stinging insect allergy
Dr Carl Kennedy	MBBS	Advanced Trainee (Clinical Immunology and Allergy)	house/dust mite allergy

Publications

Brown SG, van Eeden P, Wiese MD, Mullins RJ, Solley GO, Puy R, Taylor RW, Heddle RJ. Causes of ant sting anaphylaxis in Australia: The Australian Ant Venom Allergy Study. *Med J Aust.* 2011 Jul18;195(2):69-73.

Mullins RJ, Clark S, Katelaris C, Smith V, Solley G, Camargo CA Jr. Season of birth and childhood food allergy in Australia. *Pediatr Allergy Immunol.* 2011 Sep;22(6):583-9.

Department of Clinical Pharmacology



Dr Paul Kubler
Director, Clinical Pharmacology

Overview

The primary aims of the Department of Clinical Pharmacology are to enhance medication safety within the hospital and to maximise the efficacy, safety and cost-effectiveness of drug therapy, using a consistent, systematic approach.

The Department offers a range of services, including advice on therapeutic drug monitoring, consultation liaison for patients with pharmacological problems and various process issues in methods of drug prescribing and availability.

Other areas of activity include teaching of undergraduate and postgraduate medical students, pharmacists and pharmacy students, nursing staff and allied health staff, whilst undertaking ongoing clinical and basic pharmacology research.

The Department has been additionally enhanced by a Quality Use of Medicines (QUM) Unit in the last three years. The role of this unit is to monitor and evaluate medication use in collaboration with prescribers, pharmacists, nurses and other healthcare professionals to improve patient care through appropriate, safe and cost effective use of medicines.

Current research projects include:

- ASPIRE trial: RCT to assess the safety and efficacy of aspirin versus placebo after standard warfarin therapy for the prevention of recurrent venous thromboembolism
- EINSTEIN Study: RCT to assess the efficacy of Rivaroxaban versus Warfarin in the treatment of patients with thromboembolic disease
- A multicentre prospective study investigating the effect of a Bayesian method of aminoglycoside monitoring on clinical outcomes and cost: Comparison to existing Begg nomogram
- Indications and outcomes of off-label Rituximab use at two tertiary hospitals
- Analysis of non-formulary use of high cost drugs at a tertiary hospital over a seven year period.

Research staff

Name	Qualifications	Position	Interests/specialities
Dr Paul Kubler	MBBS, FRACP	Director, Clinical Pharmacology; Staff Specialist	therapeutics, rheumatology
Dr Jennifer Martin	MBChB, MA (Oxon), FRACP, PhD	Senior Staff Specialist, Internal Medicine and Clinical Pharmacology	pharmacogenetics, quality use of medicine
Dr Peter Donovan	MBBS, FRACP	Staff Specialist	clinical pharmacology, endocrinology, general medicine
Karen Davies	BNurs, RN	Clinical Nurse Consultant, Safe Medication Practice	medication safety and quality processes and procedures, education, renal medicine
Jessica Toleman	BPharm	QUM Coordinator	quality use of medicine
Julia Holman	BPharm	QUM Pharmacist	quality use of medicine
Champika Pattullo	BPharm	QUM Pharmacist	quality use of medicine
Anne Cassimatis		Administration Officer	clinical pharmacology

Publications

Treatment for pulmonary hypertension in Australia. *IMJ* 2011;41;217-9.

Population pharmacokinetics of paracetamol in overdose in a single patient. *Toxicology*.

A new clinical protocol for the pharmacological management of acute behavioural disturbance. *Australasian Psychiatry* 2011.

Evaluation of Factor VII use for major haemorrhage at two tertiary hospitals in Australia. *Australasian Journal of Surgery*. 2011.

Department of Endocrinology

Overview

The Department of Endocrinology is staffed by 13 medical, two administrative, four allied health, four research nurses, two clinical nurses, one podiatrist, one dietitian and four scientists.

Clinical services provided include inpatient consultative services at RBWH, TPCH and specialised outpatient clinics at RBWH, TPCH and Bundaberg Hospital. The Department contributes to the Statewide Thyroid Cancer Clinic held with members of Cancer Care Services and to the Obstetric Endocrine Clinic held with staff from Women's and Newborn Services and provides outreach services to Bundaberg and telehealth services in maternity health and complex type two diabetes to hospitals in the central zone.

Clinical research projects include an active clinical trials unit. Chronic disease funding is underwriting projects in management of diabetes in pregnancy and type two diabetes. The Conjoint Endocrine Laboratories, a joint venture of Internal Medicine Services and Pathology Queensland, undertakes studies at a basic science level of placental iodide and thyroid hormone handling.

Associate Professor Emma Duncan joined the Department in the middle of 2010 and a major role for her is to promote research activity within the Department. There is now one doctoral student and two potential students starting next year.

The department has developed strong links with several research departments and has started major clinical studies in several areas including:

- HIV disease and bone
- Pheochromocytoma and bone disease
- Genetics of pheochromocytoma
- Genetics of thyroid cancer
- Genetics of skeletal dysplasia
- Genetics of osteogenesis imperfecta
- Genome wide association studies of osteoporosis.

The Department has developed the first gestational diabetes decision support tool for the management of diabetes. Data on all patients managed in the Department is now captured at every clinic visit. This has led to the potential to do clinical trials and outcome audit of all patients with diabetes in pregnancy and to collaboration with the Department of Obstetric Medicine and Neonatology. One registrar has commenced her doctoral studies in Obstetric Medicine and another will shortly will commence her doctoral studies.

Ongoing research projects include:

- Basic Science
 - i) Placental handling of thyroid hormone and iodine
- Clinical trials
 - ii) 16 studies
- Chronic funding
 - iii) Improving outcomes of patients with type two diabetes



Assoc. Prof. Michael d'Emden
Director, Endocrinology

Research staff

Name	Qualifications	Position	Interests/speciality
Assoc. Prof. Michael d'Emden	PhD, FRACP	Director, Endocrinology	clinical trials, chronic disease
Assoc. Prof. Emma Duncan	PhD, FRACP	Senior Staff Specialist	genetics of endocrinology, clinical bone disease
Dr Robin Mortimer AO	FRACP	Senior Director, Office of Health and Medical Research	thyroid hormone, iodine and placenta innovation projects
Dr Maree Mungomery	FRACP	Visiting Medical Officer	chronic disease, diabetes telehealth project
Dr Kerry Richard	PhD	Senior Scientist	thyroid hormone, iodine, placenta
Dr Huika Li t	MB	Scientist	thyroid hormone, iodine, placenta
Dr Kelly Landers	PhD	Research Assistant	thyroid hormone, iodine, placenta

Research staff

Name	Qualifications	Position	Interests/speciality
Erika Tapp	BHlthSc	Research Assistant	clinical trials
Helen Legg c	BNurs	Research Assistant	clinical trials
Liz Lahz	BNurs	Research Assistant	clinical trials
Janelle McFarlane		Trials Coordinator	bone metabolism studies
Alison Barry	BA, BNurs, RM, MPH, CDEProject Officer		chronic disease projects
Sharon Chambers	RN	Project Officer	chronic disease projects

Achievements and awards

Award	Event	Recipient
Queensland Smart State Grant for Regulation of transplacental transfer of thyroid hormones and iodide	NA	Richard K, Li H, Mortimer H

Publications

Lingwood BE, Henry AM, d'Emden MC, Fullerton AM, Mortimer RH, Colditz PB, Le Cao KA, Callaway LK. Determinants of body fat in infants of women with gestational diabetes mellitus differ with fetal sex. *Diabetes Care*. 2011;34(12):2581-5.

Haw JE, d'Emden MC, Goodall I. Is Australia ready to use glycated haemoglobin for the diagnosis of diabetes? *Medical Journal of Australia*. 2001;195(1):7-8.

Patel J, Landers KA, Li H, Mortimer RH, Richard K. Ontogenic changes in placental transthyretin. *Placenta*. 2011;32(11):817-22.

Expression and uptake of the thyroxine-binding protein transthyretin is regulated by oxygen in primary trophoblast placental cells. Patel J, Landers KA, Mortimer RH, Richard K. *Journal of Endocrinology*. 2011;212(2):159-67.

Choice of antithyroid drugs in pregnancy. Mortimer RH. *Thyroid*. 2011;21(10):1159; author reply 1160-1.

Li H, Landers K, Patel J, Richard K, Mortimer RH. Effect of oxygen concentrations on sodium iodide symporter expression and iodide uptake and hCG expression in human choriocarcinoma BeWo cells. *American Journal of Physiology - Endocrinology and Metabolism*. 2011;300(6):E1085-91.

Patel J, Landers K, Li H, Mortimer RH, Richard K. Delivery of maternal thyroid hormones to the fetus. *Trends in Endocrinology and Metabolism*. 2011;22(5):164-70.

Patel J, Landers K, Li H, Mortimer RH, Richard K. Oxygen concentration regulates expression and uptake of transthyretin, a thyroxine binding protein in JEG-3 choriocarcinoma cells. *Placenta*. 2011;32(2):128-33.

McLeod DS, Mortimer RH, Perry-Keene DA, Allworth A, Woods ML, Perry Keene J, McBride WJ, Coulter C, Robson JM. Histoplasmosis in Australia: Report of 16 cases and literature review. [Review]. *Medicine*. 2011;90(1):61-8.

Estrada K, Styrkarsdottir U, Evangelou E, H Hsu Y, EL Duncan (equal first authors) et al. New genomic loci for bone mineral density, osteoporosis and risk of fracture. *Nat Genet* 2011;44(5):491-501.

Zankl A, Duncan E (equal first authors), Leo P, Clark G, Glazov E, Addor M, Herlin T, Ae Kim C, Leheup B, McGill J, McTaggart S, Mittas S, Mitchell A, Mortier G, Robertson S, Schroeder M, Terhal P, Brown M. Mutations in MAFB cause multicentric carpotarsal osteolysis. *Am J Hum Gen*. 2011;90(3):494-501.

Gregson C, Steel SA, O'Rourke KP, Allan K, Ayuk J, Bhalla A, Clunie G, Crabtree N, Fogelman I, Goodby A, Langman CM, Linton S, Marriott E, McCloskey E, Moss KE, Palferman T, Panthakalam S, Poole KES, Stone MD, Turton J, Wallis D, Warburton S, Wass JAH, Duncan EL, Brown MA, Davey-Smith G, Tobias JH. Sink or swim: An evaluation of the clinical characteristics of individuals with High Bone Mass. *Ost Int*. 2011;23(2):643-54.

Bradbury LA, Barlow S, Geoghegan F, Hannon RA, Stuckey SL, Wass JAH, Russell RGG, Brown MA, Duncan EL. Risedronate in adults with osteogenesis imperfecta type one: Increased bone mineral density and decreased bone turnover, but high fracture rate persists. *Ost Int*. 2011;23(1):285-94.

Duncan EL et al. Genome-wide association study using extreme truncate selection identifies novel genes controlling bone mineral density and fracture risk. *PLoS Genetics*. 2011;7(4) e1001372-1-e1001372-10.

Publications

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Department of Gastroenterology and Hepatology



Prof. Barbara Leggett

Director, Gastroenterology
and Hepatology

Overview

Research in the Conjoint Gastroenterology Laboratory headed by Professor Barbara Leggett is focussed on understanding the molecular events underlying the development of bowel polyps and cancers. We are using state-of-the-art technologies to study these molecular changes, including genome wide array analysis to examine DNA methylation signatures, expression profiles and copy number variations. Work from this laboratory has directly impacted surveillance strategies for early detection of bowel polyps and choice of therapy for patients with advanced bowel cancer.

Current research projects include:

- The CpG island methylator phenotype in colorectal cancers and polyps
- Identification of molecular features of high risk colorectal polyps
- Tubulovillous adenomas in colorectal cancer
- Oncogenic BRAF and the serrated pathway to colorectal cancer
- Generation of a BRAF mutant mouse model.

Associate Professor David Hewett is working on strategies to improve the quality of colonoscopy with a particular focus on maximising polyp detection to reduce the risk of cancers occurring between surveillance colonoscopy. He also has research interests in health care communication.

Dr John Croese has recently joined the Department and has a long standing interest in understanding the immune reaction of the gut to parasitic infections and how this may be used to advantage to treat diseases such as celiac disease. Dr Mark Appleyard conducts research into diseases of the small bowel and how these may be diagnosed and treated by advanced endoscopy techniques such as capsule endoscopy.

Research in the Inflammatory bowel disease Laboratory headed by Dr Graham Radford-Smith continues to investigate the genetic and environmental contributions to the development of Crohn's disease and ulcerative colitis. The linked Clinical IBD research programme continues to shape thinking around the definitions of these diseases and the optimisation of treatments. Both of these programmes have been used as a springboard in the development of the ANZ IBD Consortium, now made up of 14 centres, and recently attracting a major project grant from the NHMRC to study refractory ulcerative colitis. This consortium has a strong link with the International IBD Genetics Consortium, making a significant contribution to recent publications that have redefined the genetic architecture of both Crohn's disease and ulcerative colitis.

Current research projects include:

- Genomic medicine: Predictors of refractory ulcerative colitis and response to treatment
- Identification of causal variants associated with colorectal cancer complicating colonic inflammatory bowel disease using exome sequencing technology and extreme phenotype study design
- Phase I study to determine the safety and tolerability of losartan in patients with ileal Crohn's disease
- Relationship between genotype and phenotype - including age of onset, disease location, severity of disease, extra-intestinal symptoms, medical management and smoking status
- Adalimumab therapy for perineal Crohns fistulas (the APEC study): A randomised placebo-controlled trial incorporating MRI to monitor deep tissue healing.

Research staff

Name	Qualifications	Position	Interests/specialities
Dr Mark Appleyard	MD, FRACP	Director, Gastroenterology and Hepatology	small bowel endoscopy
Dr Graham Radford-Smith	DPhil, FRACP, FRCP	Senior Staff Specialist; Head, IBD and TPN Programmes	inflammatory bowel disease, health services research
Prof. Barbara Leggett	MD, FRACP	Senior Staff Specialist; Head, Conjoint Gastroenterology Laboratory	colorectal cancer, clinical hepatology
Dr Vicki Whitehall	PhD	Senior Scientist	colorectal cancer
Ron Buttenshaw	CertChem	Senior Technician	colorectal cancer

Research staff

Name	Qualifications	Position	Interests/specialities
Troy Dumenil	MAppSci	Research Assistant	colorectal cancer
Diane McKeone	Diploma Laboratory Techniques	Research Assistant	colorectal cancer
Sonia Greco	BSc (Hons)	Research Assistant	colorectal cancer
Catherine Bond	MSc	PhD student	colorectal cancer
Dr Mark Bettington	BSc, MBBS, FRCPA	PhD student	colorectal cancer
Dr Nicholas Tutticci	BSc, MBBS, FRACP	MPhil student	colorectal cancer
Assoc. Prof. David Hewett	MBBS, MSc, PhD, FRACP	Staff Specialist; Head, Phase 2, UQ Medical School	colorectal cancer, colonoscopy, health services improvement
Deborah D'Arcy	BNurs	Clinical Nurse Consultant	clinical hepatology
Rita Marangone	BNurs	Clinical Nurse	clinical hepatology
Dr Catherine Cayser	MBBS, FRACP, PhD	Visiting Medical Officer	clinical hepatology
Dr Mariko Howlett	MBBS, FRACP	Staff Specialist	inflammatory bowel diseases (clinical)
Lisa Simms	BSc (Hons)	Senior Scientist	inflammatory bowel diseases (QIMR)
Dr Georgia Hume	MBBS (Hons), FRACP	Staff Specialist, PhD student	inflammatory bowel diseases (Clinical and QIMR)
Dr Anthony Croft	BSc (Hons), MBBS	Research Assistant	inflammatory bowel diseases (clinical)
Katherine Hanigan	BSc (Public Health)	Senior Research Assistant	inflammatory bowel diseases (QIMR)
Gabrielle Dwyer	BHealthSc (Public Health)	Research Assistant	inflammatory bowel diseases (clinical)
Ning Huang	MAppSci	Research Assistant	inflammatory bowel diseases (QIMR)
Angela Lin	BMedSci	Research Assistant	inflammatory bowel diseases (clinical)
Natalie Gerns	BNurs	Clinical Nurse	inflammatory bowel diseases (clinical)
Chantal Tabrett	BNurs	Clinical Nurse	inflammatory bowel diseases (clinical)
Anna Zournazi	BSc, MSc, CN, BNurs	Research Coordinator	inflammatory bowel diseases (QIMR)
Dr Felicity Hartnell	BSc (Hons), MBBS	Research Assistant	inflammatory bowel diseases (clinical)

Supervised postgraduate students

Name	Current studies	Research topic
Bond C	PhD	Molecular features distinguishing microsatellite stable versus microsatellite instability high serrated pathway tumours
Bettington M	PhD	Identification of molecular features of high risk colorectal polyps
Fernando W	PhD	Molecular pathogenesis of serrated carcinoma of the colon
Tutticci N	MPhil	The prevalence and predictors of sessile serrated adenomas at colonoscopy

Supervised postgraduate students

Name	Current studies	Research topic
Chapman-Kiddell C	MPhil	The role of diet in inflammatory bowel disease
Walker N	MPhil	Acute severe ulcerative colitis: Long-term outcomes
Hume G	PhD	The intestinal mucosal immune response and genetic susceptibility to inflammatory bowel disease

Awards and achievements

Award	Event	Recipient
Distinguished Research Award	Australian Gastroenterology Week	Leggett B
Queensland Health Service Award	RBWH Staff Recognition Ceremony	Radford-Smith G

Research grants

Investigators	Project title	Granting body	Amount awarded	Years of funding
Whitehall V, Leggett B	Tubulovillous adenomas in colorectal tumorigenesis	NHMRC Project Grant 552473	\$284,250	2009-2012
Radford-Smith G, Montgomery G, Lawrance I	Genomic medicine: Predictors of refractory ulcerative colitis and response to treatment	NHMRC Project Grant	\$849,261	2012-2014
Leggett B, Whitehall V	Molecular changes underlying the initiation and progression of bowel polyps	RBWH Foundation	\$40,000	2011
Radford-Smith G	Phase I study to determine the safety and tolerability of losartan in patients with ileal Crohn's disease	RBWH Foundation	\$40,000	2011

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Genetic Health Queensland



Assoc. Prof. Julie McGaughran

Director, Genetic Health Queensland

Overview

Genetic Health Queensland (GHQ) is the statewide super specialty service which provides clinical genetics services for the state of Queensland. The service is based at the Royal Brisbane and Women's Hospital and undertakes clinics at many locations throughout the state, including Cairns, Townsville, Mackay, Bundaberg, Toowoomba, Nambour and Gold Coast.

There are six consultant staff, two advanced trainees and an intern on elective placement. As a statewide service, GHQ contributes to education and grand rounds at RBWH, the Royal Children's Hospital (RCH) and across the state. All clinical staff undertake a number of presentations locally to other health professional groups and to non-government organisations. Genetic counsellors work with the medical staff both at RBWH and at sites throughout Queensland. MSc students in genetic counselling undertake their practical training in the Department.

The Queensland Familial Bowel Cancer Registry is also part of the Department. There are two research nurses who are part of the KConFab cancer research group. There is a weekly in service, journal club and clinical review meeting. There are biannual in services which regional staff also attend.

Research interests include dysmorphology, bone dysplasias, neurogenetics, prenatal genetics, cardiac genetics and cancer genetics. Director of Genetic Health Queensland, Associate Professor Julie McGaughran is also supervising two PhD students and an MPhil candidate.

Given the rarity of some genetic conditions and the availability of some genetic testing only out of state or in a research setting, there is considerable collaboration between staff of the department and national and international colleagues.

Research staff

Name	Qualifications	Position	Interests/specialities
Assoc. Prof. Julie McGaughran	BSc (Hons), MBChB (Hons), MD, FRCP, FRACP, AFRACMA, MAICD	Director, Genetic Health Queensland	cardiac genetics, dysmorphology
Assoc. Prof. Michael Gabbett	MBBS, MMedSc, FRACP, AFRACMA	Staff Specialist	prenatal genetics, paediatric genetics
Dr Michael Gattas	MB, BS, FRACP	Senior Staff Specialist	
Assoc. Prof. John MacMillan	MD, FRCP, FRACP	Senior Staff Specialist	neurogenetics
Dr Rachel Susman	BSc, MBBS, MRCP, FRACP	Staff Specialist	cancer genetics
Assoc. Prof. Andreas Zankl	MD, FMH, FRACP	Staff Specialist	skeletal dysplasias
Tracey Scuffham	BSc, MSc (Hons)	Assoc. Genetic Counsellor	neurogenetics

Supervised postgraduate students

Name	Current studies	Research topic
Tan Y	PhD	eMBRACE study
Gabbett M	MPhil	Characterisation of the oculoauriculovertebral spectrum
Noon L	PhD	Focus study

Research grants

Investigators	Project title	Granting body	Amount awarded	Years of funding
Scuffham T, MacMillan J	Motivations, descriptive epidemiology and outcomes of patients seeking genetic testing for Huntington disease	RBWH Foundation	\$20,000	2011
Zankl A	Skeletome	RBWH Private Practice Trust Fund	\$75,000	2010-2012

Publications

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Infectious Diseases Unit



Assoc. Prof. Tony Allworth
Director, Infectious Diseases

Overview

The Infectious Diseases Unit is a broad-based, multidisciplinary unit providing a range of services both across RBWH campus and beyond. It has a major role as a consultative service for the clinical management of patients with infectious diseases problems across all disciplines.

The inpatient activity of the Unit is focussed on care of patients with complex infectious diseases such as HIV, and other specialised infectious diseases such as malaria, melioidosis, encephalitis, and meningitis. The Unit is also an isolation ward for patients colonised with multiresistant organisms, those infected with airborne pathogens such as tuberculosis, varicella, SARS and influenza, and it includes the high containment unit for the management of organisms such as those causing viral haemorrhagic fevers.

The Unit provides ongoing education for the graduate medical program with clinical attachments for medical students as well as clinical teaching for the physician trainees. The Richard Kemp Day Therapy Unit provides cost-effective care by facilitating outpatient therapy and the placement of peripherally inserted central catheters (PICCs). The Infection Monitoring and Prevention Service provides a campus-wide, facility-specific infection control program, which aims to meet the needs of patients and staff and provides expert advice throughout the campus with regard to issues pertinent to infection control.

The IV Service provides safe and efficient intravenous access and care for inpatients throughout the hospital and the service continues to conduct a twice-yearly IV cannulation course for both Queensland Health and external clients, including graduate medical course students.

The research interests of the Unit are diverse including anti-microbial therapies and resistance, epidemiology especially in the nosocomial setting, parasitology and its overlap with other disciplines including HIV medicine and immunological diseases, zoonotic infections, and HIV/AIDS. The medical staff of the Unit are focussed upon the translation of basic science research into clinical application and have affiliations with the Queensland Institute of Medical Research, The University of Queensland, particularly through the Centre for Clinical Research and the Australian Infectious Diseases Research Centre.

Research staff

Name	Qualifications	Position	Interests/specialities
Assoc. Prof. Tony Allworth	MBBS (Hons1), FRACP, FRCPA, FACTM, MASM	Director, Infectious Diseases; Visiting Scientist, UQCCR	HIV/AIDS, antibiotic resistance, influenza, therapeutic trials
Assoc. Prof. James McCarthy	MD, FRACP, DH&TM	Consultant Physician, Infectious Diseases Unit; Visiting Scientist, QIMR, Infectious Diseases	parasitology, malaria, vaccine trials
Prof. David Paterson	MBBS, FRACP, FRCPA	Consultant Physician, Infectious Diseases Unit; Microbiologist, Pathology Queensland; Prof. Infectious Diseases, UQ; Medical Advisor, CHRISP	antimicrobial resistance, infections in ICU
Assoc. Prof. Marion Woods	MD, MPH, FRACP, FACP, FAFPHM	Consultant Physician, Infectious Diseases Unit; Visiting Scientist, QIMR, Infectious Diseases	clinical epidemiology, HIV, disease pathogenesis
Dr Alex Chaudhuri	BSc (Hons), MBBS	Registrar, Infectious Diseases	
Dr Hugh Wright	BSc, BVMS, PhD, MBBS	Registrar, Infectious Diseases	
Janelle Zillmann	Registered Nurse	HIV Coordinator, Infectious Diseases	
Geoff McQueen	BNurs	Nurse Unit Manager, Wattlebrae	
Michelle Doidge	BNurs	Clinical Nurse Consultant, Infection Control	
Michael Terry	BNurs	Clinical Nurse Consultant, Infection Control	

Supervised postgraduate students

Name	Current studies	Research topic
Britton S	PhD	Malaria diagnostics
Leow H	PhD	Malaria diagnostics
Appleyard B	PhD	Malaria in pregnancy
Butterworth A	PhD	Drugs for malaria gametocytes
Murray H	BSc (Hons)	Immunohistochemistry of scabies
Kearns T	PhD	Community control of parasites in indigenous communities
Patel B	MPhil	Challenges in management of infections on a burn injury unit
Wailan A	PhD	Genome and plasmid characteristics of NDM-1 and OXA181 producing enterobacteriaceae
Kamolvit W	PhD	Molecular epidemiology and insight into genomes of two common nosocomial pathogens: Carbapenem resistant acinetobacter baumannii and vancomycin-resistant enterococcus faecium
Zowawi H	PhD	Beta-lactamase producing gram-negative bacteria in the Gulf states (region-wide surveillance and innovative diagnosis)
Rogers B	PhD	Risk factors for community-onset ESBL producing E. coli
Adnan S	PhD	Improving antimicrobial use in critically ill patients
van Hal S	PhD	Predictors of mortality in staphylococcus aureus bacteremia
Marquess J	PhD	An epidemiological study to investigate asymptomatic clostridium difficile colonisation in hospital patients
McCarthy K	PhD	Pseudomonas aeruginosa bloodstream infection
Robertus L	PhD	The epidemiology of tuberculosis in Queensland as it relates to strategies to prevent transmission, particularly in indigenous Australians

Achievements and awards

Award	Event	Recipient
BMA Medical Book Award	Awarded BMA Medical Book Awards Highly Commended for chapter in Kucers' The Use of Antibiotics 6E entitled Pharmacology	Infectious Disease Unit

Research grants

Investigators	Project title	Granting body	Amount awarded	Years of funding
McCarthy J	Health Research Fellowship	Queensland Government	\$750,000	2011-2015
Clements A, Andrews R, Black J, Traub R, McCarthy J	A cluster RCT of the impact of a community-based hygiene and sanitation programme on infection with intestinal parasites following mass albendazole chemotherapy in Timor-Leste	NHMRC Partnership Project 1013713	\$987,270	2011-2013
Andrews R, Speare R, Carapetis J, McCarthy J, Cheng A, Kearns T, Mulholland E, Holt D, Markey P	Impact of an ivermectin mass drug administration program against endemic scabies and strongyloidiasis	NHMRC Project 605804	\$ 1,257,125	2011-2014
Gardiner D, Trenholme K, Brown C, McCarthy J	Assay development for lead identification of anti-gametocidal agents	NIH R21 (NS075609-01)	\$ 136,444	2011-2012
Graves N, Paterson DL	Centre for Research Excellence in reducing healthcare associated infection	NHMRC Centre for Research Excellence Grant Application	\$2,495,795	2011-2016

Research grants

Investigators	Project title	Granting body	Amount awarded	Years of funding
Cooper M, Paterson DL, Roberts J	Membrane-targeted antibiotic for complicated skin and skin structure (cSSSI) infections caused by MRSA, VISA, and VRE (methicillin and Vancomycin-resistant <i>S. aureus</i> and enterococci)	Wellcome Trust Grant	\$5,046,982	2011-2013
Clements A, Paterson DL	<i>Clostridium difficile</i> : Assessing the risks to Australia of an emerging healthcare-related pathogen	NHMRC Project Grant Application	\$936,321	2011-2013
Cooper M, Paterson DL	Development of novel hybrid antibiotics for the treatment of hospital and community acquired drug resistant gram-negative and gram-positive bacterial infections	National Health and Medical Research Council NHMRC	\$689,946	2011-2013

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Department of Internal Medicine and Aged Care

Overview

The Department of Internal Medicine and Aged Care (IMAC) consists of five acute internal medicine units, a multidisciplinary heart failure service (jointly managed with the Department of Cardiology), a day treatment unit, an extended care unit, a geriatric assessment and rehabilitation unit, a rehabilitation day hospital, a statewide Fabry Disease treatment service, a clinical audit unit and aged care assessment team (ACAT).

The Department provides consultant-led, 24-hour emergency medical cover for the hospital, every day of the year. Inpatient services include acute, subacute and rehabilitation care for more than 6,000 patients per year and the Department offers comprehensive consultation services to the rest of the hospital and beyond. This includes a acute medical and perioperative consultation service, a geriatric medicine and rehabilitation liaison service for all subacute restorative care, a rural stroke outreach service, and an active obstetric medicine service, including a Obstetric Medicine Telehealth Service for rural and regional Queensland. Outpatient services include approximately 20 general medical clinics per week, a number of weekly obstetric medicine clinics, a geriatric assessment clinic and specialist memory clinic.

The Internal Medicine Research Unit's (IMRU) main focus is health systems research, obstetric medicine and therapeutics. The Unit has been an active member of the Australian anticoagulation trialists group and has been engaged in many of the multicentre trials investigating the new anticoagulants. The Unit has a major role in quality improvement projects in the clinical service. It has been successful in attaining NHMRC project grants.

The Team Research in Internal Medicine (TRIM) multidisciplinary research group provides an opportunity to investigate clinical issues which involve or affect more than one professional discipline. Major research areas include aged and chronic disease management.

The Obstetric Medicine Unit at RBWH is active in clinical and basic science research across all medical problems which occur throughout pregnancy. There are a number of PhD candidates. The Unit has been successful in numerous research grant/funding.



Assoc. Prof. Charles Denaro
Director, Internal Medicine
and Aged Care

Research staff

Name	Qualifications	Position	Interests/specialities
Assoc. Prof. Charles Denaro	FRACP, MD	Director, Internal Medicine and Aged Care	therapeutics, cardiovascular medicine, health services
Dr Alison Mudge	FRACP, PhD	Clinical Director, Research and Education	health services, geriatrics
Assoc. Prof. Leonie Callaway	FRACP, PhD	Head, Royal Brisbane Clinical School; Staff Specialist	obstetric medicine, obesity
Assoc. Prof. Cameron Bennett	FRACP, MBiomedE	Executive Director, Subacute Services; Staff Specialist	clinical trials
Dr Karin Lust	FRACP	Clinical Director, Obstetric Medicine	obstetric medicine
Dr Narelle Fagermo	FRACP	Staff Specialist	obstetric medicine, telehealth
Dr Paul Kubler	FRACP	Director, Clinical Pharmacology	therapeutics, rheumatology
Dr Helen Barrett	FRACP	Obstetric Medicine Fellow	obstetric medicine, endocrinology
Dr Penny Wolski	MBBS, FRACP	Staff Specialist	obstetric medicine, endocrinology
Julie Adsett	BPhy (Hons)	Senior Physiotherapist	models of exercise delivery for patients with chronic heart failure
Jessica Suna	BN, BAppSci	Clinical Nurse Consultant, Heart Failure Research	heart failure
Diane Bookless	BN, RM, GradDip (Community Health)	Research Nurse	clinical trials
Katie Foxcroft	RN, RM, MAppSc (Research)	Coordinator, Nurse Research	obstetric medicine, clinical trials

Research staff

Name	Qualifications	Position	Interests/specialities
Lisa Mitchell	RN, MSSc (Health Practice)	Project Coordinator; Nurse Researcher	health service improvement
Karen Kasper	RN, BN, MN(leadership)	Project Coordinator; Nurse Researcher	health service improvement
Xanthe Sansome	BPhy	Research Assistant	clinical trials
Dr Marloes Dekker-Nitert	PhD	Senior Post-Doctoral Fellow, UQCCR	obstetric medicine
Glenys Smith		Administration Officer	

Supervised postgraduate students

Name	Current studies	Research topic
Young A	PhD	Preventing nutritional decline in older adults
deJersey S	PhD	Are we missing opportunities: Understanding health behaviours associated with overweight in pregnancy
Denny K	PhD	Role of C5a in fetal and maternal health
Barrett H	PhD	Maternal lipids in pregnancy
Harris L	PhD	Pre-eclampsia: Early identification of at-risk patients and clinical implications
Achong N	PhD	Exercise-induced pulmonary artery hypertension in pregnant women with underlying medical conditions in pregnancy – E-PUMP study
Kilgour K	PhD	Electronic record keeping in pregnancy
Suna J	MHealthSci	The effect of exercise on sleep quality in heart failure patients
McRae P	M Phil	Identifying interdisciplinary care needs in older surgical patients

Achievements and awards

Award	Event	Recipient
Graz Clock Award, Best Scientific Presentation	Australasian Diabetes in Pregnancy Society	Callaway L
Best Poster Award	Society of Obstetric Medicine of Australia and NZ	Callaway L
Andrew Phippard Prize for Best Scientific Presentation	Society of Obstetric Medicine of Australia and NZ	Callaway L
RACP Queensland Advanced Trainee Award	RACP Queensland statewide meeting	Manji A
Best Poster Award	Society of Obstetric Medicine of Australia and NZ	Foxcroft K

Research grants

Investigators	Project title	Granting body	Amount awarded	Years of funding
Mudge A, Denaro C, Scott A, Javorsky G	Exercise in heart failure: Does it add to disease management?	NHMRC project grant	\$698,950	2008-2011
Taylor SM, Woodruff TM, Callaway LK, Finnell RH	Complement C5a receptors, placental inflammation and reproductive impairment	NHMRC Project grant	\$967,750	2009-2013
Callaway L	Postdoctoral Fellowship	RBWH Foundation	\$150,000	2009-2011
Mudge A	THRIVE: Targeting hospitalisation risk in vulnerable elders: A pilot study	RACP Postdoctoral Fellowship	\$60,000	2011
Barrett H	Medical and Dental Research Scholarship	NHMRC	\$96,000	2011-2014
McRae P, Mudge A, Walker P, Duglison N, Gardiner R, Cruickshank M et al	Identifying Interdisciplinary needs in older surgical inpatients	RBWH Foundation	\$30,000	2011

Research grants

Investigators	Project title	Granting body	Amount awarded	Years of funding
Adsett J, Hwang R, Mullins R, Kuys S, Mandruziak A, Paratz J, Mudge A	Aquatic versus land based exercise for patients with chronic heart failure	Health Practitioner Research Scheme Grant	\$24 478	2011-2012
Cruikshank M, Mudge A, McRae P	Multiprofessional allied health assistant in the Eat Walk Engage (EWE) Program	Queensland Health	\$58,000	2011-2012
Ross L, Banks M, Mudge A, Young A, Isenring E	Managing malnutrition	Queensland Health	\$134,000	2011-2013
Callaway L, Humphrey M	Prospective study of validity of an obstetric risk score revision	Queensland Health	\$100,000	2011
Callaway L	Exercise as a prescription: Can we prevent adverse outcomes for at-risk mothers and babies	RBWH Foundation	\$150,000	2010-2011
De Jersey, Daniels S, Callaway L, Nicholson J, Ross L	Are we missing opportunities: Understanding health behaviours associated with overweight in pregnancy	The University of Queensland	\$28,000	2011
Barrett H	Cardiovascular Research Grant	Pfizer Australia Cardiovascular Research Grant	\$39,000	2011

Publications

Mudge AM, Denaro C, Scott A et al. Exercise training in recently hospitalised heart failure patients enrolled in a disease management program: Design of the EJECTION-HF randomised controlled trial. *Eur J Heart Fail.* 2011 13;(12):1370-75.

Mudge AM, Ross L, Young A, Isenring E, Banks M. Helping understand nutritional gaps in the elderly (HUNGER): A prospective study of patient factors associated with inadequate nutritional intake in older medical inpatients. *Clinical Nutrition.* 2011 June; 30(3):320-25 (IF 3.3).

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Ghali J, Nicholls K, Denaro C, Sillence D, Chapman I, Goldblatt J, Thomas M, Fletcher J. Effect of reduced agalsidase beta dosage in fabry patients: The Australian experience. *JIMD Reports.* 2011; DOI 10:1007/8904 e-pub.

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Dekker Nitert M, Foxcroft KF, Lust K, Fagermo N, Lawlor DA, O'Callaghan M, McIntyre HD, Callaway LK. Overweight and obesity knowledge prior to pregnancy: A survey study. *BMC Pregnancy Childbirth.* 2011;21;11(1):96.

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Department of Neurology



Dr Robert Henderson
Director, Neurology

Overview

The Department of Neurology has had a productive year in 2011, continuing to focus on clinical neurology research within RBWH. The research builds from clinical excellence in the areas of stroke, neuromuscular and movement disorders, multiple sclerosis and epilepsy. The group focuses on collaborations with research centres. Some achievements for the group have been:

- The Motor Neurone Disease joined the EMPOWER international trial studying the safety and efficacy of dexamipexole in patients with MND
- Dr Nadeeka Dissanayaka from the Movement Disorders group was awarded a RBWH Foundation Postdoctoral Fellowship to continue her research into understanding anxiety in Parkinson's disease
- The Stroke group joined the START-EXTEND international trial which extends the time window for thrombolysis using advanced imaging to select patients
- Four postgraduate research students completed their degrees with supervision from members of the Neurology Research Centre.

The linkage with other departments and RBWH Foundation has grown through 2011 and there are high hopes for quality research production in 2012.

Research staff

Name	Qualifications	Position	Interests/specialities
Dr Robert Henderson	MBBS, FRACP, PhD	Director, Neurology	neuromuscular, stroke, autonomic
Prof. Pamela McCombe	MBBS, FRACP, PhD	Visiting Medical Officer	immune neurological disorders
Dr Stefan Blum	MD, FRACP	Research Fellow	neuromuscular
Dr Fusun Baumann	MD	Research Fellow	neuromuscular
Assoc. Prof. Stephen Rose	PhD	Honorary Research Scientist	neuromuscular
Nicole Hutchinson	BN	Clinical Nurse Consultant	neuromuscular
Jacqueline Cameron	BN	A/Clinical Nurse Consultant	neuromuscular
Helen Woodhouse	BN	Research Nurse	neuromuscular
Susan Heggie	RN	Research Nurse	neuromuscular
Matthew Devine		Research Assistant	neuromuscular
Prof. David Reutens	MBBS, FRACP, MD, PhD	Foundation Prof. Experimental Neurolog; Director, Centre of Advanced Imaging, UQ	epilepsy
Emeritus Prof. Mervyn Eadie	MD, PhD	Senior Neurologist	epilepsy
Assoc. Prof. Lata Vadlamudi	MBBS, FRACP, PhD	Staff Neurologist	epilepsy
Assoc. Prof. Cecile Lander	MBBS, FRACP	Visiting Medical Officer	epilepsy
Dr Alice-Ann Sullivan	MBBS, FRACP	Staff Neurologist	epilepsy
Dr Swapna Sebastian	MBBS, MRCP (UK), MD	Research Fellow	epilepsy
Dr Julie Hocking	PhD, BPsych, MCogSci	Research Scientist	epilepsy
Rebecca Williams	BPsych, GDipMagResTech	Research Student	epilepsy
Fred Tremayne	BScAppBiol (Hons), BSc Clinical Psychology (Neurophysiology) (Hons), PostGradCert Peripheral Neurophysiology	Senior Neurophysiology Technician	epilepsy
Jodi Frankland	BN	Epilepsy Nurse/Epilepsy Action	epilepsy
Dr Andrew Wong	MBBS, FRACP, PhD	Director, Stroke Services	stroke
Dr Stephen Read	MBBS, FRACP, PhD	Visiting Medical Officer (Stroke Research)	stroke

Research staff

Name	Qualifications	Position	Interests/specialities
Dr Nabeel Sheikh	MBBS	Research Fellow	stroke
Tennille Rowland	BOccThy, MPhil, GradCertOccThy (Stroke)	Occupational Therapist	stroke
Renee Hull	BN	Stroke Research Coordinator	stroke
Genevieve Skinner	RN	Stroke/Neurology Research Clinical Nurse	stroke
Prof. Michael Pender	MBBS (Hons I), FRACP, MD, PhD	Professor, UQ	multiple sclerosis
Dr Judith Greer	BSc (Hons), PhD	Neuroimmunologist, UQ	multiple sclerosis
Bernie Gazzard	RN, RM	MS Nurse Specialist	multiple sclerosis
Kaye Hooper	RN, RM, BA, MPH	MS Nurse Consultant	multiple sclerosis
Assoc. Prof. John O'Sullivan	MBBS, FRACP, MD	Visiting Medical Officer	movement disorders, stroke
Dr Nadeeka Dissananyaka	BSc, PhD	Post-Doctoral Fellow	movement disorders
Dr Andre Troiano	MD	Research Fellow	movement disorders
Amy Jones	BN	Movement Disorders Nurse Specialist	movement disorders
Prof. Peter Silburn	MBBS, PhD, FRACP	Visiting Medical Officer	movement disorders
Assoc. Prof. George Mellick	PhD	Research Scientist	movement disorders

Postgraduate students

Name	Current studies	Research topic
Blum S	PhD	neuromuscular
Baumann S	PhD	neuromuscular
Kharatishvili I	Post-Doctoral Fellow	neuromuscular
Moldrich R	Post-Doctoral Fellow	neuromuscular
Shan Z	Post-Doctoral Fellow	neuromuscular
Ullmann J	Post-Doctoral Fellow	neuromuscular
Vegh V	Post-Doctoral Fellow	neuromuscular
Vogel M	Post-Doctoral Fellow	neuromuscular
Yang S	Post-Doctoral Fellow	neuromuscular
Du J	PhD	epilepsy

Name	Current studies	Research topic
Faizo N	PhD	epilepsy
Williams R	PhD	epilepsy
Sepehrband F	PhD	epilepsy
Chupan J	PhD	epilepsy
Brown H	M Phil	stroke
Eames S	PhD	stroke
Barwood C	PhD	stroke
Sheikh N	PhD	stroke
Nguyen G	PhD	stroke
Roxbury T	PhD	Stroke

Research grants

Investigators	Project title	Granting body	Amount awarded	Years of funding
Reutens DC, Mackay-Sim A, Bartlett PF, Paxinos G, Halliday GM, Watson CR	Facilities for automated high-throughput slide scanned and stereology	Australian Research Council (ARC)	\$520,000	2010-2011
Brown MA, Xu H, Bartlett PF, Wallace RH, Visscher PM, Mowry BJ, Reutens DC	Sino-Australian neurogenetics initiative	Australian Research Council (ARC)	\$690,000	2011-2014
Ullman J, Yang SU, Kurniawan N, Janke A, Wullmann DC, Reutens DC	A population based atlas of the zebrafish brain for quantitative phenotypic comparisons of disease models	NIH	\$120,000	2012-2014
Reutens DC	Fellowship	NHMRC	\$504,875	2010-2014

Research grants

Investigators	Project title	Granting body	Amount awarded	Years of funding
Berkovic SF, Jackson GD, Gecz J, Connelly A, Scheffer IE, Reutens DC, Petrou S, Dibbens L, Calamante F, Thomas P	Neurobiology of human epilepsy: Genes, cellular mechanisms, networks and whole brain	NHMRC	\$16,450,000	2011-2015
Reutens DC	Infrastructure Funding: EIF Round 3	National Imaging Facility	\$40,231,000	no date
Read SJ, Copland D et al.	Imaging predictors of aphasia recovery in stroke patients	RBWH Foundation	\$20,000	2010-2011
McMahon K, Copland D, Read S	Predicting recovery of language and communication after stroke using neuroimaging	Wesley Research Institute	\$85,000	2010-2012
Dissananyaka N	Understanding anxiety in Parkinson's disease	RBWH Foundation	\$180,000	2010-2012
Dissananyaka N, O'Sullivan J, Silburn P, Byrne G, Copland D, Mellick G, Marsh R	Improving diagnostic methods of anxiety disorders in Parkinson's disease: Phase 1	RBWH Foundation	\$30,000	2011
Dissananyaka N, Silburn P, Byrne G, O'Sullivan J, Copland D, Mellick G, Marsh R	Novel methods for early detection in anxiety in Parkinson's disease	Parkinson's Queensland Inc (PQI) Seeding Grant Scheme	\$25,000	2011
O'Sullivan J	Therapeutic targeting of complement C5a receptors in Huntington's disease	NHMRC	\$452,318.50	2011-2013

Publications

Adamson CL, Wood AG, Chen J, Barton S, Reutens DC, Pantelis C, Velakoulis D, Walterfang M. Thickness profile generation for the corpus callosum using Laplace's equation. *Hum Brain Mapp.* 2011;32(12):2131-40.

Badve M, Jhamb A, Read S, Henderson R. Hippocampal infarcts in transient global amnesia. *J Clin Neurosci.* 2011;18:449.

Barwood CH, Murdoch BE, Whelan BM, Lloyd D, Riek S, O'Sullivan JD, Coulthard A, Wong A. Modulation of N400 in chronic non-fluent aphasia using low frequency Repetitive Transcranial Magnetic Stimulation (rTMS). *Brain Lang.* 2011;116:125- 135.

Barwood CH, Murdoch BE, Whelan BM, Lloyd D, Riek S, O'Sullivan JD, Coulthard A, Wong A. Improved language performance subsequent to low-frequency rTMS in patients with chronic non-fluent aphasia post-stroke. *Eur J Neurology.* 2011;18:935-943.

Barwood CH, Murdoch BE, Whelan BM, Lloyd D, Riek S, O'Sullivan JD, Coulthard A, Wong A, Hall G, Aitken P. The immediate effects of low frequency Repetitive Transcranial Magnetic Stimulation (rTMS) and 'sham' condition rTMS on behavioural language in chronic non-fluent aphasia. *Neurorehabilitation* 2011;28:113-128.

Baumann, F, Henderson, RD, Ridall, PG, Pettitt, AN, McCombe PA. Quantitative studies of lower motor neuron degeneration in amyotrophic lateral sclerosis: Evidence for exponential decay of motor unit numbers and greatest rate of loss at the site of onset.

Blum S, Gillis D, Brown H, Boyle R, Henderson RD, Heyworth-Smith D, Hogan P, Kubler P, Lander C, Limberg N, Pillans P, Prain K, Staples C, Walsh M, McCombe P, Wong R. Use and monitoring of low dose Rituximab in myasthenia gravis. *Journal of Neurology, Neurosurgery and Psychiatry.* 2011;82(6):659-63.

Eadie MJ. William Gowers' interpretation of epileptogenic mechanisms – 1880 to 1906. *Epilepsia.* 2011;52:1045-1051.

Eames S, Hoffmann T, Worrall L, Read S. Stroke patients' awareness of risk and readiness to change related behaviours. *Topics in Stroke Rehabilitation.* 2011;18:481-489.

Eames S, Hoffmann T, Worrall L, Read S. Delivery styles and formats for different stroke information topics: Patient and carer preferences. *Patient Education and Counselling.* 2011;84:e18-e24 (doi:10.1016/j.pec.2010.07.007)

Hollingworth SA, Rush A, Hall WD, Eadie MJ. Utilisation of anti-Parkinson drugs in Australia: 1995 to 2009. *Pharmacoepidemiology and Drug Safety.* 2011;20:450-456.

Klein CJ, Botuyan MV, Wu Y, Ward CJ, Nicholson GA, Hammans S, Hojo K, Yamanishi H, Karpf AR, Wallace DC, Simon M, Lander C, Boardman LA, Cunningham JM, Smith GE, Litchy WJ, Boes B, Atkinson EJ, Middha S, Parisi JE, Mer G, Smith DI, DYCK PJ. Mutations in DNMT 1 cause hereditary sensory neuropathy with dementia and hearing loss. *Nat Genet.* 2011;43(6):595-600.

McCombe PA, Henderson RD. The role of immune and inflammatory mechanisms in ALS. *Curr Mol Med.* 2011;11(3):246-54.

Publications

- Nadebaum C, Anderson VA, Vajda F, Reutens DC, Barton S, Wood AG. Language skills of school-aged children prenatally exposed to antiepileptic drugs. *Neurology* 2011;76(8):719-26.
- Nadebaum C, Anderson V, Vajda F, Reutens DC, Barton S, Wood A. The Australian brain and cognition and antiepileptic drugs study: IQ in school-aged children exposed to sodium valproate and polytherapy. *J Int Neuropsychol Soc.* 2011;17(1):133-42.
- Ngo St, Baumann F, Ridall PG, Pettitt AN, Henderson RD, Bellingham MC, McCombe PA. The relationship between Bayesian motor unit number estimation and histological measurements of motor neurons in wild-type and SOD1^{G93A} mice.
- Pandian J, Dalton K, Scott J, Read SJ, Henderson RD. Cardiovascular autonomic dysfunction in acute stroke. *Int J Stroke.* 2011;6:176-177.
- Plummer C, Henderson RD, O'Sullivan JD, Read SJ. Ischemic stroke and transient ischemic attack following head and neck radiotherapy: A review. *Stroke.* 2011; 42:2410-2418.
- Rowland T, Gustafsson L, Turpin M, Henderson R, Read S. Chedoke Arm and Hand Activity Inventory-9 (CAHAI-9): A multicentre investigation of clinical utility. *International J Therapy Rehab.* 2011;18:588-595.
- Rowland T, Turpin M, Gustafsson L, Henderson R, Read S. Chedoke Arm and Hand Activity Inventory-9 (CAHAI-9): Perceived clinical utility within 14 days of stroke. *Topics in Stroke Rehabilitation.* 2011;18:382-393.
- Richards K, Watson C, Buckley RF, Kurniawan ND, Yang Z, Keller MD, Beare R, Bartlett PF, Egan GF, Galloway GJ, Paxinos G, Petrou S, Reutens DC. Segmentation of the mouse hippocampal formation in magnetic resonance images. *Neuroimage.* 2011;58(3):732-40.
- Schönberger M, Ponsford J, Reutens DC, Beare R, Clarke D, O'Sullivan R. The relationship between mood disorders and MRI findings following traumatic brain injury. *Brain Inj.* 2011;25(6):543-50.
- Sheikh N, Henderson RD. Subacute unilateral cranial and cervical polyneuropathies. *Journal of Clinical Neuroscience.* 2011;18(5):683-734.
- Singh P, Yan J, Hull R, Read S, O'Sullivan J, Henderson R, Rose S, Greer J, McCombe P. Levels of phosphorylated axonal neurofilament subunit H (pNFH) are increased acute ischemic stroke. *J Neurol Sci* 2011; 304:117-121.
- Takagi M, Lubman DI, Walterfang M, Barton S, Reutens DC, Wood A, Yücel M. Corpus callosum size and shape alterations in adolescent inhalant users. *Addict Biol.* 2011 Sep 29. doi: 10.1111/j.1369-1600.2011.00364.x. [E-pub ahead of print] PMID: 21955104.
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- Tieng QM, Cowin GJ, Reutens DC, Galloway GJ, Vegh V. MRI demodulation frequency changes provide different information. *Magn Reson Med.* 2011;66(6):1513-4.
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- Vajda F, Graham J, Roten A, Lander C, O'Brien TJ, Eadie M. Teratogenicity of the newer antiepileptic drugs: The Australian experience. *Journal of Clinical Neuroscience* 2011; doi.org/10.1016/j.jocn.2011.08.003. [e-publication ahead of print].
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- Venkatachalam TK, Pieren GK, Reutens DC. Synthesis and structural characterisation of (Z)-3-((4-Chlorophenylamino) Methylene) Naphthalen-2(3H)-One: An Enol, Keto or Zwitterionic Tautomer? *J Chem Crystallogr.* 2011;41:944-951.
- Venkatachalam TK, Pierens GK, Bernhardt PV, Reutens DC. Synthesis and x-ray crystal structure of 1 and 2-cinnamoyloxy acetophenones. *J Chem Crystallogr.* 2011;41:563-569.
- Walterfang M, Fahey M, Abel L, Fietz M, Wood A, Bowman E, Reutens DC, Velakoulis D. Size and shape of the corpus callosum in adult niemann-pick type C reflects state and trait illness variables. *AJNR Am J Neuroradiol.* 2011;32(7):1340-6.
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Department of Nuclear Medicine incl. Queensland PET Service



Dr William Fong
Director, Nuclear Medicine

Overview

The Department of Nuclear Medicine at the Royal Brisbane and Women's Hospital is one of the largest and busiest in Australia. It provides a referral, diagnostic and therapeutic nuclear medicine service with four SPECT/CT gamma cameras, one solid state cardiac camera, BMD dual energy X-ray absorptiometry (DEXA) and a pQCT scanner.

Research interests in nuclear medicine include image reconstruction methodologies, application of gating and bone mineral densitometry in various disease states.

The Department hosts the Queensland PET Service, which operates two PET/CT scanners and a cyclotron in Queensland. It offers research facilities to a wide variety of investigators. In addition to conventional tracers such as fluoro-deoxyglucose (18FDG), the Service also conducts research using 18FDOPA, 18FLT and 68Ga-DOTATATE. Other tracers, such as 18FMISO, 18FET and 11C-Amino Acids, will soon be available enabling the study and research of a greater range of diseases.

There is also ongoing research interest in image reconstruction algorithms, respiratory gating and image analysis techniques.

Research staff

Name	Qualifications	Position	Interests/specialities
Dr William Fong	MBBS, FRACP	Director, Nuclear Medicine	paediatric nuclear medicine
Dr David Macfarlane	MBBS, FRACP	Deputy Director, Nuclear Medicine; Director, Queensland PET Service	radionuclide therapy, positron emission tomography (PET)
Dr Aravind Ravi Kumar	MBBS, FRACP	Senior Staff Specialist	nuclear cardiology, nuclear oncology, training and education
Dr Frank Fiumara	MBBS, FRACP, MBA	Senior Staff Specialist	PET, paediatric nuclear medicine
Dr Paul Thomas	BMed, FRACP	Assistant Director, Queensland PET Service	neuro-oncology imaging, kinetic analysis of PET tracers
Dr Marissa Bartlett	PhD Physics	Senior Medical Physicist	radiation safety, nuclear medicine and PET radio isotope imaging
Dr Matthew Griffiths	PhD Medical Physics	Director, Medical Physicists	cyclotron production of radioisotopes, medical imaging of radioisotopes
Dr Jye Smith	PhD Medical Physics	Medical Physicist	computer processing of medical images, radio isotope production
Bruce Wallace	MAppSc Medical Physics	Medical Physicist	radiation safety
John Bellen	BSc (Chem)	Radiochemistry Laboratory Manager	production of PET and NM radiopharmaceuticals
Dr Stephen Taylor	PhD SynthOrgChemistry	PET Radiochemist	Radiopharmaceutical chemistry, PET radiopharmaceutical development
Ross Vecchio	BSc (Chem)	Radiochemist	quality control systems
Sandra Kemp	General Nursing	Clinical Nurse Consultant; Study Coordinator (Nursing)	oncology, neurology
Natalie Fletcher	BNursing	Clinical Nurse; Research Nurse	oncology
Travis Pearson	BAppSci (NMT), MBA	Director, Nuclear Medicine Technology	multi-modality imaging
Louise Campbell	BAppSci (NMT), GradDipBusAdmin	Director, PET Technology	multi-modality imaging
Peter Garcia	BAppSci (NMT), MHLthSci	Senior Nuclear Medicine Scientist	multi-modality imaging
Sarah Stephenson	BAppSci (NMT)	Senior Nuclear Medicine Scientist	multi-modality imaging
Nikki-Louise Scott	BSc (Hons) (BiomedSci), GradDip (NMT)	Nuclear Medicine Scientist	multi-modality imaging
Sarah Frecker	BAppSci (NMT)	Nuclear Medicine Scientist	multi-modality imaging
Rowena Rose	BAppSci (NMT)	Nuclear Medicine Scientist	multi-modality imaging

Research grants

Investigators	Project title	Granting body	Amount awarded	Years of funding
Rose S, Crozier S, Salvado O, Coulthard A, Thomas P, Fay M	Improving the assessment of brain tumour treatment outcome using 18F-DOPA PET/MRI fusion.	NHMRC 631567	\$637,125	2009-2011

Publications

Huang YT, Ravi Kumar A. Potential for truncating the scan length of restaging FDG-PET/CT following chemoradiotherapy in head and neck squamous cell carcinoma. *Nucl Med Commun.* 2012;33(5):503-8.

Lee J, Hartnett G, Ravi Kumar A. Predictive value according to location of incidental focal colorectal fluorodeoxyglucose uptake on positron emission tomography scans (letter). *Colorectal disease.* 2012 Jan 17. doi: 10.1111/j.1463-1318.2012.02938.x.

Bhatt M, Bartlett M, Mallitt K, McTaggart S, Ravi Kumar A. Correlation of different published radionuclide GFR estimation techniques and proposed paediatric normative data. *Nucl Med Commun.* 2011;32(11):1088-1094.

Blazak J, Ravi Kumar A. Palpation Thyroiditis seen on F-18 FDG PET/CT. *Clin Nucl Med.* 2011;36(3):261-3.

Fazlollahi A, Dowson N, Meriaudeau F, Rose S, Fay M, Thomas P, Taylor Z, Gal Y, Coultard A, Winter C, MacFarlane D, Salvado O, Crozier S, Bourgeat P. Automatic Brain Tumour Segmentation in 18F-FDOPA PET Using PET/MRI Fusion. 2011 International Conference on Digital Image Computing: Techniques and Applications, pages 325-329, 2011. 2011 IEEE (DOI 10.1109/DICTA.2011.61).

Saul ME, Thomas PA, Dosen PJ, Isbister GK, OLeary MA, Whyte IM, McFadden SA, van Helden DF. A pharmacological approach to first aid treatment for snakebite. *Nature Medicine* 2011;17:809-11. Pubmed ID 21706027. doi: 10.1038/nm.2382.

Palliative Care Service



Dr Carol Douglas
Clinical Director,
Palliative Care Service

Overview

The Palliative Care Service provides a consultative model of care to any patient at RBWH with progressive life-limiting disease. There are no dedicated research staff employed by the Service.

The Service supports research initiatives generated externally by collaborating with leading researchers in palliative medicine and palliative care, through recruitment of RBWH patients to medication studies and participation in studies contributing to the understanding of patients' experiences at the end-of-life.

Research staff

Name	Qualifications	Position	Interests/specialities
Dr Carol Douglas	MBChB, FRACGP, FACHPM, Dip Family Med, DipPalliativeMed	Clinical Director, Palliative Care Service; Senior Staff Specialist	pain medicine, motor neurone disease, renal disease

Research grants

Investigators	Project title	Granting body	Amount awarded	Years of funding
Connell S, Douglas C	Achieving needs-based end-of-life services: A prospective, longitudinal study of pathways for advanced cancer patients: A pilot study	Cancer Council Queensland Research Project Grant	\$100,000	2011

Department of Pharmacy

Overview

The Department of Pharmacy provides medicines management services for inpatients, outpatients and day admitted patients for RBWH, including the Geriatric and Rehabilitation Unit and Fortitude Valley (Metro North Mental Health Services).

The mission statement for the Department of Pharmacy is to deliver patient-centred, evidence-based, medicine-focussed care, through many facets of medicine management in collaboration with medical and nursing staff in hospital and in primary care.

The Department has an increasing team of researchers with collaboration at The University of Queensland School of Pharmacy and Medicine, Queensland University of Technology and independent research teams. Research is coordinated by Dr Jason Roberts, Consultant Clinical Pharmacist (Critical Care) and NHMRC Research Fellow.

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Assoc. Prof. Ian Coombes
Director, Pharmacy

Research staff

Name	Qualifications	Position	Interests/specialities
Assoc. Prof. Ian Coombes	BPharm (Hons), MSc, PhD	Director, Pharmacy	pharmacy practice, medication safety, prescribing safety
Dr Jason Roberts	BPharm (Hons), BApp Sc, PhD, FSHP	Consultant Clinical Pharmacist	clinical pharmacokinetics and pharmacodynamics, critical care, infectious diseases
Dr Michael Barras	BPharm, PhD	Assistant Director	clinical pharmacokinetics
Dr Christine Carrington	BPharm, MSc, PhD	Assistant Director	cancer chemotherapy dose optimisation, pharmaceutical care to day therapy
Dr Lesley Ross-Lee	BPharm, PhD	Senior Clinical Trials Pharmacist	facilitation and coordination of investigator-lead and pharmaceutical company supported
Elizabeth Doran	MPharm	Senior Pharmacist	emergency medicine
Kelly Mulvogue	BPharm, BSc, PGDipClinPharm, MSHPA AACPA	Clinical Pharmacist	geriatrics, individualised evidence-based medicine
Kim Ta	BPharm (Hons)	Clinical Pharmacist	education and training
Noor Al-Adhami	BPharm, GradCert ClinPharm	Clinical Pharmacist	renal and cardiology
Julian Lindsay	BPharm (Hons)	Pharmacist	cancer care, neurology
Arna Neilsen	BPharm	Pharmacist	clinical services aligned with medical teams vs wards and health care outcomes

Supervised postgraduate students

Name	Current studies	Research topic
Carrington C	PhD	Role of pharmacist in medicine management in day care cancer patients
Mulvogue K	Master of Philosophy	De-prescribing in geriatric patients
Neilsen A	PhD	Team-based clinical pharmacy services
Firman P	Master of Clinical Pharmacy	Pharmacy practice
Marotti S	Master of Philosophy	Heparin dosing in vascular patients
Hall J	Masters of Clinical Pharmacy	Mineralocorticoid activity and aldosterone antagonist dose in hyperkalaemia
Sandhu G	PhD	Evaluation of the impact of increasing patient weight on the dosing of anticancer medication in malignant haematology and development of strategies to optimise treatment at The Prince Charles Hospital
Lindsay J	Master of Clinical Pharmacy	Pharmacist roles in cancer care
Hale A	PhD	Pharmacist prescribing in surgical pre-admission clinic at The Prince Charles Hospital
Stacey S	PhD	Validation and outcome of advanced training program for paediatric pharmacists

Achievements and awards

Award	Event	Recipient
Best Paper (Session: A good first move)	Society of Hospital Pharmacists of Australia National Conference, Hobart	Ta K
Best Paper (Session: Making antibiotics safe)	Society of Hospital Pharmacists of Australia National Conference, Hobart	Roberts JA
The University of Queensland Foundation Research Excellence Award	The University of Queensland	Roberts JA
Denis Wade New Investigator Award	Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists	Roberts JA
Best Paper (Session: Make an educated move)	Society of Hospital Pharmacists of Australia National Conference, Hobart	Ta K, Coombes I
Best Paper (Session: Make a move)	Society of Hospital Pharmacists of Australia National Conference, Hobart	Hale A, Coombes I

Publications

- Coombes I, Wheeler A, Hale A. Evaluation of effectiveness and relevance of safe medication practice tutorials as a course for pharmacist prescribers in New Zealand. *Pharmacy Education* 2011;11 (1):95-98.
- Coombes I, Bates I, Duggan C, Galbraith K. Developing and recognising advanced practitioners in Australia: An opportunity for a maturing profession? *J Pharm Pract Res* 2011;41 17-18.
- Coombes I, Reid C, McDougall D, Stowasser D, Duiguid M, Mitchell C. Pilot of National inpatient medication Chart in Australia: improving prescribing safety and enabling prescribing training. *BrJCP*. 2011;72(2):338-349.
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- Noble C, Shaw P, Nissen L, Coombes I, O'Brien M. Curriculum for uncertainty may not be the answer. *Am J Pharm Ed*. 2011;75(1):1-2.
- Noble C, O'Brien M, Coombes I, Shaw P, Nissen L. Concept Mapping to evaluate an undergraduate pharmacy curriculum. *Am J Pharm Educ*. 2011 Apr 11;75(3):55.
- Morris S, Coombes I. The right to prescribe: Towards core prescribing competencies for all prescribers. *Aust Prescr*. 2011;34:126-127.
- Barras MA, Alraman H, Kirkpatrick CMJ, Harris M, Dakin C, Jess K, Pilbeam M, Norris RLG. Bayesian optimisation of tobramycin dosing in patients with Cystic Fibrosis. *JPPR*. 2011;41:183-187.
- Mudge A, Redfern H, Barras MA, Bell J, Pachana N, Kasper K. Redefining readmission risk factors for general medicine patients. *J Hosp Med*. 2011;6:61-67.
- Carrington C, Weir J, Smith P. The development of a competency framework for pharmacists providing cancer services. *Journal of oncology pharmacy practice*. 2011;17(3):168-178.
- Al Balushi RM, Paratz JD, Cohen J, Banks M, Dulhunty J, Roberts JA, 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.
- Lipman J, Udy AA, Roberts JA. Do we understand the impact of altered physiology, consequent interventions, and resultant clinical scenarios in ICU? The antibiotic story. *Anaesth Intens Care*. 2011;999-1000.
- Patel K, Roberts JA, Tett S, Deldot M, Lipman J, Kirkpatrick CMJ. Population pharmacokinetics of fluconazole in critically ill patients receiving continuous venovenous hemodiafiltration: Using Monte Carlo Simulations to predict doses for specified pharmacodynamic targets. *Antimicrob Agents Chemother*. 2011;55(12):5868-5873.
- Sinnollareddy M, Peake SL, Roberts MS, Playford EG, Lipman J, Roberts JA. Pharmacokinetic evaluation of fluconazole in critically ill patients. *Expert Opin Drug Metab Toxicol*. 2011;7(11):1431-40.
- Douglas A, Udy AA, Wallis SC, Jarrett P, Stuart J, Lassig-Smith M, Deans R, Roberts MS, Taraporewalla K, Jenkins J, Medley G, Lipman J, Roberts JA. Plasma and tissue pharmacokinetics of cefazolin in patients undergoing elective and semi-elective abdominal aortic aneurysm open repair surgery. *Antimicrob Agents Chemother*. 2011;55(11):5238-42.
- Roberts JA. Using PK/PD to optimise antibiotic dosing for critically ill patients. *Curr Pharmaceut Biotechnol*. 2011;12(12):2070-9.
- Roberts JA. The importance of antibiotic dosing in critically ill patients. *Curr Pharmaceut Biotechnol*. 2011;12(12):198-2.
- Baptista JP, Udy AA, Sousa E, Pimentel J, Wang L, Roberts JA, Lipman J. A comparison of estimates of glomerular filtration in critically ill patients with augmented renal clearance (ARC). *Crit Care*. 2011;15(3):R139.

Publications

Martin JH, Fay MF, Udy A, Roberts JA, Kirkpatrick CMJ, Ungerer J, Lipman J. Pitfalls of using estimations of glomerular filtration rate in an intensive care population. *Intern Med J* 2011; 41(7):537-43.

Roberts JA, Taccone FS, Udy AA, Jacobs F, Louis JL, Lipman J. Vancomycin dosing in critically ill patients: Robust methods for improved continuous infusion regimens. *Antimicrob Agents Chemother* 2011; 55(6): 2704-2709.

Douglas A, Altukroni M, Udy AA, Roberts MS, Taraporewalla K, Jenkins J, Lipman J, Roberts JA. The pharmacokinetics of cefazolin in patients undergoing elective and semi-elective abdominal aortic aneurysm open repair surgery. *BMC Anesthesiol* 2011, 11:5.

Roberts JA, Roberts MS, Semark A, Udy AA, Kirkpatrick CMJ, Paterson DL, Roberts MJ, Lipman J. Antibiotic dosing in the at-risk critically ill patient: Linking pathophysiology with pharmacokinetics/pharmacodynamics in sepsis and trauma patients. *BMC Anesthesiol*. 2011;11:3.

Udy AA, Roberts JA, Lipman J. What does a normal serum creatinine concentration mean in ICU? Augmented renal clearance and implications thereof. *Nature Rev Nephrol* 2011, 7: 539-43.

Ulldemolins M, Roberts JA, Lipman J, Rello J. Antibiotic dosing in multiple organ dysfunction syndrome. *Chest*, 2011; 2011;139:1210-1220.

Roberts JA, Mehta RL, Lipman J. SLED - allows rational renal replacement therapy, but does it allow rational drug dosing? *Crit Care Med* 2011; 39(3):602-603.

Roberts JA, Kirkpatrick CMJ, Lipman J. Monte-Carlo Simulations: Maximising antibiotic pharmacokinetic data to optimise clinical practice for critically ill patients. *J Antimicrob Chemotherapy*. 2011;66:227–231.

Ulldemolins M, Roberts JA, Rello J, Paterson DL, Lipman J. The effects of hypoalbuminaemia on optimising antibiotic dosing in critically ill patients. *Clin Pharmacokinet*. 2011;50(2):1-12.

Roberts JA, Kwa A, Montakantikul P, Gomersall C, Kuti JL, Nicolau DN. Pharmacodynamic profiling of intravenous antibiotics against prevalent gram-negative organisms across the globe: The PASSPORT Program, Asia-Pacific region. *Int J Antimicrob Agents*. 2011;37(3): 225-9.

McGloughlin S, Roberts JA, O'Donoghue S, Martin JH, Briscoe S, Lipman J. Ganciclovir pharmacokinetics and suggested dosing in continuous veno-venous haemodiafiltration. *Int J Antimicrob Agents*. 2011;37(1):90-2.

Varghese JM, Roberts JA, Lipman J. Antimicrobial pharmacokinetic and pharmacodynamic issues in the critically ill with severe sepsis and septic shock. *Crit Care Clin*. 2011;27:19-34.

Department of Renal Medicine



Dr Helen Healy
Director, Renal Medicine

Overview

The Department of Renal Medicine continues to advance its research program within the laboratory and through the field and to the bedside. Collaborations are developing within RBWH, particularly Dr Ranganathan with the Department of Intensive Care Medicine and the Department of Rheumatology, with antibiotic and vasculitis studies respectively.

Externally there has been rapid growth of CKD Qld, a multidisciplinary chronic kidney disease research platform that includes a chronic kidney disease registry. This collaboration with Professor Wendy Hoy includes all Queensland Health renal chronic kidney disease clinics in Queensland (see www.CKDQLD.org).

Ongoing collaborations with The University of Queensland School of Human Movement studies yield fruitful results with publications and grants. Collaborations with the School of Human Life Sciences at The University of Tasmania in the laboratory continue and with the School of Nursing and Midwifery in the area of Palliative Care.

The establishment of a Professorial Nursing Research Unit within renal medicine promises to further advance research productivity. Allied health researchers continue to undertake high quality investigations leading to grant success and publications. The conjoint renal research laboratory has undergone a successful review and will continue to expand its research agenda and productivity. Both investigator initiated and industry sponsored clinical trials are undertaken. In particular, renal medicine contributes to high quality and important national and international clinical trials and supports studies performed under the auspices of the Australian Kidney Trial Network. Renal medicine researchers have presented at national and international meetings with increased frequency.

Research publications continue to increase both in quantity but also quality based on journal impact factors. Advanced trainees in renal medicine are taking an increasing interest and role in research and present regularly at the Australian and New Zealand Society of Nephrology Meetings. Renal medicine researchers contribute significantly to review of research both for journal manuscripts and grants for NHMRC and internationally.

Research staff

Name	Qualifications	Position	Interests/specialities
Dr Helen Healy	MBBS, PhD, FRACP	Director, Renal Medicine	dendritic cells, chronic kidney disease, polycystic kidney disease, clinical trials
Prof. Robert Fassett	BMedSc, MBBS, PhD, FRACP, FASN	Director, Renal Research	chronic kidney disease, clinical trials, oxidative stress and inflammation, exercise, astaxanthin, omega-3 polyunsaturated fatty acids, cardiovascular disease
Dr Dwaraka Ranganathan	MD, DM, FRCP, FRACP	Senior Staff Specialist	peritoneal dialysis, clinical trials, antibiotics, vasculitis, home dialysis therapies
Dr Adrian Kark	MBChB, FRACP	Senior Staff Specialist	chronic kidney disease
Dr Vincent D'Intini	MBBS, FRACP	Senior Staff Specialist	acute kidney injury
Dr George T John	MBBS, FRACP	Senior Staff Specialist	immunosuppression, kidney transplantation, infectious diseases
Dr Sharad Ratanjie	MBChB, FRACP	Senior Staff Specialist	hemodialysis, ESAs
Dr Ray Wilkinson	AssocDMedTech, BSc (Hons), PhD	Post Doctoral Fellow	dendritic cells, conjoint renal laboratory
Xiangju Wang	MSc	Research Scientist	conjoint renal laboratory
Anne Salisbury	RN	Executive Coordinator CKD.QLD	chronic kidney disease, registry
Dr Sree Krishna Venuthurupalli	MBBS, FRACP	PhD Student	CKD.QLD
Ritza Driver	RN, MSc (Echocardiography)	Research Technician	cardiovascular measurements
Tania Whitlock		Administrative Officer	renal research

Research staff

Name	Qualifications	Position	Interests/specialities
Elisabeth Hamernik		Clinical Psychologist	adherence to therapies, depression
Prof. Ann Bonner	BAppSc (Nurs), MA, PhD	Prof. Renal Nursing, QUT	chronic conditions, chronic disease, grounded theory, kidney, renal, transplantation
Danielle Heffernan	RN	ADON, Renal Medicine	administration
Julie Kirby	RN	Clinical Trial Coordinator	clinical trials
Lisa Hart	RN	Renal Transplant Coordinator	renal transplantation
Caroline Shelverton	RN	Renal Transplant Coordinator	renal transplantation
Lesley Williams	RN	Registered Nurse	peritoneal and home dialysis
Nicola Williams	RN	Registered Nurse	peritoneal and home dialysis
Tony Blinkhorn	RN	Registered Nurse	hemodialysis
Rebecca Russo	RN	Registered Nurse	chronic kidney disease
Sonya Coleman	RN	Registered Nurse	chronic kidney disease
Belinda Morey		Senior Dietitian; Nutritionist	salt in chronic kidney disease

Supervised postgraduate students

Name	Current studies	Research topic
Venuthurupalli S	PhD	CKD.QLD
Houghton C	PhD	Effects of sulphorophane on kidney function in CKD patients with type two diabetes
Matsumoto A	PhD	Effects of exercise training and antioxidant supplementation on endothelial cell gene expression
Sampangi S	PhD	The role of renal proximal tubular epithelial cells (PTEC) in autologous immune-modulation

Awards and achievements

Award	Event	Recipient
Best clinical science presentation for 'Pharmacokinetics of intraperitoneal gentamicin in peritoneal dialysis patients with peritonitis (GIPD Study)'	2011 RBWH Healthcare Symposium	Varghese J

Research grants

Investigators	Project title	Granting body	Amount awarded	Years of funding
Ranganathan D	POEMSLUN study	RBWH Foundation	\$40,000	2011
Fassett RG, Johnson DJ et al	A randomised, placebo-controlled trial of oxpentifylline versus placebo in the treatment of erythropoietin-resistant anemia in chronic kidney disease	NHMRC Project Grant	\$333,408.80	2011-2012
Fassett RG, Coombes JS	A metabolic testing suite for clinical exercise physiology, sports science and sports nutrition research	The University of Queensland	\$159,325	2011
Fassett RG, Shing C, Coombes JS	Premature cell aging	Clifford Craig Medical Research Trust	\$6,273	2011-2012
Fassett RG, Coombes JS	COMIVID study	Baxter Clinical Excellence Commission	\$75,000	2011-2013
Fassett RG, Hoy W	CKD.QLD	AMGEN Australia	\$400,000	2010-2012

Publications

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- Coombes JS, Fassett RG. Antioxidant therapy in haemodialysis patients. *Kidney Int*. 2012;81(3):233-46.
- Fassett RG. The uremic milieu, the ubiquitin proteasome pathway and the endothelial cell: A pathway to dysfunction. *Exp Physiol*. 2011;96(8):716-7.
- Fassett RG, Venurathapilli SK, Gobe G, Coombes JS, Cooper MA, Hoy W. Biomarkers in chronic kidney disease: A review. *Kidney Int*. 2011;80(8):806-2.
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- Strobel N, Marsh S, Fassett RG, Coombes JS. Importance of understanding pre-analytical variability in biomarker development. *International Journal of Cardiology*. 2011;150(2):223-4.
- Fassett RG, Robertson IK, Ball MJ, Cardinal J, Geraghty DP, Coombes JS. The effect of atorvastatin on NGAL and Cystatin C in chronic kidney disease: The LORD Trial Nephrology Dialysis and Transplantation 2012 Jan;27(1):182-9 E-pub 2011 May 4.
- Bulmer AC, Coombes JS, Blanchfield JT, Toth I, Fassett RG, Taylor SM. Bile pigment pharmacokinetics and absorption in the rat: Therapeutic potential for enteral administration. *Br J Pharmacol*. 2011;164(7):1857-70.
- Raggi P, Chertow GM, Torres PU, Csiky B, Naso A, Nossuli K, Moustafa M, Goodman WG, Lopez N, Downey G, Dehmel B, Floege J, ADVANCE Study Group The ADVANCE study: A randomised study to evaluate the effects of cinacalcet plus low-dose vitamin D on vascular calcification in patients on hemodialysis. *Nephrol Dial Transplant*. 2011;26(4):1327-39.
- Kolade OO, O'Moore-Sullivan TM, Stowasser M, Coombes JS, Fassett RG, Marwick T and Sharman JE. Arterial stiffness, central blood pressure and body composition in health and disease. *International Journal of Obesity (Lond)*. 2012;36(1):93-9. E-pub 2011 Apr 12.
- Fassett RG, Coombes JS. Astaxanthin: A therapeutic agent in cardiovascular disease for Marine Drugs. 2011;9(3):447-65.
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- Houghton CA, Steels EL, Fassett RG, Coombes JS. Effects of a gliadin-combined plant superoxide dismutase extract on self-perceived fatigue in women aged 50-65 years *Phytomedicine*. 2011;15:18(6):521-6.
- Peake J, Gobe GC, Fassett RG, Coombes JS. Effects of fish oil supplementation on inflammation, apoptosis, fibrosis and oxidative stress following obstructive renal injury in rats. *Molecular Nutrition and Food Research*. 2011;55(3):400-10.
- Fassett RG, Robertson IK, Mace R, Youl L, Challenor S, Bull R. Palliative care in end stage kidney disease. *Nephrology*. 2011;16(1):4-12.
- Strobel NA, Fassett RG, Marsh SA, Coombes JS. Biomarkers of oxidative stress as predictors of cardiovascular disease. *International Journal of Cardiology*. 2011 Mar 3;147(2):191-201.
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- Ismail AM, Devakumar S, Anantharam R, Fletcher GJ, Subramani T, John GT, Daniel D, Abraham P. Low frequency of occult hepatitis B infection in anti-HBc seropositive blood donors: Experience from a tertiary care centre in South India. *Blood Transfus.* 2011;15:1-3.
- Chacko B, John GT. Leflunomide for cytomegalovirus: Bench to bedside. *Transpl Infect Dis.* 2011 Oct 9. [E-pub ahead of print]
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- Basu G, Mohapatra A, Manipadam MT, Mani SE, John GT. Leflunomide with low-dose everolimus for treatment of Kaposi's sarcoma in a renal allograft recipient. *Nephrol Dial Transplant.* 2011 Oct;26(10):3412-5. E-pub 2011 Jul 20.
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Department of Rheumatology



Dr Paul Kubler
Director, Rheumatology

Overview

The Department of Rheumatology provides a comprehensive range of diagnostic and therapeutic services to patients with acute and chronic musculoskeletal disease.

Areas of research interest include management of inflammatory arthritis and anti-phospholipid syndromes, myocardial abnormalities in SLE (investigation with cardiac MRI), clinical research including evaluation of new treatment modalities for rheumatic illness, and quality of life and burden of disease of patients with musculoskeletal disease.

The Department has a focus on adolescent rheumatology and has established the Young Adults with Rheumatic Disease (YARD) Service for optimising the care of 16-25 year-old patients (including transition care) in a multidisciplinary environment.

The Department liaises closely with other medical specialties, allied health and community service providers to optimise patient outcomes. In particular, there is a monthly combined renal-rheumatology clinic (vasculitis and SLE) and bi-monthly respiratory-rheumatology service.

Research staff

Name	Qualifications	Position	Interests/specialities
Dr Paul Kubler	MBBS, FRACP	Director, Rheumatology	inflammatory arthritis and drug use in rheumatic diseases
Dr Alex Klestov	MBBS, FRACP	Staff Specialist	osteoarthritis, rheumatoid arthritis
Dr Sumant Kevat	MBBS, FRACP	Visiting Specialist	inflammatory arthritis
Dr Michael Gunsberg	MBBS, FRACP	Visiting Specialist	inflammatory arthritis
Dr Lisa Cummins	MBBS	Advanced Trainee	vasculitis
Dr Sateesh Shankaranarayana	MBBS	Advanced Trainee	giant cell arteritis
Kellie Stockton	BPthy	PhD Candidate	SLE cardiac imaging, fatigue, vitamin D status
Dr Ben Whitehead	MBBS, FRACP	Clinical Fellow	adolescent rheumatology

Publications

Martin JH, Kubler PA. Treatment for pulmonary hypertension in Australia. *IMJ* 2011;41:217-9.

Stockton K, Paratz J, Kandiah D, Bennell K. Fatigue, muscle strength and vitamin D status in women with systemic lupus erythematosus compared to healthy controls. *Lupus*. 2011;21:271-8.

Stockton K, Wrigley T, Mengersen K, Kandiah D, Paratz J, Bennell K. Test-retest reliability of hand-held dynamometry and functional tests in systemic lupus erythematosus. *Lupus*. 2011;20:144-50.

Stockton KA, Mengersen K, Paratz JD, Kandiah D, Bennell KL. Effect of vitamin D supplementation on muscle strength: A systematic review and meta-analysis. *Osteoporos Int*. 2011;22:859-71.

Department of Thoracic Medicine

Overview

Research projects at the Department of Thoracic Medicine include:

- 36-year follow up of the Tasmanian Asthma Study in Queensland (Morrison S, Dharmage S, Walters EH, Abramson M, Hopper J, Jenkins M, Feather I, Brown M)
- Airway epithelial regeneration and inflammation in asthma (Solomon C, Upton Z, Morrison S, Chandratilleke M, Stewart I, Brown M)
- The effect of respiratory frequency on forced oscillation measures of respiratory system mechanics (Brown M, Morrison S)
- A placebo-controlled randomised safety and efficacy study of Botox in patients with neurogenic detrusor overactivity and neurological respiratory impairment (Gardiner R, Scells B, Morrison S, Brown M)
- The effect of pegylated interferon alpha on lung function, an exploratory study (Chia C, Clarke P, Zappala C, Morrison S, Leggett B)
- Impedance oscillometry and respiratory function testing in dynamic airways compression (Nguyen P, Morrison S, Brown M, Fielding D)
- Hi-COPD (Bashirzadeh F)
- VOC breath testing in in-situ lung cancer (Fielding D)
- VOC breath testing in in-situ larynx cancer (Fielding D)
- Prospective audit of pleural effusion management pathway (Fielding D, Ritchie A)
- Pleural ultrasound teaching tools (Fielding D, Salomonsen M)
- Intercostal artery localisation (Fielding D, Salomonsen M)
- Detecting trapped lung with echo speckle track imaging (Fielding D, Salomonsen M)
- Chest drain insertion assessment tools (Fielding D, Salomonsen M)
- NBI surveillance post curative of head and neck cancer (Fielding D).



Assoc. Prof. Stephen Morrison
Director, Thoracic Medicine

Research staff

Name	Qualifications	Position	Interests/specialities
Assoc. Prof. Stephen Morrison	FRACP, PhD	Director, Thoracic Medicine	respiratory medicine
Dr David Fielding	FRACP, MD	Staff Physician	respiratory medicine
Dr Christopher Zappala	FRACP, MD	Staff Physician	respiratory medicine
Dr Matthew Salomonsen	PHD	Clinical Fellow	respiratory medicine
Michael Brown	MAppSci	Lecturer QUT; Senior Scientist	respiratory medicine
Dr Farzad Bashirzadeh	FRACP, MD, MSM,	Staff Physician	respiratory medicine