



2015

**Renal Department
St George & Sutherland
Hospitals**

Summary

In 2015 our department continued to maintain an active academic role despite an increasingly busy clinical load. We have contributed as follows:

- Given invited presentations at 31 Local, 21 National and 6 International meetings
- Presented original research at 3 local, 6 national and 3 International meetings
- Published 25 peer reviewed papers, 2 book chapters and 4 published abstracts
- Two members of our department (Elizabeth Josland & Maria Chan) received prestigious awards in recognition of their academic contributions to Renal Medicine

Head of Department

Professor Mark Brown

MBBS, MD, FRACP

Senior Consultant Staff

Dr Sharon Ong BSc (Med), MBBS, PhD, FRACP (Conjoint Senior Lecturer, UNSW), Head of Research, Dept. Renal Medicine.

Associate Professor John Kelly MBBS, MD, FRACP

Associate Professor George Mangos MBBS, MD, FRACP

Associate Professor Ivor Katz MD, MBBCh, FCP(SA), BSc Honours, PhD, FRACP

Dr William Chan MBBS, PhD, FRACP

Dr Parthasarathy Shanmugasundaram MBBS, DM, FRACP (Conjoint Lecturer, UNSW)

Dr Cathie Lane B.Pharm. B.Med FRACP, Grad Cert ULT, PhD (Conjoint Lecturer, UNSW)

Dr Franziska Pettit MB BCh, BAO, MSci, MRCPI, FRACP

Dr Frank Brennan MBBS, FRACP, FACHPM, LLB- Consultant Palliative Care Medicine

Dr Sunil Badve MBBS, MD, DNB, FRACP, FASN (locum nephrologist)



Research Staff

Research Fellows & students

Dr Zara Amer
Dr Marina Weinstein, Advanced Trainee
Dr Shampa Sinha, BPT
Gina Clark Davis

Research Officers

Lynne Roberts (RN, MMid, MHIthSci)
Saiyini Pirabhahar (BNurs, MHIthSci, PGrad Dip Med Lab Sci)

Nursing & Allied Health contributors to Research

Alison Smyth (RN, B Health Sci. (Nursing), Grad. Dip. Health Sci. (Nursing))
(Anna) Claire Cuesta (RN, BScNsg, Grad Cert Acute Care Nursing – Renal)
Coralie Meek (RN, Bnurs, Grad. Dip Nurs, MnursAP)
Elizabeth Josland (Grad Dip Nurs, MPH)
Hannah Burgess (BSocWk)
Jennifer Beddoe (BNurs, Grad. Dip. Mid)
Kylie Turner (RN, Bnurs, Grad Cert Renal Nursing)
Maria Chan (BSc(Hons), M NutrDiet, GradDipExSpSc, PhD, AdvAPD)
Dr Shelley Tranter (RN, DNsg)
Tania Burns (RN, Grad Cert. Acute Care Nursing (Renal))
Yanella Martinez-Smith (BNurs, MNursAP)



RECENT AND ONGOING RESEARCH PROJECTS

Chronic Kidney Disease (CKD)

1. CKD-Fix study
2. CKD Health Systems research – Web based CKD outreach program
3. Hypertension in CKD

Hypertension in pregnancy

1. The 'new' R-A-A system in pre-eclampsia.
2. Body composition in normal pregnancy.
3. Post-partum physiology, psychology and paediatric outcomes for women with pre-eclampsia (the 'P4' study).
4. Evaluating the accuracy of home BP devices in pregnancy

Peritoneal and Haemodialysis

1. Engaging people from Greek backgrounds in home dialysis therapies
2. Peritoneal Dialysis Outcomes and Practice Patterns Study (PDOPPS)

Transplant

1. Improving the renal transplant recipient inpatient experience
2. The experience of waiting for a kidney from a deceased donor



PRESENTATIONS

Invited Lectures – Local

1. **Brennan F.** Advance Care Planning and Nephrology. Department of Nephrology Meeting, St George Hospital. NSW June 18th 2015.
2. **Brennan F & Brown M.** The experience of establishing a Renal Supportive Care Service. Cardiology Department, St Vincent's Hospital, Sydney. NSW. July 10th 2015.
3. **Brennan F & Brown M.** The experience of establishing a Renal Supportive Care Service. Ethics Committee, St Vincent's Hospital, Sydney. NSW. August 11th 2015.
4. **Brennan F** The pathophysiology of pruritus. Australian Wound Management Association (NSW Branch) Conference. August 14th 2015.
5. **Brennan F** Pain management in patients with End Stage Kidney Disease (ESKD). Renal Supportive Care Symposium, St George Hospital. NSW August 21st 2015.
6. **Brennan F.** Renal Supportive Care - An Overview. Renal Supportive Care Master Class, St George Hospital. NSW. August 22nd 2015
7. **Brennan F.** Symptom management in patients with End Stage Kidney Disease. Renal Supportive Care Master Class, St George Hospital. NSW August 22nd 2015.
8. **Brennan F.** Competency and advance care planning. Advance Care Planning teaching day, Sacred Heart Hospice, Darlinghurst. NSW. Sep 11th 2015.
9. **Brennan F.** The pathogenesis and management of Uraemic Pruritus and Restless Legs Syndrome in patients with End Stage Kidney Disease. Western Sydney Renal Supportive Care Symposium. Blacktown Hospital. NSW Nov 23rd 2015.
10. **Brennan F.** The pathogenesis and management of Pruritus (Part II). Department of Dermatology, St George Hospital. NSW Nov 25th 2015.
11. **Brown M.** HOPE: Renal Supportive Care Program. MDT cardiology, respiratory and palliative care meeting. St Vincent's Hospital. Sydney. NSW July 10th 2015
12. **Brown M.** HOPE Renal supportive care program. St Vincent's hospital Bioethics meeting. St Vincent's hospital, Sydney Aug 11th 2015.
13. **Brown M.** Renal Supportive Care: Research findings and what is new. St George 6th Annual Renal Supportive Care Symposium. St George Hospital. Aug 21st 2015.
14. **Brown M.** Renal Supportive care in Clinical Practice. Renal Supportive Care Master Class. St George Hospital Aug 22nd 2015.
15. **Josland L.** Renal Supportive Care. Acute Care Taskforce. UTS Aerial Function Centre. Sydney NSW. Mar 13th 2015
16. **Chan M.** Renal Nutrition Update, NSW North Coast, Health Education and Training Institute (HETI), NSW Health funded program. Mid-North Coast NSW. November 2015.
17. **Chan M.** Nutrition Support in Advanced Chronic Kidney Disease, Combined Renal and Nutritional support interest group update, Dietitians Association of Australia. Sydney. August 2015.
18. **Chan M** Subjective Global Assessment (SGA) training webinar. Dietitians Association of Australia. November 2015.
19. **Josland L.** Nursing role in Renal Supportive Care. How far have we come and where to from here? Renal Supportive Care Symposium, St George Hospital. NSW Aug 21st 2015.
20. **Josland L.** The concept of renal supportive care. Renal Supportive Care Training Workshop 1. Sydney. NSW. Oct 23rd 2015.



21. **Josland L & Burgess H.** Decision making for patients with ESKD – the commencement of either dialysis or a conservative, non-dialysis pathway. Renal Supportive Care Training Workshop 1. Sydney, NSW. Oct 23rd 2015.
22. **Josland L.** The care of the dying patient with ESKD. Renal Supportive Care Training Workshop 2. Sydney, NSW. Nov 18th 2015.
23. **Josland L.** The concept of renal supportive care. Renal Supportive Care Training Workshop 2. Sydney, NSW. Nov 18th 2015.
24. **Josland L & Burgess H.** Decision making for patients with ESKD – the commencement of either dialysis or a conservative, non-dialysis pathway. Renal Supportive Care Training Workshop 2. Sydney, NSW. Nov 18th 2015.
25. **Mangos G** Cold hands and Sick kidneys. Grand Rounds, St George Hospital. Sydney. April 2015.
26. **Mangos G.** FRACP Short Case Examination Master Class. St George Hospital. May 2015
27. **Mangos G.** Difficult Hypertension – treatment resistance, white coat effect and rare causes. Servier- Endocrine and Renal Weekend, Sydney August 2015.
28. **Mangos G.** The Great Debate: That we are setting up interns to Fail (University perspective) St George & Sutherland Research Symposium, Sydney, NSW. Oct 15th 2015.
29. **Smyth A & Magann L.** The care of the dying patient with ESKD. Renal Supportive Care Training Workshop 1. Sydney, NSW. Oct 23rd 2015.
30. **Smyth A.** Caring for the dying patient with kidney disease. St George Hospital Palliative Care Course. Sydney, NSW. Sep 17th 2015.
31. **Turner K & Hogan E.** Productive Ward: implementation in an outpatient dialysis unit. Productive Ward Show Case NSW. Nov 30th 2015.

Invited Lectures – National

1. **Brennan F.** Renal Supportive Care - An Overview. South Australian Palliative Care Conference. Adelaide SA. May 22nd 2015.
2. **Brennan F.** Renal Supportive Care: Case Studies, Grand Rounds. Townsville Hospital, Townsville, QLD. May 25th 2015
3. **Brennan F.** The expanding role of Palliative Care across disciplines - Palliative Care in the non-malignant setting. Congress of the Royal Australasian College of Physicians (RACP), Cairns, QLD. May 26th 2015
4. **Brennan F.** Care of the Dying Patient. Grand Rounds. Modbury Hospital, Modbury, Adelaide. SA. May 27th 2015
5. **Brennan F.** Palliative Care in the malignant and non-malignant setting. Intern Education. Lyell McEwin Hospital, Adelaide. SA May 28th 2015.
6. **Brennan F.** Renal Supportive Care - An Overview. Registrars. Lyell McEwin Hospital, Adelaide. SA. May 28th 2015.
7. **Brennan F.** Withholding and withdrawing from treatment – medicine, morality and ethics. Palliative Care Department, Modbury Hospital, Adelaide. SA. May 29th 2015.
8. **Brennan F.** Renal Supportive Care Master Class. Lectures given on Renal Supportive Care – An Overview, Symptom Management, Advance Care Planning, Care of the Dying Patient with End Stage Renal Disease and Creating and nurturing a Renal Supportive Care Service. Palliative Care Department, Hobart Hospital. Hobart Tasmania. Nov 11th 2015.



9. **Brown M.** Hypertension pathophysiology and management. Nephrology 101 course, Melbourne VIC Feb 7th 2015.
10. **Brown M.** Electrolyte and acid-base disorders. Nephrology 101 Course. Melbourne, VIC. Feb 7th 2015.
11. **Brown M.** Clinical Management of Pre-eclampsia. Annual Scientific Meeting of the ESA and SRB. Adelaide, SA. Aug 24th 2015.
12. **Brown M.** The Inaugural Professor Priscilla Kincaid-Smith Lecture: Anti-hypertensive treatment of Hypertension in Pregnancy. 10th Anniversary meeting; Society of Obstetric Medicine of Australia & New Zealand (SOMANZ) Melbourne, VIC. Oct 17th 2015.
13. **Burgess H.** The social Work role in informed decision making for renal patients. Renal Society of Australasia annual conference, June 15-17th Perth, WA
14. **Cuesta C, de Rueda M & Vella E.** A practical guide for clinic review of peritoneal dialysis patients. Renal Society of Australasia annual conference, June 15-17th Perth, WA
15. **Mangos G.** Update on Renal Artery Stenosis. Australia New-Zealand Society of Nephrology annual conference. Canberra ACT. Sep 2015.
16. **Martinez-Smith Y.** The Bleeding Fistula. Australia New-Zealand Society of Nephrology annual conference. Canberra ACT. Sep 7-9th 2015.
17. **Tranter S** Consent for renal replacement therapy: are we getting it right? Renal Society of Australasia annual conference, June 15-17th Perth, WA
18. **Tranter S.** Engaging people from Greek backgrounds in home dialysis therapies. Renal Society of Australasia annual conference, June 15-17th Perth, WA
19. **Tranter S, Josland E & Turner K.** Death attitudes and bereavement needs of dialysis nurses. Renal Society of Australasia annual conference, June 15-17th Perth, WA
20. **Tranter S.** Engaging people from Greek backgrounds in home dialysis therapies. Haemodialysis workshop. Bendigo, VIC. Sep 10th 2015.
21. **Tranter S.** Consent for renal replacement therapy: are we getting it right? Haemodialysis workshop. Bendigo, VIC. Sep 10th 2015.



Invited Lectures – International

1. **Brennan F.** Renal Supportive Care Workshop. Lectures given on Renal Supportive Care – An Overview, Symptom Management, Advance Care Planning, Care of the Dying Patient with End Stage Renal Disease, Creating and nurturing a Renal Supportive Care Service. Hosted by the All Ireland Institute of Hospice and Palliative Care. Dublin, Ireland. Oct 19th 2015.
2. **Brennan F.** Renal Supportive Care – Where are we now? Renal Society of Australasia Conference, Wellington, New Zealand. Nov 6th 2015.
3. **Brennan F.** Difficult communication in Renal Supportive Care. Renal Society of Australasia Conference, Wellington, New Zealand. Nov 7th 2015.
4. **Brown M.** What's new in pre-eclampsia? ISSHP European Congress. Budapest. Hungary. Sep 24th 2015.
5. **Brown M.** Management of Hypertension in Pregnancy and beyond. Japanese Study group for Physiology and Management of Blood Pressure. Kyoto, Japan. Nov 28th 2015.
6. **Chan M.** Researching the Practice Framework to Improve the Nutritional Care of Patients with End Stage Kidney Disease. Joel Kopple Award, National Kidney Foundation annual spring meeting, Dallas, USA. April 2015.

Presentations of Research at Scientific Meetings

Local

1. **Amer Z, Amer Z, Ong S, Kelly JJ.** Home Blood Pressure monitoring in chronic kidney disease. St George & Sutherland Research Symposium, Sydney, NSW. Oct 15th 2015.
2. **Cuesta C, De Rueda M & Vella E, Robinson F & Tranter S.** A practical guide for clinic review of peritoneal dialysis patients. St George & Sutherland Research Symposium, Sydney, NSW. Oct 15th 2015.
3. **Cuesta C, Vella E, Badve S, Robinson L & Johnson D.** The Peritoneal Dialysis Outcomes and Practice Patterns Study (PDOPPS) Trial. St George & Sutherland Research Symposium, Sydney, NSW. Oct 15th 2015.

National

1. **Amer Z, Ong S, Kelly JJ.** Assessment of reliability of home blood pressure monitoring in chronic kidney disease. High Blood Pressure Council of Australia, Annual Scientific Meeting. Melbourne, VIC. December 2015.
2. **Amer Z, Ong S, Kelly JJ.** Audit of home blood pressure monitoring in chronic kidney disease patients. Australian and New Zealand Society of Nephrology (ANZSN) Annual Scientific Meeting, Canberra, ACT. September 2015.
3. **Badve SV** Mammalian target of rapamycin inhibitors and clinical outcomes in adult kidney transplant recipients. Australian and New Zealand Society of Nephrology (ANZSN) Annual Scientific Meeting, Canberra, ACT. September 2015.



4. **Chan M.** Nageswaran M, Patwardhan A et.al. Perceived Nutrition Management Priorities and Current Practice in Progressive Chronic Kidney Disease, stages 4-5, 52nd Australian and New Zealand Society of Nephrology (ANZSN) Annual Scientific Meeting, Canberra, ACT. September 2015.
5. **Chan M,** et.al. Perceived Nutrition Management Priorities and Current Practice in non-dialysis CKD or Conservative Care. 52nd Australian and New Zealand Society of Nephrology (ANZSN) Annual Scientific Meeting, Canberra, ACT. September 2015.
6. **Ong S,** Ho FM, Williamson PM, Beddoe J, **Kelly JJ.** Reduced Cortisol Inactivation and Hypertension in Chronic Kidney Disease. Australian and New Zealand Society of Nephrology (ANZSN) Annual Scientific Meeting, Canberra, ACT. September 2015.

International

1. **Chan M, Kelly J,** Batterham M and Tapsell L.. Change of Clinical and Nutrition Profiles of Patients at Enrolment to the to the Multi-Disciplinary, Pre-dialysis Assessment Clinic, 4/2002 to 3/2007 vs. 4/2007 to 3/2012. 17th International Congress of Nutrition and Metabolism in Renal Disease ICNMRD, May 2014 Wurzburg, Germany.
2. **Cuesta A & Tranter S, De Rueda M and Vella E.** Transition from peritoneal dialysis. International Society of Peritoneal Dialysis. Madrid, Spain 2014
3. **Pettit F, Mangos GJ,** Davis G, Henry A & **Brown MA.** Is early onset of pre-eclampsia worse for mother or baby? International Society for the Study of Hypertension (ISSHP), New Orleans, Nov 2014

Published Abstracts

1. **Pettit, F. M., Mangos, G. J.,** Davis, G., Henry, A., & **Brown, M. A.** Is superimposed pre-eclampsia different from de-novo pre-eclampsia? *Pregnancy Hypertension: An International Journal of Women's Cardiovascular Health*, 5(1), 92-93.
2. **Pettit, F. M., Mangos, G. J.,** Davis, G., Henry, A., & **Brown, M. A.** Is early onset pre-eclampsia worse for mother or baby. *Pregnancy Hypertension: An International Journal of Women's Cardiovascular Health*, 2015: 5(1), 102-103.
3. **Pettit, F. M., Spaan, J., Mangos, G. J.,** Davis, G., Henry, A., & **Brown, M. A.** The role of the vasodilator renin angiotensin system (RAAS) in hypertensive pregnancy. *Pregnancy Hypertens*, 2015: 5(1), 127.
4. Varnier, N. A., **Brown, M.,** Davis, G., **Pettit, F., Mangos, G.,** & Henry, A. Triggers for delivery in pre-eclampsia. In *Pregnancy Hypertens* 2015:Vol. 5 (pp. 20-21).



PUBLICATIONS

General Nephrology and CKD

1. **Badve SV**, Zhang L, Coombes JS et al. Association between serum alkaline phosphatase and primary resistance to erythropoiesis stimulating agents in chronic kidney disease: a secondary analysis of the HERO trial. Can J Kidney Health Dis 2015;2:33.
2. **Badve SV**, Palmer SC, Johnson DW, Strippoli GF. A nephrology guide to reading and using systematic reviews of randomized trials. Nephrol Dial Transplant 2015;30:878-84.
3. **Badve SV**, Palmer SC, Hawley CM, Pascoe EM, Strippoli GF, Johnson DW. Glomerular filtration rate decline as a surrogate end point in kidney disease progression trials. Nephrol Dial Transplant 2015:doi:10.1093/ndt/gfv269.
4. Mallett A, Tang W, Hart G, **Badve SV**, et al. End-Stage Kidney Disease Due to Fibrillary Glomerulonephritis and Immunotactoid Glomerulopathy - Outcomes in 66 Consecutive ANZDATA Registry Cases. Am J Nephrol 2015;42:177-84.

Renal Supportive & Palliative Care

5. **Brennan FP**, Collett, **Josland EA**, **Brown MA**. Symptoms of patients with CKD managed without dialysis. Progress in Palliative Care 2015; 23:267-273
6. **Brennan FP**, **Josland EJ**, **Kelly JJ**. Chronic Pruritis. Histamine Is Not Always the Answer. Journal of Pain and Symptom Management. Vol 50, October 2015 p 566-570.
7. **Brown MA**, Collett G, **Josland E**, Foote C, **Brennan F**. CKD in Elderly Patients Managed without Dialysis: Survival, Symptoms, and Quality of Life. CJASN 2015. 10: 260-268
8. Hassan HC, **Brennan F**, Collett G, **Josland E**, **Brown MA**. Efficacy and safety of Gabapentin for uraemic pruritus and restless legs syndrome in conservatively managed patients with end stage kidney disease. Journal of Pain and Symptom Management. 2015. 49: 782-789
9. Nadeau-Fredette AC, **Badve SV**, Johnson DW. Daily home hemodialysis: balancing cardiovascular benefits with infectious harms. Am J Kidney Dis 2015;65:6-8.
10. Roberts MA, Pilmore HL, Ierino FL, **Badve SV** et al. The beta-Blocker to Lower Cardiovascular Dialysis Events (BLOCADE) Feasibility Study: A Randomized Controlled Trial. Am J Kidney Dis 2015. doi: 10.1053/j.ajkd.2015.10.029
11. Roberts MA, Pilmore HL, Ierino FL, **Badve SV**. et al. The rationale and design of the Beta-blocker to LOWER Cardiovascular Dialysis Events (BLOCADE) Feasibility Study. Nephrology (Carlton) 2015;20:140-7.
12. Vieceilli AK, Pascoe E, Polkinghorne KR, **Badve SV** et al. The Omega-3 fatty acids (Fish Oils) and Aspirin in Vascular access Outcomes in RENal Disease (FAVOURED) study: the updated final trial protocol and rationale of post-initiation trial modifications. BMC Nephrol 2015;16:89.
13. Zhang L, Coombes J, Pascoe EM, **Badve SV** et al. The effect of pentoxifylline on oxidative stress in chronic kidney disease patients with erythropoiesis-stimulating agent hyporesponsiveness: Sub-study of the HERO trial. Redox Rep 2015. doi: 10.1179/1351000215Y.0000000022
14. Zhang L, Liu X, Pascoe EM, **Badve SV**. et al. Long term outcomes of end stage kidney disease for patients with IgA nephropathy: A multi-center registry study. Nephrology (Carlton) 2015. doi: 10.1111/nep.12629



15. Zhang L, **Badve SV**, Pascoe EM et al. The Effect of Exit-Site Antibacterial Honey Versus Nasal Mupirocin Prophylaxis on the Microbiology and Outcomes of Peritoneal Dialysis-Associated Peritonitis and Exit-Site Infections: A Sub-Study of the Honeypot Trial. *Perit Dial Int* 2015;35:712-21.

Transplantation

16. **Burns T**, Fernandez R & Stephens M. The experiences of adults who are on dialysis and waiting for a renal transplant from a deceased donor: a systematic review. *JBI Database of Systematic Reviews & Implementation Reports*. 2015: 13(2) 169-211.

Renal Obstetric Medicine

17. Davis GK, Roberts LM, **Mangos G**, **Brown MA**. Comparisons of auscultatory hybrid and automated sphygmomanometers with mercury sphygmomanometry in hypertensive and normotensive pregnant women: parallel validation studies. *Journal of Hypertension*. 2015.33(3):499-506.
18. **Pettit F**, **Mangos GJ**, Davis GK, Henry A, **Brown MA**. Pre-eclampsia causes adverse maternal outcomes across the gestational spectrum. *Pregnancy Hypertension: An International Journal of Women's Cardiovascular Health* 2015; 5:190-204
19. Tong A, **Brown M**, Winkelmayr WC, Craig JC, Jesudason S. Perspectives on pregnancy in women with chronic kidney disease. *Am J Kidney Disease*. 2015;66:951-961
20. Van Oostwaard M, Langenveld J, Schuit E, Papatsonis D, **Brown MA**, Byaruhanga R et al. Recurrence of hypertensive disorders of pregnancy, an Individual Patient Data Meta-Analysis. *American Journal of Obstetrics and Gynecology* 2015;212:624e1-624e17
21. Varnier N., Chwah S., Miller T., **Pettit F.**, **Brown M.**, Henry, A. All that wheezes is not asthma: a cautionary case study of shortness of breath in pregnancy *Obstetric Medicine: The Medicine of Pregnancy*. 2015; 8: 149-151.
22. Varnier N., **Pettit F**, Rees D., Thou S., **Brown M.**, Henry, A. Coronary artery disease secondary to familial hypercholesterolaemia: an infrequent cause of increasingly common pregnancy co-morbidity *Obstetric Medicine: The Medicine of Pregnancy*. 2015; 8: 152-154.

Hypertension

23. Singer, J., Sader, M., **Beddoe, J.**, **Brown, M.**, & **Mangos, G**. Renal sympathetic nerve ablation (RSNA) improves BP in treatment resistant hypertension (TRHT). *Nephrology* 2015:Vol. 20 (pp. 88)
24. **Mangos, G.**, & Singer, J. Treatment-resistant hypertension. *Australian Doctor*. 2015: 25-40.
25. Williamson PM, **Ong SHL**, Whitworth JA, **Kelly JJ**. The role of sustained release isosorbide mononitrate on corticosteroid-induced hypertension in health human subjects. *J Hum Hypertens*. 2015 Dec; 29(12):737-43. doi: 10.1038/jhh.2015.14. Epub 2015 Mar 26.



BOOK CHAPTERS

1. Brown MA. **Pregnancy with Pre-existing Renal disease.** Chapter 45; in: Comprehensive Clinical Nephrology 5th edition. RJ Johnson, J Feehally, J Floege (eds). Elsevier. Philadelphia. USA 2015.
2. Martin A, **Brown MA. Renal Complications in Normal Pregnancy.** Chapter 44 in: Comprehensive Clinical Nephrology 5th edition. RJ Johnson, J Feehally, J Floege (eds). Elsevier. Philadelphia. USA. 2015.

AWARDS & GRANTS

1. Renal Society of Australasia – Outstanding contribution award was awarded to **Ms Elizabeth Josland.**
2. National Kidney Foundation, USA- Joel Kopple Award – award to **Dr Maria Chan** for the outstanding contribution to renal nutrition.



3. **St. George Medical Research Foundation Grant:**

P4 study: follow up studies of physiology, psychology and paediatric wellbeing after hypertensive pregnancy



Department of Renal Medicine

St George Hospital
50 Montgomery Street
Kogarah NSW 2217

T: 612-91132622
F: 612-95538192

Email: STGRenalDepartment@health.nsw.gov.au
Website: <https://stgrenal.org.au/>

Renal Research Unit

St George Hospital
Behind James Laws House
Kogarah NSW 2217

T: 612-91132484
F: 612-91131786

