

CURRICULUM VITAE

Adrian Gerard Barnett BSc (Hons), PhD, AStat, FASSA

Updated June 23, 2024

1 Personal information

Tel (work): 07-3138 6010, E-mail: a.barnett<at>qut.edu.au

ORCID: 0000-0001-6339-0374

Born: 1973, England. Nationalities: British, Australian. Sex: Male

1.1 Education and degrees

- PhD Mathematics: University of Queensland, December 2002: “On the use of the bispectrum to detect and model non-linearity”
 - ★ Dean’s commendation list for Outstanding Research Higher Degree Theses
 - ★ Dean of Engineering, Physical Sciences and Architecture Annual Award for the best PhD
 - ★ Supervised by Prof Rodney Wolff
- Bachelor of Science in Statistics, First Class with Honours: University College London, 1994
 - ★ Honours project supervised by Prof Philip Dawid

1.2 Employment

Professor: Institute of Health and Biomedical Innovation & School of Public Health, Queensland University of Technology, Feb 2017 to present

- **Associate Professor:** Institute of Health and Biomedical Innovation & School of Public Health, Queensland University of Technology, Aug 2010 to Feb 2017
- **Senior Lecturer in Biostatistics:** Institute of Health and Biomedical Innovation & School of Public Health, Queensland University of Technology, Nov 2007 to Aug 2010
- **Senior Lecturer in Biostatistics:** School of Population Health, University of Queensland, Jan 2006 to Nov 2007
- **Statistician:** Interesource, Jun 2005 to Dec 2005
- **Research Fellow:** School of Population Health, University of Queensland, Apr 2002 to Jan 2006 (year’s leave of absence 2005)
- **Statistician (part-time):** Centre for Health Promotion and Cancer Prevention Research, University of Queensland, Sep 2001 to Apr 2002
- **Tutor in Mathematics and Statistics (part-time):** Queensland University of Technology, Mar 1999 to Jun 2000
- **Lecturer in Statistical Inference (part-time):** Queensland University of Technology, Aug to Sep 1999
- **SAS programmer:** SmithKline Beecham, Nov 1998 to Mar 1999
- **Statistician:** Medical Research Council, Wolfson Institute of Preventive Medicine, Jan 1996 to Nov 1998
- **Statistician:** SmithKline Beecham, Sep 1994 to Jan 1996

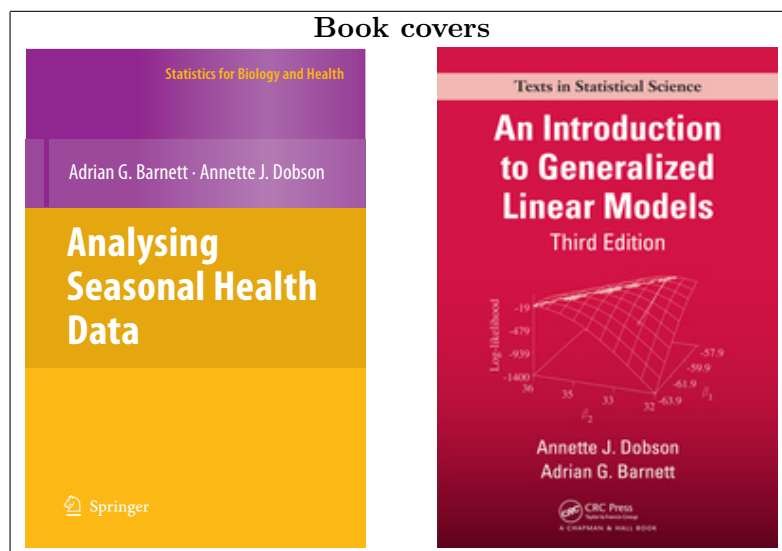
2 Research

2.1 Publications

- I have removed all journal titles from my publication list to focus on “what” I have published instead of “where”.
- 60 of my papers have more than 100 citations.
- I never accept gift authorship and have made an important contribution to all my publications. I have often helped colleagues with statistical analyses and am thanked in the acknowledgements for these papers.

Books

- [1] Dobson, A. J. and **Barnett, A. G.** (2018) *An Introduction to Generalized Linear Models*. Texts in Statistical Science, Chapman & Hall/CRC, 4th edn.
- [2] **Barnett, A. G.** and Dobson, A. J. (2010) *Analysing Seasonal Health Data*. Statistics for Biology and Health, Springer.



Book chapters

- [1] **Barnett, A. G.** and Hansen, C. A. (2009) How might the health effects of air pollution change when the planet gets warmer? Gow, K. M. (ed.), *Climate Change, Natural Disasters & Other Catastrophes: Fears and Concerns for the Future*, Nova Science Publishers.
- [2] Barnsbee, L., **Barnett, A. G.**, Halton, K., and Nghiem, S. (2017) Cost-effectiveness. Gregory, S., Stevens, M., and Fraser, J. (eds.), *Mechanical Circulatory and Respiratory Support*, pp. 749–772, Elsevier.

Peer-reviewed papers

- [1] Underwood, M. R., Vickers, M. R., and **Barnett, A. G.** (1997) Availability of services to treat patients with acute low back pain.

- [2] Aquilina, J., **Barnett, A. G.**, Thompson, O., and Harrington, K. (1999) Second-trimester maternal serum inhibin A concentration as an early marker for preeclampsia.
- [3] **Barnett, A. G.**, Underwood, M. R., and Vickers, M. R. (1999) Effect of UK national guidelines on services to treat patients with acute low back pain: follow up questionnaire survey.
- [4] Underwood, M. R., **Barnett, A. G.**, and Vickers, M. R. (1999) Evaluation of two time specific back pain outcome measures.
- [5] Howell, S., **Barnett, A. G.**, and Underwood, M. R. (2001) The use of pre-conceptional folic acid as an indicator of a health message amongst white and Bangladeshi women in Tower Hamlets, east London.
- [6] O'Brien, M. F., Harrocks, S., Clarke, A., Garlick, B., and **Barnett, A. G.** (2002) Experiences with redo aortic valve surgery.
- [7] O'Brien, M. F., Harrocks, S., Clarke, A., Garlick, B., and **Barnett, A. G.** (2002) How to do safe sternal reentry and the risk factors of redo cardiac surgery.
- [8] Correa-Velez, I., Clavarino, A., Eastwood, H., and **Barnett, A. G.** (2003) Use of complementary and alternative medicine and quality of life: changes at the end of life.
- [9] **Barnett, A. G.** and Dobson, A. J. (2004) Estimating trends and seasonality in coronary heart disease.
- [10] **Barnett, A. G.** and Dobson, A. J. (2004) Is the increase in coronary heart disease on Mondays an artifact?
- [11] Sommerlad, B. C., Fenn, C., Harland, K., Sell, D., Birch, M. J., Dave, R., Lees, M., and **Barnett, A.** (2004) Submucous cleft palate: A grading system and review of 40 consecutive submucous cleft palate repairs.
- [12] Atkinson, J. A., McKenna, K. T., **Barnett, A. G.**, McGrath, D. J., and Rudd, M. (2005) A randomized, controlled trial to determine the efficacy of paper tape in preventing hypertrophic scar formation in surgical incisions that traverse Langer's skin tension lines. **Paper featured in Editorial**, %.
- [13] **Barnett, A. G.** and Dobson, A. J. (2005) The excess in cardiovascular events on Mondays: a meta-analysis and prospective study.
- [14] **Barnett, A. G.**, Dobson, A. J., McElduff, P., Salomaa, V., Kuulasmaa, K., Sans, S., and WHO MONICA Project (2005) Cold periods and coronary events: an analysis of populations worldwide.
- [15] **Barnett, A. G.**, van der Pols, J., and Dobson, A. J. (2005) Regression to the mean: what it is and how to deal with it.
- [16] **Barnett, A. G.**, Williams, G. M., Schwartz, J., Neller, A. H., Best, T. L., Petroeschevsky, A. L., and Simpson, R. W. (2005) Air pollution and child respiratory health: a case-crossover study in Australia and New Zealand.
- [17] **Barnett, A. G.** and Wolff, R. C. (2005) A time-domain test for some types of non-linearity.
- [18] Chan, L., Shaw, A. G., Busfield, F., Haluska, B., **Barnett, A.**, Kesting, J., Short, L., Marczak, M., and Shaw, J. T. (2005) Carotid artery intima-media thickness, brachial artery flow mediated vasodilation and cardiovascular disease risk factors in diabetic and non-diabetic Indigenous Australians.
- [19] McGrath, J. J., **Barnett, A. G.**, and Eyles, D. W. (2005) The association between birth weight, season of birth and latitude.
- [20] Stanton, W. R., **Barnett, A. G.**, and Silva, P. A. (2005) Adolescents' intentions to smoke as a predictor of smoking.
- [21] Tooth, L., McKenna, K., **Barnett, A.**, Prescott, C., and Murphy, S. (2005) Caregiver burden, time spent caring and health status in the first 12 months following stroke.
- [22] **Barnett, A. G.**, Williams, G. M., Schwartz, J., Neller, A. H., Best, T. L., Petroeschevsky,

- A. L., and Simpson, R. W. (2006) The effects of air pollution on hospitalizations for cardiovascular disease in elderly people in Australian and New Zealand cities.
- [23] **Barnett, A. G.** (2007) Temperature and cardiovascular deaths in the US elderly: Changes over time.
- [24] **Barnett, A. G.**, Sans, S., Salomaa, V., Kuulasmaa, K., Dobson, A. J., and WHO MONICA Project (2007) The effect of temperature on systolic blood pressure.
- [25] Bensink, M., Wootton, R., Irving, H., Hallahan, A., Theodoros, D., Russell, T., Scuffham, P., and **Barnett, A. G.** (2007) Investigating the cost-effectiveness of videotelephone based support for newly diagnosed paediatric oncology patients and their families: design of a randomised controlled trial.
- [26] Carrigan, G., **Barnett, A. G.**, Dobson, A. J., and Mishra, G. D. (2007) Compensating for Missing Data from Longitudinal Studies Using WinBUGS.
- [27] Gray, D., Williams, G., Li, Y., Chen, H., Li, R., Forsyth, S., **Barnett, A. G.**, Guo, J., Feng, Z., and McManus, D. (2007) A cluster-randomized bovine intervention trial against *Schistosoma japonicum* in the Peoples' Republic of China: design and baseline results.
- [28] McGrath, J. J., **Barnett, A.**, Eyles, D., Burne, T., Pedersen, C. B., and Mortensen, P. B. (2007) The impact of nonlinear exposure-risk relationships on seasonal time-series data: modelling Danish neonatal birth anthropometric data.
- [29] Mishra, G. D., Carrigan, G., Brown, W. J., **Barnett, A. G.**, and Dobson, A. J. (2007) Short-term weight change and the incidence of diabetes in midlife: results from the Australian Longitudinal Study of Women's Health.
- [30] Stathakis, T., Acworth, J. P., and **Barnett, A. G.** (2007) A prediction tool for bacteraemia in febrile children aged 3–36 months.
- [31] **Barnett, A. G.**, Fraser, J. F., and de Looper, M. (2008) The seasonality in heart failure deaths and total cardiovascular deaths in Australia.
- [32] Bensink, M., Armfield, N., Irving, H., Hallahan, A., Theodoros, D., Russell, T., **Barnett, A.**, Scuffham, P., and Wootton, R. (2008) A pilot study of videotelephone-based support for newly diagnosed paediatric oncology patients and their families.
- [33] Clements, A. C. A., **Barnett, A. G.**, Nyandindi, U., Lwambo, N. J. S., Kihamia, C. M., and Blair, L. (2008) Age and gender effects in self-reported urinary schistosomiasis in Tanzania.
- [34] Hansen, C. A., **Barnett, A. G.**, and Pritchard, G. (2008) The effect of ambient air pollution during early pregnancy on fetal ultrasonic measurements during mid-pregnancy.
- [35] Sanders, S., **Barnett, A.**, Doust, J., Coulthard, M., and Correa-Velez, I. (2008) A systematic review of the diagnostic accuracy of C-reactive protein for bacterial infection in infants and children. **Rated 6/7 on both relevance and newsworthiness by BMJ updates %.**
- [36] **Barnett, A. G.**, Batra, R., Graves, N., Edgeworth, J., Robotham, J., and Cooper, B. (2009) Using a longitudinal model to estimate the effect of Methicillin-resistant *Staphylococcus aureus* infection on length of stay in an intensive care unit.
- [37] Bensink, M. E., Armfield, N. R., Pinkerton, R., Irving, H., Hallahan, A. R., Theodoros, D. G., Russell, T., **Barnett, A. G.**, Scuffham, P. A., and Wootton, R. (2009) Using videotelephony to support paediatric oncology-related palliative care in the home: from abandoned RCT to acceptability study.
- [38] BurrIDGE, L., **Barnett, A. G.**, and Clavarino, A. (2009) The impact of perceived stage of cancer on carers' anxiety and depression during the patients' final year of life.
- [39] Clements, A. C., **Barnett, A. G.**, Cheng, Z. W., Snow, R. W., and Zhou, H. N. (2009) Space-time variation of malaria incidence in Yunnan province, China.
- [40] Clements, A., et al. (2009) Use of Bayesian geostatistical prediction to estimate local variations in *Schistosoma haematobium* infection in western Africa.
- [41] Coory, M., Wills, R., and **Barnett, A. G.** (2009) Bayesian versus frequentist statistical

- inference for investigating a one-off cancer cluster reported to a health department.
- [42] Corley, A., Fraser, J. F., **Barnett, A. G.**, and Mullany, D. (2009) Nurse-determined assessment of cardiac output. Comparing a non-invasive cardiac output device and pulmonary artery catheter: a prospective observational study.
 - [43] Eakin, E., Reeves, M., Lawler, S., Graves, N., Oldenburg, B., DelMar, C., Wilke, K., Winkler, E., and **Barnett, A.** (2009) Telephone counselling for physical activity & diet in type 2 diabetes & hypertension.
 - [44] Fahy, S., Host, D., Campher, D., Tomczak, L., Vidhani, K., Higgs, M., **Barnett, A.**, Ziegenfuss, M., and Foot, C. (2009) The STAB trial - standardised testing of artificial blood. A comparative study of various products that may be used as artificial blood for high fidelity simulation training in the critical care setting.
 - [45] Graves, N., **Barnett, A. G.**, Halton, K. A., Veerman, J. L., Winkler, E., Owen, N., Reeves, M. M., Marshall, A., and Eakin, E. (2009) Cost-Effectiveness of a Telephone-Delivered intervention for physical activity and diet.
 - [46] Gray, D. J., et al. (2009) A cluster-randomised intervention trial against *Schistosoma japonicum* in the Peoples' Republic of China: bovine and human transmission.
 - [47] Hansen, C. A., **Barnett, A. G.**, Jalaludin, B. B., and Morgan, G. G. (2009) Ambient air pollution and birth defects in Brisbane, Australia.
 - [48] Mahoney, G., Slade, G., Kitchener, S., and **Barnett, A. G.** (2009) Lifetime fluoridation exposure and dental caries experience in a military population.
 - [49] Mullany, D., Foot, C., Smith, S. E., Johnson, J., and **Barnett, A. G.** (2009) Methods and preliminary results for a data linkage project to determine long-term survival after intensive care unit admission.
 - [50] Saha, S., **Barnett, A. G.**, Foldi, C., Burne, T., Eyles, D. W., Buka, S. L., and McGrath, J. J. (2009) Advanced paternal age is associated with impaired neurocognitive outcomes during infancy and childhood. **Featured in Editorial**, %.
 - [51] Saha, S., **Barnett, A. G.**, Buka, S. L., and McGrath, J. J. (2009) Maternal age and paternal age are associated with distinct childhood behavioural outcomes in a general population birth cohort.
 - [52] Wang, X. Y., **Barnett, A. G.**, Hu, W., and Tong, S. (2009) Temperature variation and emergency hospital admissions for stroke in Brisbane, Australia, 1996–2005.
 - [53] Bellapart, J., Geng, S., Dunster, K., Timms, D., **Barnett, A.**, Boots, R., and Fraser, J. (2010) Intraaortic Balloon Pump counterpulsation and cerebral autoregulation: an observational study.
 - [54] **Barnett, A. G.**, Koper, N., Dobson, A. J., Schmiegelow, F., and Manseau, M. (2010) Using information criteria to select the correct variance–covariance structure for longitudinal data in ecology. **In the journal's top ten most read papers October 2009 to May 2010.**
 - [55] Graves, N., Harbarth, S., Beyersmann, J., **Barnett, A. G.**, Halton, K., and Cooper, B. (2010) Estimating the cost of healthcare-acquired-infection: Mind your p's and q's.
 - [56] Wijndaele, K., Healy, G. N., Dunstan, D. W., **Barnett, A. G.**, Salmon, J., Shaw, J. E., Zimmet, P. Z., and Owen, N. (2010) Increased cardio-metabolic risk is associated with increased TV viewing time.
 - [57] **Barnett, A.**, Graves, N., Rosenthal, V. D., Salomao, R., and Rangel-Frausto, M. S. (2010) Excess length of stay due to a central line associated blood stream infections in intensive care units in Argentina, Brazil and Mexico. **Commentary by C J Crnich.**
 - [58] **Barnett, A.**, Tong, S., and Clements, A. (2010) What measure of temperature is the best predictor of mortality? **Commentary by Gasparrini & Armstrong.**
 - [59] Correa-Velez, I., Gifford, S., and **Barnett, A.** (2010) Longing to belong: Social inclusion and wellbeing among youth with refugee backgrounds in the first three years in Melbourne,

Australia.

- [60] Guo, Y., Tong, S., Zhang, Y., **Barnett, A. G.**, Jia, Y., and Pan, X. (2010) The relationship between particulate air pollution and emergency hospital visits for hypertension in Beijing, China.
- [61] Tong, S., Wang, X., and **Barnett, A. G.** (2010) Assessment of heat-related health impacts in Brisbane, Australia: Comparison of different heatwave definitions.
- [62] Eakin, E. G., et al. (2010) Living well with diabetes: a randomized controlled trial of a telephone-delivered intervention for maintenance of weight loss, physical activity and glycaemic control in adults with type 2 diabetes. **Not peer reviewed.**
- [63] Guo, Y., Tong, S., Li, S., **Barnett, A. G.**, Yu, W., Zhang, Y., and Pan, X. (2010) Gaseous air pollution and emergency hospital visits for hypertension in Beijing, China: a time-stratified case-crossover study.
- [64] Guo, Y., **Barnett, A. G.**, Zhang, Y., Yu, W., Tong, S., Pan, X., and Zhou, M. (2010) The short-term effect of air pollution on cardiovascular mortality in Tianjin, China: comparison of time series and case-crossover analyses.
- [65] **Barnett, A. G.**, Beyersmann, J., Allignol, A., Rosenthal, V. D., Graves, N., and Wolkewitz, M. (2011) The time-dependent bias and its effect on extra length of stay due to nosocomial infection.
- [66] Correa-Velez, I., **Barnett, A. G.**, Gifford, S. M., and Sackey, D. (2011) Health status and use of health services among recently arrived men with refugee backgrounds: A comparative analysis of urban and regional settlement in Southeast Queensland.
- [67] Tung, J.-P., Fung, Y. L., Nataatmadja, M., Colebourne, K. I., Esmaeel, H. M., Wilson, K., **Barnett, A. G.**, Wood, P., Silliman, C. C., and Fraser, J. F. (2011) A novel in vivo ovine model of transfusion-related acute lung injury (TRALI). **Best original article published in Vox Sanguinis in 2011 & Graeme Nielson Best Published Paper 2011 Award (The Prince Charles Hospital).**
- [68] Guo, Y., **Barnett, A. G.**, and Tong, S. (2011) A large change in temperature between neighbouring days increases the risk of mortality.
- [69] Rosenthal, V. D., et al. (2011) Time dependent analysis of length of stay and mortality due to urinary tract infections in ten developing countries: INICC findings.
- [70] Rosenthal, V. D. et al. (2011) Time-dependent analysis of extra length of stay and mortality due to ventilator-associated pneumonia in intensive-care units of ten limited-resources countries: findings of the international nosocomial infection control consortium (INICC).
- [71] Strand, L., **Barnett, A. G.**, and Tong, S. (2011) The influence of season and ambient temperature on birth outcomes: a review of the epidemiological literature.
- [72] Bellapart, J., Chan, G., Tzeng, Y.-C., Ainsley, P., **Barnett, A. G.**, Dunster, K. R., Boots, R., and Fraser, J. F. (2011) The effect of ventricular assist devices on cerebral autoregulation: a preliminary study.
- [73] **Barnett, A. G.**, Plonka, K., Seow, W. K., Wilson, L.-A., and Hansen, C. (2011) Increased traffic exposure and negative birth outcomes: a prospective cohort in Australia.
- [74] Strand, L., **Barnett, A. G.**, and Tong, S. (2011) Methodological challenges when estimating the effects of season and seasonal exposures on birth outcomes.
- [75] Corley, A. et al. (2011) Oxygen delivery through high-flow nasal cannulae increase end expiratory lung volume and reduce respiratory rate in post cardiac surgical patients.
- [76] Robotham, J. V., Graves, N., Cookson, B. D., **Barnett, A. G.**, Wilson, J. A., Edgeworth, J. D., Batra, R., Cuthbertson, B. H., and Cooper, B. S. (2011) Screening, isolation, and decolonisation strategies in the control of methicillin resistant *Staphylococcus aureus* in intensive care units: cost effectiveness evaluation. Editorial by Kluytmans & Harbarth.
- [77] Graves, N., **Barnett, A. G.**, and Clarke, P. (2011) Funding grant proposals for scientific

- research. retrospective analysis of grant review panel members' scores.
- [78] Huang, C. et al. (2011) Projecting heat-related mortality under climate change scenarios: A systematic review.
 - [79] Guo, Y., **Barnett, A. G.**, Pan, X., Yu, W., and Tong, S. (2011) The impact of temperature on mortality in Tianjin, China: A case-crossover design with a distributed lag non-linear model.
 - [80] Graves, N., **Barnett, A. G.**, and Rosenthal, V. (2011) Open versus closed IV infusion systems: a state based model to predict risk of catheter associated blood stream infections.
 - [81] Wolkewitz, M., Allignol, A., Graves, N., and **Barnett, A. G.** (2011) Is 27 really a dangerous age for famous musicians? Retrospective cohort study.
 - [82] Magalhães, R. S., **Barnett, A. G.**, and Clements, A. C. A. (2011) Geographical analysis of the role of water supply and sanitation in the risk of helminth infections of children in West Africa.
 - [83] Strand, L., **Barnett, A. G.**, and Tong, S. (2012) Maternal exposure to ambient temperature and the risk of preterm birth and stillbirth. **Commentary by Prof Scott Zeger.**
 - [84] Wang, X. Y. et al. (2012) The impact of heatwaves on mortality and emergency hospital admissions from non-external causes in Brisbane, Australia.
 - [85] **Barnett, A. G.**, Munck, L., and Fraser, J. F. (2012) The effects of the 2009 dust storm on emergency admissions to a Brisbane hospital.
 - [86] Hansen, A., Bi, P., Nitschke, M., Pisaniello, D., Ryan, P., Sullivan, T., and **Barnett, A. G.** (2012) Particulate air pollution and cardiorespiratory hospital admissions in a temperate Australian city: A case-crossover analysis.
 - [87] Huang, C., **Barnett, A. G.**, Wang, X., and Tong, S. (2012) The impact of temperature on years of life lost in Brisbane, Australia. **Commentary by Prof Patrick Kinney.**
 - [88] **Barnett, A. G.**, Hajat, S., Gasparrini, A., and Rocklöv, J. (2012) Cold and heat waves in the United States.
 - [89] **Barnett, A. G.**, Huang, C., and Turner, L. (2012) Benefits of publicly available data (Research Letter).
 - [90] Lee, J. C., Fraser, J. F., **Barnett, A. G.**, et al. (2012) Effect of caffeine on adenosine-induced reversible perfusion defects assessed by automated analysis. **Featured in Editorial.**
 - [91] Graves, N. et al. (2012) Evaluating the Economics of the Australian national hand hygiene initiative.
 - [92] Tung, J.-P., Fraser, J. F., Nataatmadja, M., Colebourne, K. I., **Barnett, A. G.**, Glenister, K. M., Zhou, A. Y., Wood, P., Silliman, C. C., and Fung, Y. L. (2012) Age of blood and recipient factors determine the severity of transfusion-related acute lung injury (TRALI).
 - [93] Pukallus, M., Plonka, K., **Barnett, A. G.**, Holcombe, T., Walsh, L., and Seow, W. (2012) Mutans streptococci and lactobacilli colonisation in preterm children from the neonatal period to seven months of age.
 - [94] Turner, L. R., **Barnett, A. G.**, Connell, D., and Tong, S. (2012) Ambient temperature and cardiorespiratory morbidity: A systematic review and meta-analysis.
 - [95] **Barnett, A. G.**, Clements, A. C. A., and Vaneckova, P. (2012) Estimating the effects of environmental exposures using a weighted mean of monitoring stations.
 - [96] Rocklöv, J., **Barnett, A. G.**, and Woodward, A. (2012) On the estimation of heat-intensity and heat-duration effects in time series models of temperature-related mortality in Stockholm, Sweden.
 - [97] Shekar, K. et al. (2012) Increased sedation requirements in patients receiving extracorporeal life support for respiratory and cardio-respiratory failure.
 - [98] **Barnett, A.**, Baker, P., and Dobson, A. (2012) Analysing Seasonal Data.

- [99] Plonka, K. et al. (2012) Mutans Streptococci and lactobacilli colonization in preterm children from the neonatal period to seven months of age.
- [100] Huang, C., **Barnett, A. G.**, et al. (2012) Effects of extreme temperatures on years of life lost for cardiovascular deaths: a time series study in Brisbane, Australia.
- [101] de Abreu, D. A. F., Landel, V., **Barnett, A. G.**, McGrath, J., Eyles, D., and Feron, F. (2012) Prenatal vitamin D deficiency induces an early and more severe experimental autoimmune encephalomyelitis in the second generation.
- [102] Corley, A., Spooner, A., **Barnett, A. G.**, Caruana, L., Hammond, N., and Fraser, J. (2012) End-expiratory lung volume recovers more slowly after closed endotracheal suctioning than after open suctioning. A randomised crossover study.
- [103] Shekar, K., Roberts, J. A., McDonald, C. I., Fisquet, S., **Barnett, A. G.**, Mullany, D. V., Ghassabian, S., Fung, Y. L., Smith, M. T., and Fraser, J. F. (2012) Sequestration of drugs in the circuit may lead to therapeutic failure during extracorporeal membrane oxygenation.
- [104] Guo, Y., **Barnett, A. G.**, and Tong, S. (2012) High temperatures-related elderly mortality varied greatly from year to year: important information for heat-warning systems.
- [105] **Barnett, A. G.** (2012) Air Pollution Trends in four Australian cities.
- [106] Shekar, K. et al. (2012) ASAP ECMO: Antibiotic, sedative and Analgesic Pharmacokinetics during Extracorporeal Membrane Oxygenation: A multi-centre study to optimise drug therapy during ECMO.
- [107] Plonka, K., Pukallus, M., **Barnett, A. G.**, Holcombe, T., Walsh, L., and Seow, W. (2013) A longitudinal case-control study of caries development from birth to 36 months.
- [108] Plonka, K., Pukallus, M., **Barnett, A.**, Holcombe, T., Walsh, L., and Seow, W. (2013) A controlled, longitudinal study of home visits compared to telephone contacts to prevent early childhood caries.
- [109] Pukallus, M., Plonka, K., Holcombe, T., **Barnett, A. G.**, Walsh, L., and Seow, W. (2013) A Randomized Controlled Trial of a 10 percent CPP-ACP cream to reduce mutans streptococci colonization.
- [110] Pukallus, M., Plonka, K., **Barnett, A. G.**, Walsh, L., Holcombe, T., and Seow, W. (2013) A randomised, controlled clinical trial comparing chlorhexidine gel and low-dose fluoride toothpaste to prevent early childhood caries.
- [111] Hopstock, L. A., **Barnett, A. G.**, Bønaa, K. H., Mannsverk, J., Njølstad, I., and Wilsgaard, T. (2013) Seasonal variation in cardiovascular disease risk factors in a subarctic population - the Tromsø study 1979-2008.
- [112] Plonka, K., Pukallus, M., Holcombe, T., **Barnett, A. G.**, Walsh, L., and Seow, W. (2013) A randomized controlled clinical trial comparing a remineralizing paste with an antibacterial gel to prevent early childhood caries.
- [113] Paynter, S. et al. (2013) Sunshine, rainfall, humidity and child pneumonia in the tropics: time series analyses.
- [114] Guo, Y., **Barnett, A. G.**, and Tong, S. (2013) Spatiotemporal model or time series model for assessing city-wide temperature effects on mortality?
- [115] Guo, Y., Wang, Z., Li, S., Tong, S., and **Barnett, A. G.** (2013) Temperature Sensitivity in Indigenous Australians.
- [116] Graves, N., Page, K., Halton, K., and **Barnett, A. G.** (2013) Linking scientific evidence and decision-making: a case-study of hand hygiene interventions.
- [117] Huang, C., **Barnett, A. G.**, Xu, Z., Chu, C., Wang, X., Turner, L. R., and Tong, S. (2013) Managing the Health Effects of temperature in response to climate change: Challenges ahead. Featured in journal's Science Selection.
- [118] **Barnett, A. G.**, Lucas, M., Platts, D., Whiting, E., and Fraser, J. F. (2013) The benefits of thermal clothing during winter in patients with heart failure: a pilot randomised controlled

trial.

- [119] Hammond, N. E., Spooner, A., **Barnett, A. G.**, Corley, A., Brown, P., and Fraser, J. F. (2013) The effect of implementing a modified early warning scoring (MEWS) system on the adequacy of vital sign documentation.
- [120] Page, K., Graves, N., Halton, K., and **Barnett, A. G.** (2013) Humans, Things and Space: Costing hospital infection control interventions.
- [121] Pukallus, M., Plonka, K., Kularatna, S., Gordon, L., **Barnett, A. G.**, Walsh, L., and Seow, W. K. (2013) Cost-effectiveness of a telephone-delivered education program to prevent early childhood caries in a disadvantaged area.
- [122] Herbert, D., **Barnett, A. G.**, Graves, N., and Clarke, P. (2013) On the time spent preparing grant proposals: an observational study of Australian researchers.
- [123] Marshall, A. L., Miller, Y. D., Graves, N., **Barnett, A. G.**, and Fjeldsoe, B. S. (2013) Moving MobileMums forward: Protocol for a larger randomized controlled trial of an improved physical activity program for women with young children.
- [124] **Barnett, A. G.** et al. (2013) The increased risks of death and extra lengths of hospital and ICU stay from hospital-acquired bloodstream infections: a case-control study.
- [125] Tyack, Z., Frakes, K., Cornwell, P., Kuys, S., **Barnett, A. G.**, and McPhail, S. M. (2013) The health outcomes and costs of people attending an interdisciplinary chronic disease service in regional Australia: Protocol for a longitudinal cohort investigation.
- [126] Wardrop, N. A., **Barnett, A. G.**, Atkinson, J.-A., and Clements, A. C. A. (2013) Plasmodium vivax malaria incidence over time and its association with temperature and rainfall in four counties of Yunnan province, China.
- [127] Halton, K. A., Sarna, M., **Barnett, A. G.**, Leonardo, L., and Graves, N. (2013) A systematic review of community-based interventions for emerging zoonotic diseases in Southeast Asia.
- [128] Mitchell, B., Gardner, A., **Barnett, A. G.**, Hiller, J., and N, G. (2014) The prolongation of length of stay due to Clostridium difficile infection.
- [129] Spooner, A. et al. (2014) Head-of-Bed Elevation improves end-expiratory lung volumes in mechanically ventilated subjects: A prospective observational study.
- [130] Naidoo, R., Pearse, B., Tesar, P. J., ann Yap, S., **Barnett, A. G.**, and Fayers, T. (2014) Long-term outcomes following medtronic open pivot valved conduit.
- [131] Brightwell, R. E., **Barnett, A. G.**, and Walker, P. J. (2014) Changes in temperature affect the risk of abdominal aortic aneurysm rupture.
- [132] Wolkewitz, M., **Barnett, A. G.**, Palomar, M., Frank, U., Schumacher, M., and IMPLEMENT Study Group (2014) Interventions to control nosocomial infections: an overview of study designs and statistical issues.
- [133] **Barnett, A. G.** and Knibbs, L. (2014) Higher fuel prices are associated with lower air pollution levels.
- [134] Zheng, H., **Barnett, A. G.**, Merollini, K., Sutton, A., Cooper, N., Berendt, T., Wilson, J., and Graves, N. (2014) Control strategies to prevent total hip replacement-related infections: a systematic review and mixed treatment comparison.
- [135] Wolkewitz, M., Cooper, B. S., Palomar, M. M., Alvarez-Lerma, F., Olaechea-Astigarraga, P., **Barnett, A. G.**, Harbarth, S., and Schumacher, M. (2014) Multilevel competing risk models to evaluate the risk of nosocomial infection.
- [136] Herbert, D., Coveney, J., Clarke, P., Graves, N., and **Barnett, A. G.** (2014) The impact of funding deadlines on personal workloads, stress and family relationships: a qualitative study of Australian researchers.
- [137] Hondula, D. and **Barnett, A. G.** (2014) Heat-Related Morbidity in Brisbane, Australia: Spatial variation and area-level predictors.

- [138] **Barnett, A. G.**, et al. (2014) Changes in healthcare associated *Staphylococcus aureus* bloodstream infections after the introduction of a national hand hygiene initiative.
- [139] **Barnett, A. G.** (2014) It's safe to say there's no safe level of air pollution.
- [140] Wolkewitz, M., Cooper, B. S., Bonten, M. J. M., **Barnett, A. G.**, and Schumacher, M. (2014) Interpreting and comparing risks in the presence of competing events.
- [141] Fanning, J., et al. (2014) The silent and apparent neurological injury in transcatheter aortic valve implantation study (SANITY): concept, design and rationale.
- [142] Knibbs, L., Hewson, M., Bechle, M., Marshall, J., and **Barnett, A. G.** (2014) A national satellite-based land-use regression model for air pollution exposure assessment in Australia.
- [143] **Barnett, A. G.** Katie Page, Campbell, M., Brain, D., Martin, E., Winters, S., Hall, L., Paterson, D., and Graves, N. (2014) Changes in healthcare associated infections after the introduction of a national hand hygiene initiative.
- [144] Estensen, K., Shekar, K., Robins, E., McDonald, C., **Barnett, A. G.**, and Fraser, J. F. (2014) Macro- and micronutrient disposition in an ex vivo model of extracorporeal membrane oxygenation.
- [145] **Barnett, A. G.**, Herbert, D. L., Clarke, P., and Graves, N. (2014) The research lottery: the pressures on the Australian grant system.
- [146] **Barnett, A. G.** (2015) Turning temperature measures outside-in (research letter).
- [147] Huang, C., Chu, C., Wang, X., and **Barnett, A. G.** (2015) Unusually cold and dry winters increase mortality in Australia.
- [148] **Barnett, A. G.**, Graves, N., Clarke, P., and Herbert, D. (2015) The impact of a streamlined funding application process on application time: two cross-sectional surveys of Australian researchers.
- [149] Caruana, L., Paratz, J., Change, A., **Barnett, A. G.**, and Fraser, J. F. (2015) The time taken for the regional distribution of ventilation to stabilise: an investigation using electrical impedance tomography.
- [150] Correa-Velez, I., **Barnett, A. G.**, and Gifford, S. (2015) Working for a better life: Longitudinal evidence on the predictors of employment among recently arrived refugee migrant men living in Australia.
- [151] White, K. M., et al. (2015) Key beliefs of hospital nurses' hand hygiene decisions: protecting your peers and needing effective reminders.
- [152] Fjeldsoe, B. S., Miller, Y. D., Graves, N., **Barnett, A.**, and Marshall, A. L. (2015) Randomized controlled trial of an improved version of MobileMums, an intervention for increasing physical activity in women with young children.
- [153] White, K. M., et al. (2015) Using a theory of planned behaviour framework to explore hand hygiene beliefs at the '5 critical moments' among Australian hospital-based nurses.
- [154] **Barnett, A. G.**, Herbert, D. L., Campbell, M., Daly, N., Roberts, J. A., Mudge, A., and Graves, N. (2015) Streamlined research funding using short proposals and accelerated peer review: an observational study.
- [155] Burn, E., Marshall, A., Miller, Y., **Barnett, A. G.**, Fjeldsoe, B., and Graves, N. (2015) The cost-effectiveness of the *MobileMums* intervention to increase physical activity among mothers with young children: a Markov model informed by a randomised controlled trial.
- [156] Guo, Y. and **Barnett, A. G.** (2015) Invited commentary: Acute air pollution exposure and risk of suicide completion.
- [157] Keys, M., Sim, B. Z., Thom, O., Tunbridge, M. J., **Barnett, A. G.**, and Fraser, J. F. (2015) Efforts to Attenuate the Spread of Infection (EASI): a prospective, observational multicentre survey of ultrasound equipment in Australian emergency departments and intensive care units.
- [158] Corley, A., Bull, T., Spooner, A. J., **Barnett, A. G.**, and Fraser, J. F. (2015) Direct extubation onto high flow nasal cannulae post cardiac surgery versus standard treatment in

- patients with a BMI ≥ 30 : A randomised controlled trial.
- [159] Knibbs, L. D. and **Barnett, A. G.** (2015) Assessing environmental inequalities in ambient air pollution across urban Australia.
 - [160] Seow, K. et al. (2015) Relative cost-effectiveness of home visits and telephone contacts in preventing early childhood caries.
 - [161] Herbert, D., Graves, N., Clarke, P., and **Barnett, A. G.** (2015) Using simplified peer review processes to fund research: a prospective study.
 - [162] Russo, P. L., **Barnett, A. G.**, Cheng, A. C., Richards, M., Graves, N., and Hall, L. (2015) Differences in identifying healthcare associated infections using clinical vignettes and the influence of respondent characteristics: a cross-sectional survey of Australian infection prevention staff.
 - [163] Lazarevic, N., Dobson, A. J., **Barnett, A. G.**, and Knibbs, L. D. (2015) Long-term ambient air pollution exposure and self-reported morbidity in the Australian Longitudinal Study on Women's Health: a cross-sectional study.
 - [164] White, K., et al. (2015) Understanding the determinants of Australian hospital nurses' hand hygiene decisions following the implementation of a national hand hygiene initiative.
 - [165] Watts, R. P., Bilska, I., Diab, S., Dunster, K. R., Bulmer, A. C., **Barnett, A. G.**, and Fraser, J. F. (2015) Novel 24-hour ovine model of brain death to study the profile of the endothelin axis during cardiopulmonary injury.
 - [166] Shekar, K., Roberts, J. A., **Barnett, A. G.**, Diab, S., Wallis, S. C., Fung, Y. L., and Fraser, J. (2015) Can physicochemical properties of antimicrobials be used to predict their pharmacokinetics during extracorporeal membrane oxygenation: Illustrative data from ovine models.
 - [167] Aitken, L., Macfarlane, B., Chaboyer, W., Schuetz, M., Joyce, C., and **Barnett, A. G.** (2016) Physical function and mental health in trauma intensive care patients: a 2 year cohort study.
 - [168] Clarke, P., Herbert, D., Graves, N., and **Barnett, A. G.** (2016) A randomized trial of fellowships for early career researchers finds a high reliability in funding decisions.
 - [169] Jimmieson, N., Tucker, M., White, K., Liao, J., Campbell, M., Brain, D., Page, K., **Barnett, A. G.**, and Graves, N. (2016) The role of time pressure and different psychological safety climate referents in the prediction of nurses' hand hygiene compliance.
 - [170] Cheng, Q., Greenslade, J. H., Parsonage, W. A., **Barnett, A. G.**, Merollini, K., Graves, N., Peacock, W. F., and Cullen, L. (2016) Change to costs and lengths of stay in the emergency department and the Brisbane protocol: an observational study.
 - [171] Bellapart, J., et al. (2016) Cerebral microcirculation during experimental normovolaemic anaemia.
 - [172] Graves, N. et al. (2016) Cost-effectiveness of a national initiative to improve hand hygiene compliance using the outcome of reduced healthcare associated staphylococcus aureus bacteraemia.
 - [173] Mitchell, B., Ferguson, J., Anderson, M., J. Seara, A., and **Barnett, A. G.** (2016) Length of stay and mortality associated with healthcare-associated urinary tract infections: a multistate model.
 - [174] Stephen, D. and **Barnett, A. G.** (2016) The effect of temperature and precipitation on salmonellosis cases in South-East Queensland, Australia: An observational study.
 - [175] Guo, Y., Zeng, H., Zheng, R., Li, S., **Barnett, A. G.**, Zhang, S., Zou, X., Huxley, R., Chen, W., and Williams, G. (2016) The association between lung cancer incidence and ambient air pollution in China: A spatiotemporal analysis.
 - [176] Hall, L., et al. (2016) Researching effective approaches to cleaning in hospitals: protocol of the REACH study, a multi-site stepped-wedge randomised trial.

- [177] Tyack, Z., anne Frakes, K., **Barnett, A. G.**, Cornwell, P., Kuys, S., and McPhail, S. (2016) Predictors of health-related quality of life in people with a complex chronic disease including multimorbidity: a longitudinal cohort study.
- [178] Imai, C., **Barnett, A. G.**, Hashizume, M., and Honda, Y. (2016) The Role of Influenza in the delay between low temperature and ischemic heart disease: Evidence from simulation and mortality data from Japan.
- [179] Seow, W. K., Leishman, S. J., Palmer, J., Walsh, L. J., Pukallus, M., and **Barnett, A. G.** (2016) A longitudinal observational study of developmental defects of enamel from birth to 6 years of age.
- [180] Bellapart, J., et al. (2016) Cerebral microcirculation during mild head injury after a contusion and acceleration experimental model in sheep.
- [181] McDonald, C., Fraser, J., Shekar, K., Clarke, A., Coombes, J., **Barnett, A. G.**, Pearse, B., and Fung, Y. L. (2016) Low pre-operative selenium is associated with post-operative atrial fibrillation in patients having intermediate risk coronary artery surgery.
- [182] Wolkewitz, M., Cooper, B., Palomar-Martinez, M., Alvarez-Lerma, F., Olachea-Astigarraga, P., **Barnett, A. G.**, and Schumacher, M. (2016) Multiple time scales in modeling the incidence of potentially transmission-associated infections in hospitals.
- [183] Rowhani-Farid, A. and **Barnett, A. G.** (2016) Has open data arrived at the British Medical Journal (BMJ)? an observational study. Data available here.
- [184] Herbert, D. L., **Barnett, A. G.**, White, R., Novak, I., and Badawi, N. (2016) Funding for cerebral palsy research in Australia, 2000 to 2015: an observational study.
- [185] **Barnett, A. G.**, Campbell, M. J., Shield, C., Farrington, A., Hall, L., Page, K., Gardner, A., Mitchell, B. G., and Graves, N. (2016) The high costs of getting ethical and site specific approvals for multi-centre research.
- [186] Knight, A., Schilling, C., **Barnett, A. G.**, Jackson, R., and Clarke, P. (2016) Revisiting the Christmas holiday effect in the southern hemisphere.
- [187] Wang, Q. et al. (2017) Environmental ambient temperature and blood pressure in adults: A systematic review and meta-analysis.
- [188] Green, D., Pitman, A., **Barnett, A. G.**, Kaldor, J., Doherty, P., and Stanley, F. (2017) Advancing Australia's role in climate change and health research.
- [189] **Barnett, A. G.**, Stephen, D., Huang, C., and Wolkewitz, M. (2017) Time series models of environmental exposures: good predictions or good understanding.
- [190] Page, K., **Barnett, A. G.**, and Graves, N. (2017) What is a hospital bed day worth? A contingent valuation study of hospital chief executive officers.
- [191] Doran, M. R., **Barnett, A. G.**, Leach, J., Lott, W. B., Page, K., and Grant, W. (2017) Can video improve grant review quality and lead to more reliable ranking?
- [192] Strand, L., Clarke, P., Graves, N., and **Barnett, A. G.** (2017) Time to publication for publicly funded clinical trials in Australia: An observational study.
- [193] Marsden, E., Taylor, A., M, W., et al. (2017) A structure, process and outcome evaluation of the Geriatric Emergency Department Intervention model of care: a study protocol.
- [194] Caruana, L., Paratz, J., Change, A., **Barnett, A. G.**, and Fraser, J. F. (2017) Global tidal variations, regional distribution of ventilation, and the regional onset of filling determined by electrical impedance tomography: reproducibility.
- [195] Rowhani-Farid, A., Allen, M., and **Barnett, A. G.** (2017) What incentives increase data sharing in health and medical research? A systematic review.
- [196] Stephen, D. and **Barnett, A. G.** (2017) Using microsimulation to estimate the future health and economic costs of salmonellosis under climate change in Central Queensland, Australia.
- [197] **Barnett, A. G.**, Clarke, P., Vaquette, C., and Graves, N. (2017) Using democracy to

- award research funding: an observational study.
- [198] Carter, H. et al. (2017) The incidence, duration and cost of futile treatment in end-of-life hospital admissions to three Australian public-sector tertiary hospitals. a retrospective multi-centre cohort study.
 - [199] **Barnett, A. G.**, McElwee, P., Nathan, A., Burton, N. W., and Turrell, G. (2017) Identifying patterns of item missing survey data using latent groups: an observational study.
 - [200] Mitchell, B. et al. (2017) Variation in hospital cleaning practice and process in Australian hospitals: a structured mapping exercise.
 - [201] Nickels, M., Aitken, L. M., Walsham, J., **Barnett, A. G.**, and McPhail, S. M. (2017) Critical Care Cycling Study (CYCLIST) trial protocol: a randomised controlled trial of usual care versus usual care plus additional in-bed cycling sessions in the critically ill.
 - [202] **Barnett, A. G.**, Stewart, I., Beevers, A., Fraser, J. F., and Platts, D. (2017) Thermal clothing to reduce heart failure morbidity during winter: a randomised controlled trial.
 - [203] Hanigan, I. C., et al. (2017) Blending Multiple Nitrogen Dioxide data sources for neighborhood estimates of long-term exposure for health research.
 - [204] Coveney, J., Herbert, D. L., Hill, K., Mow, K. E., Graves, N., and **Barnett, A. G.** (2017) "Are you siding with a personality or the grant proposal?": observations on how peer review panels function.
 - [205] Nghiem, S., Graves, N., **Barnett, A. G.**, and Haden, C. (2017) Cost-effectiveness of National Health Insurance programs in high-income countries: A systematic review.
 - [206] Mudge, A. M. et al. (2017) CHERISH (collaboration for hospitalised elders reducing the impact of stays in hospital): protocol for a multi-site improvement program to reduce geriatric syndromes in older inpatients.
 - [207] Corley, A., Rickard, C., Aitken, L., Johnston, A., **Barnett, A. G.**, and Fraser, J. (2017) High flow nasal cannulae for respiratory support in adult intensive care patients.
 - [208] Brain, D., Yakob, L., **Barnett, A. G.**, Riley, T., Clements, A., Halton, K., and Graves, N. (2018) Economic evaluation of interventions designed to reduced clostridium difficile infection.
 - [209] Wozniak, T., Graves, N., and **Barnett, A. G.** (2018) How much do superbugs cost Australian hospitals? an evidence-based open-access tool.
 - [210] Brain, D., **Barnett, A. G.**, Yakob, L., Clements, A., Riley, T. V., Halton, K., and Graves, N. (2018) Reducing length of stay to improve Clostridium difficile-related health outcomes.
 - [211] Dhanani, J. et al. (2018) Strategies to reduce inappropriate laboratory blood test orders in intensive care are effective and safe: a before-and-after quality improvement study.
 - [212] Zardo, P., **Barnett, A. G.**, Suzor, N., and Cahill, T. (2018) Does engagement predict research use? An analysis of The Conversation Australia annual survey 2016.
 - [213] Knibbs, L., Coorey, C., Bechle, M., Marshall, J., Hewson, M., Jalaludin, B., Morgan, G., and **Barnett, A. G.** (2018) Long-term nitrogen dioxide exposure assessment using back-extrapolation of satellite-based land-use regression models for Australia.
 - [214] Fanning, J. P., Hoe, L. E. S., Passmore, M. R., **Barnett, A. G.**, Rolfe, B. E., Millar, J. E., Wesley, A. J., Suen, J., and Fraser, J. F. (2018) Differential immunological profiles herald MRI-defined perioperative cerebral infarction.
 - [215] Nghiem, S., Vu, X.-B., and **Barnett, A.** (2018) Trends and determinants of weight gains among OECD countries: An ecological study.
 - [216] Rowhani-Farid, A. and **Barnett, A. G.** (2018) Badges for sharing data and code at Biostatistics: an observational study.
 - [217] Meloncelli, N., Jersey, S. D., Pelly, F., and **Barnett, A. G.** (2018) Diagnosis and management practices for gestational diabetes mellitus in Australia: cross-sectional survey of the multidisciplinary team.
 - [218] **Barnett, A. G.**, Zardo, P., and Graves, N. (2018) Randomly auditing research labs could

be an affordable way to improve research quality: a simulation study.

- [219] **Barnett, A. G.** (2018) Missing the point: are journals using the ideal number of decimal places? [version 3; peer review: 2 approved].
- [220] Bellapart, J., Cuthbertson, K., et al. (2018) Cerebral Microcirculation and histological mapping after severe head injury: a contusion and acceleration experimental model.
- [221] Dhanani, J. et al. (2018) Characterisation of 40 mg/ml and 100 mg/ml tobramycin formulations for aerosol therapy with adult mechanical ventilation.
- [222] Sheng, R. et al. (2018) Effect of traffic legislation on road traffic deaths in Ningbo, China.
- [223] Prosser, S. J., **Barnett, A. G.**, and Miller, Y. D. (2018) Factors Promoting or Inhibiting normal birth.
- [224] He, Y., Zhang, X., Ren, M., Bao, J., Huang, C., Hajat, S., and **Barnett, A. G.** (2018) Assessing effect modification of excess winter death by causes of death and individual characteristics in Zhejiang Province, China: a multi-community case-only analysis.
- [225] McCreanor, V., Graves, N., **Barnett, A. G.**, et al. (2018) A systematic review and critical analysis of cost-effectiveness studies for coronary artery disease treatment [version 2; referees: 2 approved].
- [226] Swierkowski, P. and **Barnett, A. G.** (2018) Identification of hospital cost drivers using sparse group lasso.
- [227] Mudge, A. et al. (2018) Hospital-associated complications of older people: a proposed multi-component outcome for acute care.
- [228] **Barnett, A. G.**, Glisson, S., and Gallo, S. (2018) Do funding applications where peer reviewers disagree have higher citations? A cross-sectional study [version 1; referees: 2 approved].
- [229] Fanning, J. P., Hoe, L. E. S., Passmore, M. R., **Barnett, A. G.**, Obonyo, N. G., Millar, J. E., Wesley, A. J., Suen, J. Y., and Fraser, J. F. (2018) Neuron Specific Enolase and matrix metalloproteinase 9 signal perioperative silent brain infarction during or after transcatheter aortic valve implantation.
- [230] Varghese, B., **Barnett, A. G.**, et al. (2019) The effects of ambient temperatures on the risk of work-related injuries and illnesses: Evidence from Adelaide, Australia 2003–2013.
- [231] Wallis, M. et al. (2018) The Geriatric Emergency Department intervention model of care: a pragmatic trial.
- [232] Varghese, B., **Barnett, A. G.**, et al. (2018) Characterising the impact of heatwaves on work-related injuries and illnesses in three Australian cities using a standard heatwave definition- excess heat factor.
- [233] Linnane, M. et al. (2019) A comparison of the effects of manual hyperinflation and ventilator hyperinflation on restoring end-expiratory lung volume after endotracheal suctioning: a pilot physiologic study.
- [234] Lazarevic, N. et al. (2019) Statistical methodology in studies of prenatal exposure to mixtures of endocrine-disrupting chemicals: a review of existing approaches and new alternatives.
- [235] Dean, A. et al. (2019) Beyond the ‘extinction of experience’: novel pathways between nature experience and support for nature conservation.
- [236] Mitchell, B., Hall, L., White, N., **Barnett, A. G.**, et al. (2019) An environmental cleaning bundle to reduce healthcare-associated infection rates in hospitals: a randomized clinical trial.
- [237] Asumadu-Sakyi, A. B. et al. (2019) The relationship between indoor and outdoor temperature in warm and cool seasons in houses in Brisbane, Australia.
- [238] Sewell, L. and **Barnett, A. G.** (2019) The impact of caring for children on women’s research output: a retrospective cohort study.
- [239] White, N. and **Barnett, A. G.** (2019) Analysis of multi-site intervention studies using

generalized linear mixed models.

- [240] **Barnett, A. G.** and Moher, D. (2019) Turning the tables: A university league-table based on quality not quantity [version 2; peer review: 2 approved].
- [241] Asumadu-Sakyi, A. B. et al. (2019) Seasonal temperature patterns and durations of acceptable temperature range in houses in Brisbane, Australia.
- [242] Varghese, B. M., **Barnett, A. G.**, et al. (2019) Geographical variation in risk of work-related injuries and illnesses associated with ambient temperatures: A multi-city case-crossover study in Australia, 2005–2016.
- [243] Meloncelli, N., Jersey, S. D., and **Barnett, A. G.** (2019) Staff resourcing, guideline implementation and models of care for gestational diabetes mellitus management.
- [244] Nickels, M. et al. (2019) Exercise interventions are delayed in critically ill patients: a historical cohort study in an Australian tertiary intensive care unit.
- [245] White, N. M., et al. (2019) Cost-effectiveness of an environmental cleaning bundle for reducing healthcare associated infections.
- [246] McCreanor, V. et al. (2019) Pharmaceutical use and costs in patients with coronary artery disease, using Australian observational data.
- [247] Lee, K. J., Moreno-Betancur, M., Kasza, J., Marschner, I. C., **Barnett, A. G.**, and Carlin, J. B. (2019) Biostatistics: a fundamental discipline at the core of modern health data science.
- [248] **Barnett, A. G.**, Mewburn, I., and Schroter, S. (2019) Working 9 to 5: not the way to make an academic living? An observational analysis of manuscript and peer reviewer submissions over time.
- [249] **Barnett, A. G.** and Wren, J. D. (2019) An examination of confidence intervals in health and medical journals from 1976 to 2019: an observational study.
- [250] Marsden, E., Taylor, A., M, W., et al. (2020) Effect of the Geriatric Emergency Department intervention on outcomes of care for residents of aged care facilities: A non-randomised trial.
- [251] Clarke, P., Buckell, J., and **Barnett, A.** (2020) Registered Reports: Time to radically rethink peer review in health economics.
- [252] Liu, M., Choy, V., Clarke, P., **Barnett, A. G.**, Blakely, T., and Pomeroy, L. (2020) The acceptability of using a lottery to allocate research funding: A survey of applicants.
- [253] Varghese, B. et al. (2020) Heat-related injuries in Australian workplaces: perspectives from health and safety representatives.
- [254] Meloncelli, N., **Barnett, A. G.**, D’Emden, M., and Jersey, S. J. D. (2020) Effects of Changing Diagnostic Criteria for gestational diabetes mellitus in Queensland, Australia.
- [255] Varghese, B. M. et al. (2020) Determinants of heat-related injuries in Australian workplaces: perceptions of health and safety professionals.
- [256] Nickels, M. et al. (2020) Acceptability, safety and feasibility of in-bed cycling with critically ill patients.
- [257] Rowhani-Farid, A., Aldcroft, A., and **Barnett, A. G.** (2020) Did awarding badges increase data sharing in BMJ Open? A randomized controlled trial.
- [258] Sutt, A.-L. et al. (2020) Earlier tracheostomy is associated with an earlier return to walking, talking and eating.
- [259] Brain, D. et al. (2020) Protocol for a randomised trial testing a community fibrosis assessment service for patients with suspected non-alcoholic fatty liver disease: LOCAL Assessment and Triage Evaluation of Non-Alcoholic Fatty Liver Disease (LOCATE-NAFLD).
- [260] Clarke, P. et al. (2020) Group testing for SARS-CoV-2: Forward to the past?
- [261] Senanayake, S., **Barnett, A. G.**, Graves, N., Healy, H., Baboolal, K., and Kularatna, S. (2020) Using machine learning techniques to develop risk prediction models to predict graft failure following kidney transplantation: protocol for a retrospective cohort study.
- [262] Nickels, M. et al. (2020) Effect of In-bed Cycling on acute muscle wasting in critically ill

- adults: A randomised clinical trial.
- [263] Lazarevic, N. et al. (2020) Performance of variable and function selection methods for estimating the non-linear health effects of correlated chemical mixtures: a simulation study.
 - [264] Wolkewitz, M., Lambert, J., von Cube, M., Bugiera, L., Grodd, M., Hazard, D., White, N., **Barnett, A. G.**, and Kaier, K. (2020) Statistical Analysis of Clinical COVID-19 Data: A concise overview of lessons learned, common errors and how to avoid them.
 - [265] **Barnett, A. G.** and Doubleday, Z. (2020) Meta-Research: The growth of acronyms in the scientific literature.
 - [266] Lee, X., Farrington, A., Carter, H., et al. (2020) A stepped-wedge randomised-controlled trial assessing the implementation, impact and costs of a prospective feedback loop to promote appropriate care and treatment for older patients in acute hospitals at the end of life: study protocol.
 - [267] Turrell, G. et al. (2020) Cohort Profile: HABITAT – a longitudinal multilevel study of physical activity, sedentary behaviour and health and functioning in mid-to-late adulthood.
 - [268] Roope, L. S. J. et al. (2020) How should an effective COVID-19 vaccine be allocated? Health economists need to be ready to take the baton.
 - [269] Senanayake, S. et al. (2020) Deceased donor kidney allocation: an economic evaluation of contemporary longevity matching practices.
 - [270] **Barnett, A. G.** (2020) How scrambling your data can help you think more clearly.
 - [271] **Barnett, A. G.** (2020) [Rp] Estimating trends and seasonality in coronary heart disease.
 - [272] Cai, Y., Lo, J. J.-M., Venkatachalam, I., Kwa, A. L., Tambyah, P. A., Hsu, L. Y., **Barnett, A. G.**, Marimuthu, K., and Graves, N. (2020) The impact of healthcare associated infections on mortality and length of stay in Singapore—a time-varying analysis.
 - [273] Scott, A., Chalmers, I., **Barnett, A. G.**, Stephens, A., Kolstoe, S. E., Clark, J., and Glasziou, P. (2021) “The ethics approval took 20 months on a trial which was meant to help terminally ill cancer patients. In the end we had to send the funding back”: a survey of views on human research ethics reviews.
 - [274] **Barnett, A. G.** (2021) Facebook epidemiology in place of textbook epidemiology.
 - [275] McCreanor, V. et al. (2021) Cost-effectiveness analysis of percutaneous coronary intervention for single vessel coronary artery disease: An economic evaluation of the ORBITA trial.
 - [276] Doran, M., Lott, W., **Barnett, A. G.**, Leach, J., and Ioannidis, J. (2021) The future of grant proposals is video.
 - [277] Senanayake, S., Graves, N., Healy, H., Baboolal, K., **Barnett, A. G.**, and Kularatna, S. (2021) Time-to-event analysis in economic evaluations: A comparison of modelling methods to assess the cost-effectiveness of transplanting a marginal quality kidney.
 - [278] Clarke, P. M., Roope, L. S. J., Loewen, P. J., Bonnefon, J.-F., Melegaro, A., Friedman, J., Violato, M., , **Barnett, A. G.**, and Duch, R. (2021) Public opinion on global rollout of COVID-19 vaccines.
 - [279] **Barnett, A. G.** and Doubleday, Z. (2021) Demonstrating the ascendancy of COVID-19 research using acronyms.
 - [280] Diong, J., Kroeger, C., Reynolds, K., **Barnett, A. G.**, and Bero, L. (2021) Strengthening the incentives for responsible research practices in Australian health and medical research funding.
 - [281] Senanayake, S., **Barnett, A. G.**, Graves, N., Healy, H., Baboolal, K., and Kularatna, S. (2021) Development and validation of a risk index to predict kidney graft survival: the kidney transplant risk index.
 - [282] Cho, S.-M., et al. (2021) Ischemic and Hemorrhagic Stroke Among Critically Ill Patients With Coronavirus Disease 2019.

- [283] Duch, R. et al. (2021) Citizens from 13 countries share similar preferences for COVID-19 vaccine allocation priorities.
- [284] Wildi, K., LiBassi, G., **Barnett, A. G.**, et al. (2021) Design and rationale of a prospective international follow-up study on intensive care survivors of COVID-19: The long-term impact in intensive care survivors of coronavirus disease-19 -AFTERCOR.
- [285] Scott, A., Bryant, E., Byrne, J., Taylor, N., and **Barnett, A. G.** (2021) “No country bureaucratised its way to excellence”: a content analysis of comments on a petition to streamline Australian research ethics and governance processes.
- [286] Mudge, A. M., et al. (2022) Effect of a Ward-Based Program on Hospital-Associated complications and length of stay for older inpatients: The cluster randomized CHERISH trial.
- [287] **Barnett, A. G.** and Glasziou, P. (2021) Target and actual sample sizes for studies from two trial registries from 1999 to 2020: an observational study.
- [288] Lazarevic, N. et al. (2021) Prenatal exposure to mixtures of persistent environmental chemicals and fetal growth outcomes in Western Australia.
- [289] Flaws, D., **Barnett, A. G.**, et al. (2022) A Protocol for Tracking Outcomes post intensive care.
- [290] Zaaqoq, A. M., et al. (2022) Beneficial Effect of Prone Positioning during venovenous extracorporeal membrane oxygenation for coronavirus disease 2019.
- [291] Roope, L. S. J., **Barnett, A. G.**, Candio, P., Violato, M., Duch, R., and Clarke, P. M. (2022) Is there broad-based support in high-income countries for COVID-19 vaccine donation? Evidence from seven countries.
- [292] McCreanor, V., Lum, E., Graves, N., Luo, N., Parsonage, W., and **Barnett, A. G.** (2022) Reducing waste in collection of quality-of-life data through better reporting: a case study.
- [293] Blythe, R. et al. (2022) A Bayesian approach for incorporating the EQ-5D visual analogue scale when estimating health-related quality of life.
- [294] White, N. M., Balasubramaniam, T., Nayak, R., and **Barnett, A. G.** (2022) An observational analysis of the trope “a p-value of < 0.05 was considered statistically significant” and other cut-and-paste statistical methods.
- [295] Urner, M. et al. (2022) Venovenous Extracorporeal Membrane Oxygenation in patients with acute respiratory failure from COVID-19: A comparative effectiveness study.
- [296] **Barnett, A. G.**, Page, K., Dyer, C., and Cramb, S. (2022) Meta-research: Justifying career disruption in funding applications, a survey of Australian researchers.
- [297] Marsden, E., Craswell, A., Taylor, A., **Barnett, A. G.**, Wong, P.-K., and Wallis, M. (2022) Translation of the geriatric emergency department intervention into other emergency departments: a post implementation evaluation of outcomes for older adults.
- [298] Visvalingam, R., Ridley, E., **Barnett, A. G.**, Rahman, T., and Fraser, J. F. (2022) Nutrition adequacy, gastrointestinal and hepatic function during extracorporeal membrane oxygenation in critically ill adults: a retrospective observational study.
- [299] Clarke, P., Tran-Duy, A., Roope, L. S. J., Stiles, J. A., and **Barnett, A. G.** (2022) The comparative mortality of an elite group in the long run of history: an observational analysis of politicians from 11 countries.
- [300] Shipton, E., Meloncelli, N., D’Emden, M., McIntyre, H. D., Callaway, L., **Barnett, A. G.**, and de Jersey, S. (2023) Gestational diabetes screening from the perspective of consumers: Insights from early in the COVID-19 pandemic and opportunities to optimise experiences.
- [301] McGee, R., Graves, L., and **Barnett, A. G.** (2022) Timing Of Submissions to The Journal of Paediatrics and Child Health: Associations with the COVID-19 pandemic and editorial decisions.
- [302] Graves, N., **Barnett, A. G.**, Burn, E., and Cook, D. (2018) Smaller clinical trials for decision making; a case study to show p-values are costly.

- [303] Brown, C., et al. (2022) Impact of a prospective feedback loop on care review activities in older patients at the end of life. A stepped-wedge randomised trial.
- [304] Schulz, R., et al. (2022) Is the future of peer review automated?
- [305] **Barnett, A. G.** and Gadd, E. (2022) University league tables have no legs to stand on.
- [306] Borg, D. N., **Barnett, A. G.**, Caldwell, A. R., White, N. M., and Stewart, I. B. (2023) The bias for statistical significance in sport and exercise medicine.
- [307] Parsons, R., Blythe, R. D., **Barnett, A. G.**, Cramb, S. M., and McPhail, S. M. (2023) predictNMB: An R package to estimate if or when a clinical prediction model is worthwhile.
- [308] Blythe, R., Parsons, R., **Barnett, A. G.**, McPhail, S. M., and White, N. M. (2023) Vital signs-based deterioration prediction model assumptions can lead to losses in prediction performance.
- [309] **Barnett, A. G.** (2023) Automated detection of over- and under-dispersion in baseline tables in randomised controlled trials.
- [310] Kaltenbrunner, W., Waltman, L., **Barnett, A. G.**, Byrne, J., Chin, J. M., Holcombe, A., Pinfield, S., Vazire, S., and Wilsdon, J. (2023) MetaROR – a new form of scholarly publishing and peer review for STS.
- [311] **Barnett, A. G.**, Borg, D. N., Glasziou, P., and Beckett, E. (2023) Is requiring Research Integrity Advisors a useful policy for improving research integrity? A census of advisors in Australia.
- [312] Duch, R., et al. (2023) Financial incentives for COVID-19 vaccines in a rural low-resource setting: a cluster-randomized trial.
- [313] Hunter, K. E., et al. (2023) Responsibilities for receiving and using individual participant data.
- [314] **Barnett, A. G.** and White, N. (2024) Something is off-base with this title: P esteems, statical significance and more slapdash stats.
- [315] Bracci, E. L., et al. (2024) Process evaluation of a tailored nudge intervention to promote appropriate care and treatment of older patients at the end-of-life.
- [316] Borg, D. N., et al. (2024) Meta-analysis prediction intervals are under reported in sport and exercise medicine.
- [317] Senanayake, S., **Barnett, A.**, Brain, D., Allen, M., Powell, E., O’Beirne, J., Valery, P., Hickman, I., and Kularatna, S. (2024) A discrete choice experiment to elicit preferences for a chronic disease screening programme in Queensland, Australia.
- [318] White, N., Parsons, R., Borg, D., Collins, G., and **Barnett, A. G.** (2024) Planned but ever published? a retrospective analysis of clinical prediction model studies registered on clinicaltrials.gov since 2000.
- [319] White, N. M., et al. (2024) Impact of a prospective feedback loop aimed at reducing non-beneficial treatments in older people admitted to hospital and potentially nearing the end of life. a cluster stepped-wedge randomised controlled trial.

Selected editorials and letters

- [1] **Barnett, A. G.**, Graves, N., Cooper, B. S., Batra, R., and Edgeworth, J. (2008) Hospitals are dangerous places (Christmas issue).
- [2] **Barnett, A.** (2008) Reduction in measurement error confounds cumulative pollution exposure.
- [3] **Barnett, A.**, Tong, S., and Clements, A. C. A. (2010) Time series analysis on the health effects of temperature: two areas for future research.

- [4] Graves, N., **Barnett, A. G.**, and Clarke, P. (2011) Cutting random funding decisions. **Invited letter**, %.
- [5] Graves, N. and **Barnett, A. G.** (2011) Administrative burdens: Bureaucracy savings should go to research.
- [6] **Barnett, A. G.** (2012) Fast food drive-through staff may be exposed to dangerous levels of exhaust fumes.
- [7] Herbert, D. L., **Barnett, A. G.**, and Graves, N. (2013) Funding: Australia's grant system wastes time.
- [8] **Barnett, A. G.**, Campbell, M., and Burns, C. (2016) Research funding for telemedicine: An Australian perspective.
- [9] Bespalov, A., **Barnett, A. G.**, and Begley, C. G. (2018) Industry is more alarmed about reproducibility than academia.
- [10] **Barnett, A.** and Byrne, J. (2023) Retract or be damned: the "bystander effect" is worsening the situation.

Blogs/Other

- [1] **Barnett, A. G.** (2011) Counting the ways vehicle emissions (still) make us sick.
- [2] Graves, N., **Barnett, A. G.**, and Clarke, P. (2011) Fingers crossed: the role of randomness in medical research funding.
- [3] Graves, N., **Barnett, A. G.**, and Clarke, P. (2012) Submission to the strategic review of health and medical research. <http://www.mckeenreview.org.au>, %, **Invited to meet with panel for a private stakeholder meeting**.
- [4] **Barnett, A. G.** (2012) Why petrol bowsers deserve the same treatment as cigarette packs.
- [5] **Barnett, A. G.**, Graves, N., and Rocklöv, J. (2012) Creating a stink about traffic pollution.
- [6] **Barnett, A. G.**, Rocklöv, J., Hajat, S., and Fraser, J. (2012) Changes in the susceptible pool and its impact on patterns in cardiovascular mortality.
- [7] Graves, N., **Barnett, A. G.**, and Clarke, P. (2013) Reform Australian universities by cutting their bureaucracies.
- [8] **Barnett, A.** (2013) Opinion: Air pollution produces postcode lottery.
- [9] **Barnett, A. G.**, Herbert, D., and Graves, N. (2013) The end of written grant applications: let's use a formula.
- [10] **Barnett, A. G.** and Herbert, D. (2014) The personal cost of applying for research grants.
- [11] Clarke, P., **Barnett, A. G.**, Herbert, D., and Graves, N. (2014) Better ways to spend the medical research future fund.
- [12] **Barnett, A. G.** (2014) Dirty air, dodgy politics: why it's easier to attack science than listen to morwell fire death stats.
- [13] **Barnett, A. G.** (2014) Applying for funding is the worst part of my job.
- [14] **Barnett, A. G.** and Knibbs, L. (2015) Diesel fumes and your health: VW cover-up shows we need to test local cars.
- [15] **Barnett, A. G.** (2015) Reducing grant application numbers: The shame stick or prize carrot?
- [16] **Barnett, A. G.** (2015) When should I quit research? an evidence-based approach.
- [17] **Barnett, A. G.** (2015) Cold weather is a bigger killer than extreme heat: here's why.
- [18] **Barnett, A. G.** (2015) The NHMRC have an unhealthy obsession with appearances.
- [19] **Barnett, A. G.** (2016) Could the review of the NHMRC's grant programme save centuries of researchers' time?
- [20] **Barnett, A. G.** (2016) A change to judging career disruption.
- [21] **Barnett, A. G.** (2016) Improving peer review using peer-reviewed studies #PeerRevWk16.

- [22] **Barnett, A. G.** (2016) Research needs less ‘excellence’, more competence.
- [23] **Barnett, A. G.** (2016) It’s time to break ranks on university assessment.
- [24] **Barnett, A. G.** (2016) I made my grant application public, here’s why you should too.
- [25] **Barnett, A. G.** (2017) Success is just a bolt from the blue.
- [26] **Barnett, A. G.** (2017) The unethical waste of research dollars.
- [27] **Barnett, A. G.** (2017) Australian funding agency turns a blind eye to evidence.
- [28] **Barnett, A. G.** (2017) Regression to the mean: or why perfection rarely lasts.
- [29] **Barnett, A. G.** (2017) 77 clinical trials, \$29 million and 8 years but still no published results.
- [30] **Barnett, A. G.** (2017) Reading between the lines on citation value.
- [31] **Barnett, A. G.** (2017) Beneficiaries by ballot: Should research funding be allocated through voting?
- [32] **Barnett, A. G.** (2018) Random audits could shift the incentive for researchers from quantity to quality.
- [33] **Barnett, A. G.** and Sisson, S. (2018) A survey needs to involve how many people before I’m convinced.
- [34] **Barnett, A. G.** and Sisson, S. (2018) Could Australia win, really? The science of predicting the World Cup champion.
- [35] **Barnett, A. G.** (2018) An idea to promote research integrity: adding badges to papers where the authors fought against the results being suppressed or sanitised.
- [36] **Barnett, A. G.** (2019) The careers of carers: A numerical adjustment cannot level the playing field for researchers who take time off to care for children.
- [37] **Barnett, A. G.** and Sisson, S. (2019) Here’s how to make opinion polls more representative and hones.
- [38] **Barnett, A. G.** (2019) A call for a national inquiry into the burden of research ethics and governance.
- [39] Clarke, P., Roope, L., **Barnett, A. G.**, and Adler, A. (2020) An exit strategy for relaxing physical distancing measures to prevent the spread of SARS-CoV-2.
- [40] Page, L. and **Barnett, A. G.** (2022) Research funding is broken. using a lottery approach could fix it.

2.2 Book details

I have co-authored two statistical books with Prof Annette Dobson.

- An Introduction to Generalized Linear Models
 - ★ 5,700 citations (Google scholar)
 - ★ 4th edition published in 2018
 - ★ Review by Erica E. M. Moodie (McGill University) in the *Journal of Biopharmaceutical Statistics*, “This book is an excellent resource, either as an introduction to or a reminder of the technical aspects of generalized linear models, and it provides a wealth of simple yet useful examples and datasets.”
 - ★ Recommended reading for “Applied Statistics” MAN414 (Coordinator Dr Helen Thompson); rated 5/5 in LEX, semester 2, 2009
 - ★ Rated 4.6 out of 5 on Amazon.com based on 8 customer reviews; customer comment: “the most clearly written book on the topic”
 - ★ Suggested further reading on *Wikipedia* page “Generalized Linear Models”
 - ★ Has *R* package containing all the data sets “dobson”. Over 31,000 downloads (Jan 2022).
- Analysing Seasonal Health Data

- ★ 233 citations (Google scholar)
- ★ The first book to explain how to analyse seasonal data for a medical audience
- ★ Contains many new methods for uncovering seasonal patterns
- ★ Has an associated *R* software package season written with Dr Peter Baker (UQ). Over 49,000 downloads (Oct 2021).
- ★ Featured in news items in the Daily Telegraph, South African Sports Radio and ABC 612
- ★ Review by M. C. Borja in *Significance*, “A useful book on an important subject and I would recommend it to anybody interested in the analysis of seasonal data”

2.3 Research funding

Successful chief investigator grants (total funds = \$17.5 million)

- National Environment Protection Council “Expansion of the Multi-City Mortality and Morbidity Study” CIA: Prof Rod Simpson (University of the Sunshine Coast) my role: CIE (study design, data management, statistical support, report writing) \$159,836, 2003
Two highly cited publications [16, 22] and 3 conference papers.
- CellCept Australia Research Grants “The implications of Brain Death in Donor Lung Injury: Investigation and Blockade of the Endothelin Axis”, CIA: A/Prof John Fraser (Prince Charles), my role: CIG (statistical support), \$40,000, 2008
- Australian Red Cross Blood Service “A Pilot Study to Assess the Suitability of an Ovine Model for the Investigation of Adverse Transfusion Reactions”, CIA: A/Prof John Fraser (Prince Charles & UQ), my role: CIF (statistical support), \$165,000, 2008–2009
- The Prince Charles Hospital Foundation “A Pilot Study to Assess the Suitability of an Ovine Model for the Investigation of Adverse Transfusion Reactions”, CIA: A/Prof John Fraser (Prince Charles & UQ), my role: CIF (statistical support), \$49,042, 2009–2010
- The Prince Charles Hospital Foundation “Direct extubation onto high flow nasal prongs post cardiac surgery vs standard treatment in patients with BMI ≥ 30 : A randomised controlled trial.” CIA: Amanda Corley (Prince Charles), my role: CID (statistical support), \$59,574
- Queensland Emergency Medicine Research Foundation “Optimisation of cardiac output in emergency patients through non invasive cardiac output monitoring in the acute resuscitation phase. What does it add?”, CIA: Dr Neil Grant (Prince Charles), my role: CIG (statistical support), \$300,000, 2010–2012,
- Queensland Emergency Medicine Research Foundation “C.R.A.S.H. study: A randomised study of tissue oxygenation in an ovine model of haemorrhagic shock comparing the effect of colloid, fresh red cells, aged red cells and saline.”, CIA: Dr Andrew Staib (Princess Alexandra & UQ), my role: CIG (statistical support), \$106,375, 2010
- NHMRC Partnership “Evaluating hand hygiene interventions and their ability to reduce healthcare associated infection”, CIA: A/Prof Nicholas Graves (QUT), my role: CIF (study design, statistical analysis, report writing), \$500,000 in cash from NHMRC, \$400,000 in cash from ACSQHC, \$408,693 in kind from state and territory governments, 2010–2012.
Publications: [91, 116, 124, 138, 151, 169, 164, 172, 185, 190].
- AusAID “Are community based infection surveillance and control interventions effective in identifying and responding to emerging zoonotic infectious diseases in developing countries?”, CIA: Dr Kate Halton (QUT), my role: CIB (statistical analysis), \$59,500, 2011
Publication: [127].

- NHMRC Project “Building an evidence base for funding evidence-based medicine”, CIA: Adrian Barnett (QUT), \$308,510, 2011–2012, **Rated Category 6** (top 8.5% of proposals)
Publications: [7], [122, 136, 145, 148, 154, 168, 161, 204], [9, 10].
- NHMRC Project “Identifying a cost-effective approach to MRSA control in Australia”, CIA: Dr Kate Halton (QUT), my role: CID (statistical analysis), \$362,224 2011
- NHMRC Project “Modelling the cost-effectiveness of therapeutic strategies for invasive candidiasis among the ICU population”, CIA: Prof Nick Graves (QUT), my role: CID (statistical analysis), \$276,344 2011
- Australian College of Critical Care Nurses “High flow nasal cannula for respiratory support in adult intensive care patients. Australian College of Critical Care Nurses”, CIA Amanda Corley (Prince Charles), my role: CIE (statistical support), \$14,701, 2012
- NHMRC Project “A longitudinal multilevel study of physical activity, sedentary behaviour and physical function in mid-to-late adulthood”, CIA: Prof Gavin Turrell (QUT), my role: CIE (statistical analysis), \$1,269,867 2012
Publication: [199].
- CAR seed funding “Estimating the Australian burden of disease due to air pollution”, CIA: Sam Clifford, \$19,994, 2013.
- AusHSI Stimulus Grant “Saving blood and money: introduction of laboratory testing guidelines and its effect on blood loss and cost of therapy in an intensive care unit”, CIA: Jayesh Dhanani, \$41,000, 2013.
Publication: [211].
Won a quality and safety award for the Royal Brisbane and Women’s Hospital
- NHMRC Partnership “REACH: Researching Effective Approaches to Cleaning in Hospitals”, CIA: Nick Graves, my role: CIE (statistical analysis), \$1,146,817, 2014–2017.
Publications: [176, 185, 200, 236, 239, 245].
- Queensland Government Accelerate Partnerships “CHERISH: better, cheaper hospital care”, CIA: Alison Mudge, my role: CI (statistical analysis and study design), \$498,228
Publications: [206, 227, 286].
- NHMRC Centre for Research Excellence “Centre for Research Excellence in Advanced Cardio-respiratory Therapies Improving OrgaN Support (ACTIONS)”, CIA: John Fraser, my role: CIG (statistical support and student training), \$2,491,450, 2015–2019
- Heart Foundation Vanguard Grant “Using thermal clothing to reduce morbidity during winter”, my role: CIA, \$69,000, 2015–2016
Publication: [202].
- Cerebral Palsy Alliance “Researching the impact of cerebral palsy research”, my role: CIA, \$20,000, 2015–2016
Publication: [184].
- ARC Discovery “Occupational injury prevention in high temperature environments”, CIA: Prof Dino Pisaniello (Adelaide), my role: CIC, \$295,156, 2015–2016
Publications: [230, 232, 242, 253, 255].
- Asia-Pacific Network for Global Change Research “Assessing the Health Effects of Extreme Temperatures and the Development of Adaptation Strategies to Climate Change in the Asia-Pacific Region”, CIA: Dr Cunrui Huang (Sun Yat-sen University), my role: CIC, USD \$82,000, 2016–2017

- NHMRC Senior Research Fellowship A “Meta-research: Using research to increase the value of health and medical research”, \$631,370, 2017–2021
Publications: [197, 212, 216, 218, 219, 228, 240, 247, 248, 249, 251, 252, 265, 274, 270, 273, 271, 276, 280, 285, 287, 292, 294, 296]
- The Prince Charles Hospital Foundation “Evaluating and improving the funding processes of The Prince Charles Hospital Foundation”, \$47,872, 2017–2018
- NHMRC Partnership “Reducing Non-Beneficial Treatment at the End-of-Life”, my role: CIA, \$504,187, 2018–2020
Publications: [266, 303].
- NHMRC Medical Research Future Fund Keeping Australians Out of Hospital “LOCAl Assessment and Triage Evaluation of NAFLD (LOCATE-NAFLD)”, CIA: Adrian Barnett, \$969,193, 2019–2022, **Rated Category 6**
Publication: [259]
- MRFF CHD LIFE+ family-centred care models supporting long-term neurodevelopment, CIA: Steven McPhail, \$2,997,256, 2020
- RBWH and RBWH Foundation Research Project Grants. Gestational diabetes Mellitus screening and diagnosis during COVID-19: changes worth continuing? CIA: Susan de Jersey, \$49,572, 2020
- Australian Government. Australian Teletrial Program. CIA: Steve McPhail, \$75.2 million (research component \$1.9 million), 2020
- Gold Coast Health Collaborative Research Grant Scheme. Enhancing clinician research: A mixed methods study examining Australian and New Zealand specialist trainees’ experiences and research outputs. CIA: Paulina Stehlik, \$99,052, 2021
- NHMRC Partnership. NAVICARE: Implementing, scaling up and sustaining a co-designed care navigation model to improve mental health service access in regional Australia. CIA: Zephania Tyack, \$1,496,653, 2023–2025
- NHMRC Ideas Grant “Problematic articles and literature reviews in molecular cancer research”, 2024–2026 *under embargo*, CIA: Jennifer Byrne, \$442,040, 2024–2026

Notable successful associate investigator grants (total funds = \$4.3 million)

- ARC “Quantifying the effects of criteria air pollutants on child health - setting Australian air quality standards” \$504,924, 2003
This grant supported the funds from the National Environment Protection Council grant (see above) which led to 2 high impact publications [16, 22] and 3 conference papers.
- NHMRC Project Grant “Talking the walk: A longitudinal study of refugee men’s health and resettlement” CIA: Ignacio Correa-Velez (La Trobe), \$420,250, 2008–2011.
Published paper: [59].
- NHMRC Project Grant “Helping women meet their activity goals: randomised trial of a personalised program delivered by mobile telephone” CIA: Alison Marshall (QUT), \$480,475, 2010–2012.
Published paper: [152].
- NHMRC Project Grant “The unholy alliance between extracorporeal circuitry and transfusion medicine: characterising inflammation and injury” CIA: John Fraser (Prince Charles Hospital), \$929,299, 2011–2013.

- NHMRC “Centre for Research Excellence in Healthy, Liveable and Equitable Communities” CIA: Billie Giles-Corti (Uni of Melbourne), \$2,499,061, 2013–2018.
- Prince Charles Hospital Foundation “Silent and Apparent Neurological Injury In Transcatheter Aortic Valve Implantation (SANITY) Study” CIA: John Fraser (Prince Charles Hospital), \$99,272, 2014.
- Asia-Pacific Network for Global Change Research. “Scoping Workshop to Develop Proposal: Assessing the Health Effects of Extreme Temperatures and the Development of Adaptation Strategies to Climate Change in the Asia Pacific Region” CIA: Cunrui Huang, \$12,000, 2014.
- German Research Foundation Fellowship, Martin Wolkewitz, “Statistical insights into spatio-temporal variation in transmission dynamics of hospital-acquired infections using individual patient data” 259,800 Euros, 2011–2013 and re-funded for 2014–2016.

Published papers: [132, 135, 140, 182].

2.4 Research students

- Ignacio Correa-Velez, PhD: Graduated April 2004, Evaluation of complementary and alternative medicine use in palliative care. My percent contribution: 30%.

Published paper: [8]. In 2006 Ignacio was awarded a 4-year National Health and Medical Research Council (NHMRC) Postdoctoral Research Fellowship (La Trobe). He was the chief investigator of a new investigator NHMRC project grant in 2007 titled, “Talking the walk: A longitudinal study of refugee men’s health and resettlement” for \$420,250. I was an associate investigator on this grant and have been involved in the project. This has led to a published paper: [59].

- Jo-An Atkinson, MSc: Graduated December 2005, Efficacy of paper tape in preventing hypertrophic scar formation. My percent contribution: 40%.

Published paper: [12]. Jo won the Sir Ian McFarlane award at the Royal Brisbane Hospital research conference (2004). Jo is an associate professor at the Sax Institute.

- Darren Gray, PhD: Awarded June 2008, The role of bovines in human schistosoma japonicum transmission in the the Peoples’ Republic of China. My percent contribution: 10%.

Published papers: [27, 46]. Darren is currently a Professor at ANU.

- Letitia Burridge, PhD: Graduated December 2009, The experience of becoming a lay carer for a person with cancer. My percent contribution: 15%. Dean’s Award for Outstanding Research Higher Degree Theses in 2009.

Published paper: [38]. Letty now works as a postdoctoral researcher in the department of General Practice, UQ.

- Linn Strand, MPhil: Graduated Dec 2011, The influence of ambient temperature on birth outcomes in Brisbane, Australia. My percent contribution: 80%.

Published papers: [71, 74, 83]. Linn is now an Associate Professor at the Norwegian University of Science and Technology.

- Kathryn Plonka, PhD: Graduated 2012, Preventive strategies for Early Childhood Caries from Antenatal to age 24 months. My percent contribution: 10%.

Published papers: [73, 108, 93, 112, 99, 107]. Video:

<http://www.uq.edu.au/grad-school/3mt-kathryn-plonka>

- Jim Zhao, PhD: Graduated 2011, Economic evaluation of strategies for improving maternal and neonatal health in the Safe Motherhood Project of China. My percent contribution: 20%.

- Margaret Pukallus, MPhil: Graduated 2010, A longitudinal study of oral streptococci in mothers and their infants: the effect of intervention strategies. My percent contribution: 5%.
Published papers: [108, 93, 110, 109].
- Yuming Guo, PhD: Graduated December 2012, Projecting the health benefits of decreasing vehicle use in Brisbane. My percent contribution: 75%. Yuming is now a Professor at Monash University.
Published papers: [60, 63, 64, 68, 79, 104, 114].
- Cunrui Huang, PhD: Awarded February 2013, The health effects of temperature: current estimates, future projections and adaptation strategies. My percent contribution: 70%.
Published papers: [78, 87, 100, 117]. Cunrui was awarded a QUT **Outstanding Doctoral Thesis Award** in 2013. Cunrui is now a Professor at Tsinghua University.
- Xing Ju Lee, PhD: Awarded Mar 2017, Modelling VRE Transmission Routes to identify cost-effective intervention strategies. My percent contribution: 5%.
- Dimity Stephen, PhD: Awarded June 2017, Putting a price on climate change: The health and economic costs of increases in infectious diseases in Queensland due to climate change. My percent contribution: 90%. Dimity is currently a researcher at the German Centre for Higher Education Research and Science Studies.
Published papers: [174, 196]
- Marc Nickels, PhD: Awarded Dec 2020, Exercise Interventions with Critically Ill Patients in an Australian Tertiary Intensive Care Unit. My percent contribution: 5%.
Published paper: [201, 244, 256, 262]
- Yupin Crawford, Masters: Awarded July 2018, The cost-effectiveness of gold standard Venous Thromboembolism prophylaxis as compared to current practice. My percent contribution: 5%.
- Anisa Rowhani-Farid, PhD: Awarded July 2018, Open science and data sharing movement in scientific research. My percent contribution: 80%. Anisa is currently a Postdoctoral Fellow at the University of Maryland.
Published papers: [183, 195, 216, 257]
- Victoria McCreanor, PhD: Awarded June 2019, Identifying high-value care for coronary artery disease in Australia. My percent contribution: 5%. Victoria is currently a research fellow at AusHSI and the Jamieson Trauma Institute.
Published papers: [225, 246]
- Akwasi Bonsu Asumadu-Sakyi, PhD: Awarded September 2019, Indoor temperature profile and its influence on indoor air pollution in urban residential settings in a subtropical climate. My percent contribution: 5%.
Published paper: [237, 241]
- Nina Lazarevic, PhD: Awarded September 2020, Methodological issues in the study of fetal co-exposures to endocrine disrupting chemicals. My percent contribution: 5%. Nina won the Dean's Award for Outstanding Higher Degree by Research Theses.
Published papers: [234, 263, 288]
- Nina Meloncelli, PhD: Awarded July 2020, Gestational diabetes mellitus: Examining diversity in practices, impact of clinical guidelines and the implementation of a dietitian-led model of care. My percent contribution: 10%.
Published paper: [217, 243, 254]

- Louise Barnsbee, Masters: Awarded March 2020, Perceptions of Australian Health Services Researchers regarding evaluation of the impact of their research. Won a QUT scholarship in November 2018. My percent contribution: 50%.
- Lee Jones, PhD: Started Oct 2018, Investigating relationships between statistical quality and research culture. My percent contribution: 40%.
- Sameera Senanayake, PhD: Awarded June 2021, Using machine learning techniques to develop risk prediction models to predict graft failure following kidney transplantation. My percent contribution: 20%.

Published paper: [261, 269, 281]

- Eri Asakura, PhD: Started Feb 2022, Task-shifting with mobile applications in the management of chronic liver disease: patients' preference and cost-effectiveness. My percent contribution: 20%.
- Robert Schulz (Medical Faculty Charité – Universitätsmedizin Berlin), PhD: Started June 2021. My percent contribution: 10%.

Mentoring outside my research group:

- Anders Erickson, Medical Sciences & Geography, University of Victoria, Canada. International Society for Environmental Epidemiology Students & New Researchers Network. May 2014.
- Tea Espeland Uggen. <https://acems.org.au/>. 2018.
- Cath Leigh. <https://acems.org.au/>. 2019.
- Rebecca Harding. Statistical Society of Australia. 2019.
- Edwin Lim. Statistical Society of Australia. 2021.
- Monsurul Hoq, Statistical Society of Australia. 2022.
- Paulina Stehlik, Bond University. 2022.
- Sally Butler, Statistical Society of Australia. 2023.
- Nathalia Bock, QUT. 2024.

2.5 International visitors

- 2014 Chisato Imai, Nagasaki University, Endeavour Cheung Kong Research Fellowship (top 5 international and Australian recipients coming from/going to a Cheung Kong participating country), paper: [178]
- 2012 David Hondula, Virginia, USA, East Asia and Pacific Summer Institutes fellowship, National Science Foundation, paper: [137]
- 2011 Laila Hopstock, University of Tromsø, Norway, university scholarship, paper: [111]
- 2010 Martin Wolkewitz, Freiburg University, Germany, paper: [65]

2.6 Awards and scholarships

- Winner of the IHBI Carla Patterson Award for our work on the REACH trial.
- Exemplary reviewer for *Epidemiology* (2018)
- Queensland University of Technology, Vice-chancellor's performance award for excellence in supervision \$6,000 (2015)

- Queensland University of Technology, Vice-chancellor's team performance award for AusHSI - nominated (2015)
- Queensland University of Technology, Vice-chancellor's performance award \$6,000 (2013)
- One of 6 reviewers of the year for *Epidemiology* (2014)
- One of 9 reviewers of the year for *Environmental Health Perspectives* (2013)
- Runner-up best environmental epidemiology paper published in 2012 (Awards Committee Chair: Michael Brauer, University of British Columbia) [83]
- Best original article published in *Vox Sanguinis* (2011), 10,000 Euros, paper: [67]
- One of 11 reviewers of the year for *Environmental Health Perspectives*
- One of 12 reviewers of the year for *Environmental Health Perspectives*
- Queensland University of Technology, Vice-chancellor's performance award \$5,000 (2010)
- Queensland University of Technology, nominated for the Vice-chancellor's award for excellence (2010)
- University of Queensland, School of Population Health, School's Research Incentive Scheme \$2,500 (Mar 2005)
- UQ Dean of Engineering, Physical Sciences and Architecture award for Best PhD (2002)
- Commonwealth Government Department of Education, Science & Training International Postgraduate Research Scholarship (1999).
- Distinguished Investigator Award (Senior Investigator) in Health Services Research, awarded by the Health Services Research Association of Australia and New Zealand (HSRAANZ) (2022)

2.7 Refereeing

- Statistics Advisor *Journal of Telemedicine and Telecare* 2007–2016, renewed 2015
- Editorial Review Board of *Environmental Health Perspectives* 2011–2016; promoted to Associate Editor Board 2016–2018
- Editorial Board of *Epidemiology* 2013–2017, renewed 2015, 2016, 2018 and 2022
- Statistical Advisory Board *BMJ Open* 2013–present
- Scientific Review committee for the Australian Centre for Health Services Innovation (2012–present).
- External reviewer for 9 NHMRC Project Grants (2008–2017).
- Reviewed 47 papers for *Circulation* as a paid reviewer (USD \$50 per review)
- Reviewed grants for funding agencies in Australia, the Czech Republic, Hong Kong, Israel and UK

3 Teaching

3.1 Lecturing, tutoring and co-ordination

- Coordinator, Advanced Research Methods: QUT, internal, 44 undergraduate students, 12 lectures, teaching satisfaction by 12 students 4.7 out of 5 (2011)
- Coordinator, Health Statistics: QUT, external, 59 postgraduate students, teaching satisfaction by 4 students 3.0 out of 5 (2011)
- Guest lecturer, Advanced Quantitative Research Methods: QUT, internal, postgraduate students, 2 lectures, teaching satisfaction by 5 students 4.6 out of 5 (2009)

- Coordinator, Advanced Quantitative Research Methods: QUT, internal, postgraduate students, teaching satisfaction by 14 students 4.1 out of 5 (2008)
- Coordinator, Health Statistics: QUT, external and internal, postgraduate students, teaching satisfaction by 10 students 4.7 out of 5 (2008)
- Lecturer, Introduction to Biostatistics: UQ, external and internal, postgraduate students, overall evaluation by 20 students 4.5 out of 5 (2007)
- Lecturer, Clinical Biostatistics, Biostatistics Collaboration Australia: UQ, external, postgraduate students, overall evaluation by 13 students 4.0 out of 5 (2006–2007)
- Lecturer, Measuring Population Health: UQ, postgraduate epidemiologists, overall evaluation by 11 students 4.3 out of 5 (2003)
- Tutor, Statistical Data Analysis 1: QUT, 1st year science and arts students, overall evaluation by 43 students 4.5 out of 5 (1999–2002)
- Tutor & Lecturer, Applied Statistics 2: QUT, 2nd year science students, overall evaluation by 23 students 4.2 out of 5 (1999)
- Demonstrator: QUT Science Train (1999)
- Tutor, Introduction to Statistics: Royal London Hospital, 1st year medical students (1998)

4 Policy

- Science and Technology Australia policy committee (2019–2023, re-elected 2021)
- Research used in a speech to parliament by Prime Minister Tony Abbott (Mar 2014)
- Research cited and quoted in McKeon review of health and medical research (Mar 2014)
- Workshop on Resource Condition Targets in Brisbane by South East Queensland Natural Resource Management (Apr 2008)
- Expert review of the Queensland Greens' document on the health effects of air pollution (Aug 2008)
- NHMRC workshop in Canberra (flights and expenses paid) on air quality in and around traffic tunnels (May 2007)
- Critique of Queensland government report on the health effects of the Boggo Road Busway for a Brisbane parents' group (Jul 2007)
- Critique of Queensland government report on the health effects of the Hale Street Bridge for a Brisbane parents' group (Oct 2006)

5 Professional activity

- Member NHMRC Research Quality Steering Committee (2022–2024) and chair of the Education and Training Working Group
- Member NHMRC Research Committee (2021–2024)
- Elected to the Academy of Social Sciences in Australia (2021)
- Member NHMRC Peer Review Advisory Committee (2020–2022)
- Association for Interdisciplinary Meta-research & Open Science (AIMOS)
 - Member (2019–)
 - Board member (2021–)

- Secretary (2022)
- President (2023–2024)
- Mathematical Sciences Cluster representative on the board of Science and Technology Australia (2018–2022)
- Statistical Society of Australia:
 - National President (2018–2020)
 - National Vice President (2017–2018, 2020–2021)
 - Pitman Medal Awards Committee (2012, 2014, 2016, 2020), re-appointed 2016
 - President Queensland Branch (2011–2013)
 - Member Queensland Branch Council (1999–2000, 2010–2015, 2022–2023)
- Expert witness at the Hazelwood mine fire inquiry (2015)
- Expert advisory panel for the *Queensland Evaluation Group* evaluating submissions for the Australian *Pharmaceutical Benefits Schedule* (2006–2007)
- Blog: “Median Watch”
- X: aidybarnett
- Mastodon: aidybarnett
- Github (code-sharing): agbarnett