

CURRICULUM VITAE

Adrian Gerard Barnett PhD, BSc (Hons), AStat

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1 Personal information

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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

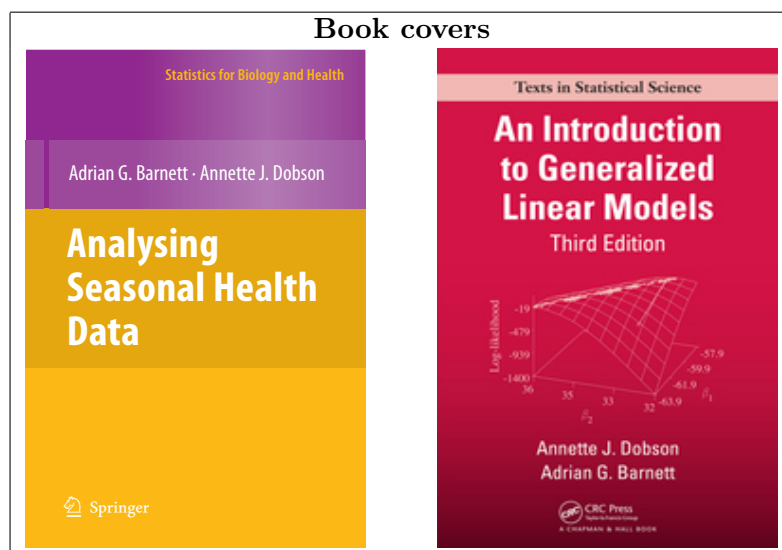
2 Research

2.1 Publications

- I have 309 peer-reviewed publications, 2 books and 1 book chapter.
- My h-index is 76 for Google scholar.
- 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 will be 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. *The British Journal of General Practice*, **47**, 501–502.

- [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. *American Journal of Obstetrics and Gynaecology*, **181**, 131–136.
- [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. *BMJ*, **318**, 919–920.
- [4] Underwood, M. R., **Barnett, A. G.**, and Vickers, M. R. (1999) Evaluation of two time specific back pain outcome measures. *Spine*, **24**, 1104–1112.
- [5] Howell, S., **Barnett, A. G.**, and Underwood, M. R. (2001) The use of pre-conceptual folic acid as an indicator of a health message amongst white and Bangladeshi women in Tower Hamlets, east London. *Journal of Family Practice*, **18**, 300–303.
- [6] O’Brien, M. F., Harrocks, S., Clarke, A., Garlick, B., and **Barnett, A. G.** (2002) Experiences with redo aortic valve surgery. *Journal of Cardiac Surgery*, **17**, 35–39.
- [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. *Journal of Cardiac Surgery*, **17**, 4–13.
- [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. *Palliative Medicine*, **17**, 695–703.
- [9] **Barnett, A. G.** and Dobson, A. J. (2004) Estimating trends and seasonality in coronary heart disease. *Statistics in Medicine*, **23**, 3505–3523.
- [10] **Barnett, A. G.** and Dobson, A. J. (2004) Is the increase in coronary heart disease on Mondays an artifact? *Epidemiology*, **15**, 583–588.
- [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. *Cleft Palate-Craniofacial Journal*, **41**, 114–123.
- [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. *Plastic and Reconstructive Surgery*, **116**, 1648–56, **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. *Journal of Epidemiology and Community Health*, **59**, 109–114.
- [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. *Journal of Epidemiology and Community Health*, **59**, 551–557.
- [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. *International Journal of Epidemiology*, **34**, 215–220.
- [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. *American Journal of Respiratory and Critical Care Medicine*, **171**, 1272–8.
- [17] **Barnett, A. G.** and Wolff, R. C. (2005) A time-domain test for some types of non-linearity. *IEEE Transactions on Signal Processing*, **53**, 26–33.
- [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. *Atherosclerosis*, **180**, 319–326.
- [19] McGrath, J. J., **Barnett, A. G.**, and Eyles, D. W. (2005) The association between birth

- weight, season of birth and latitude. *Annals of Human Biology*, **32**, 547–59.
- [20] Stanton, W. R., **Barnett, A. G.**, and Silva, P. A. (2005) Adolescents' intentions to smoke as a predictor of smoking. *Preventive Medicine*, **40**, 221–6.
 - [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. *Brain Injury*, **19**, 963–74.
 - [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. *Environmental Health Perspectives*, **114**, 1018–23.
 - [23] **Barnett, A. G.** (2007) Temperature and cardiovascular deaths in the US elderly: Changes over time. *Epidemiology*, **18**, 369–372.
 - [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. *Blood Pressure Monitoring*, **12**, 195–203.
 - [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. *BMC Health Services Research*.
 - [26] Carrigan, G., **Barnett, A. G.**, Dobson, A. J., and Mishra, G. D. (2007) Compensating for Missing Data from Longitudinal Studies Using WinBUGS. *Journal of Statistical Software*, **19**.
 - [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. *American Journal of Tropical Medicine & Hygiene*, **77**, 866–74.
 - [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. *BMC Medical Research Methodology*, **7**.
 - [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. *Diabetes Care*, **30**, 1418–1424.
 - [30] Stathakis, T., Acworth, J. P., and **Barnett, A. G.** (2007) A prediction tool for bacteraemia in febrile children aged 3–36 months. *Emergency Medicine Australasia*, **19**, 353–358.
 - [31] **Barnett, A. G.**, Fraser, J. F., and de Looper, M. (2008) The seasonality in heart failure deaths and total cardiovascular deaths in Australia. *Australian and New Zealand Journal of Public Health*, **32**, 408–413.
 - [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. *Journal of Telemedicine and Telecare*, **14**, 315–321.
 - [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. *Tropical Medicine and International Health*, **13**, 713–721.
 - [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. *Environmental Health Perspectives*, **116**, 362–369.
 - [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. *Journal of Pediatrics*, **153**, 570–4, **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. *American Journal of Epidemiology*, **170**, 1186–1194.
- [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. *Palliative Medicine*, **23**, 228–37.
- [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. *Psycho-Oncology*, **18**, 615–23.
- [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. *Malaria Journal*, **8**.
- [40] Clements, A., et al. (2009) Use of Bayesian geostatistical prediction to estimate local variations in *Schistosoma haematobium* infection in western Africa. *Bulletin of the World Health Organization*, **87**, 885–964.
- [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. *BMC Medical Research Methodology*, **9**.
- [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. *International Journal of Nursing Studies*, **46**, 1291–7.
- [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. *American Journal of Preventive Medicine*, **36**, 142–149.
- [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. *Simulation in Healthcare*, **4**, 54–59.
- [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. *PLoS ONE*, **4**, e7135.
- [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. *PLoS ONE*, **4**, e5900.
- [47] Hansen, C. A., **Barnett, A. G.**, Jalaludin, B. B., and Morgan, G. G. (2009) Ambient air pollution and birth defects in Brisbane, Australia. *PLoS ONE*, **4**, e5408.
- [48] Mahoney, G., Slade, G., Kitchener, S., and **Barnett, A. G.** (2009) Lifetime fluoridation exposure and dental caries experience in a military population. *Community Dentistry and Oral Epidemiology*, **36**, 485–92.
- [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. *Critical Care and Resuscitation*, **11**, 191–7.
- [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. *PLoS Medicine*, **6**, e1000040, **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. *Schizophrenia Research*, **115**, 130–135.
- [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. *International Journal of Biometeorology*, **53**, 535–541.
- [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. *BMC Anesthesiology*, **10**, 3.
- [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. *Methods in Ecology and Evolution*, **1**, 15–24, **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. *Clinical Infectious Diseases*, **50**, 1017–21.
- [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. *Medicine & Science in Sports & Exercise*, **42**, 1511–8.
- [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. *Infection Control and Hospital Epidemiology*, **31**, 1106–14, **Commentary by C J Crnich.**
- [58] **Barnett, A.**, Tong, S., and Clements, A. (2010) What measure of temperature is the best predictor of mortality? *Environmental Research*, **110**, 604–611, **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. *Social Science & Medicine*, **71**, 1399–40.
- [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. *Science of the Total Environment*, **408**, 4446–50.
- [61] Tong, S., Wang, X., and **Barnett, A. G.** (2010) Assessment of heat-related health impacts in Brisbane, Australia: Comparison of different heatwave definitions. *PLoS ONE*, **5**, e12155.
- [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. *BMC Public Health*, **10**, 452, **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. *Environmental Health*, **9**, 57.
- [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. *Science of the Total Environment*, **409**, 300–6.
- [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. *Value in Health*, **11**, 381–386.
- [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. *Australian Journal of*

Primary Health, **17**, 66–71.

- [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). *Vox Sanguinis*, **100**, 219–230, **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. *PLoS ONE*, **6**, e16511.
- [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. *Journal of Infection*, **62**, 136–41.
- [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). *Epidemiology and Infection*, **139**, 1757–63.
- [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. *Environmental Research*, **111**, 451–462.
- [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. *BMC Anesthesiology*, **11**.
- [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. *Environmental Health*, **10**, 26.
- [74] Strand, L., **Barnett, A. G.**, and Tong, S. (2011) Methodological challenges when estimating the effects of season and seasonal exposures on birth outcomes. *BMC Medical Research Methodology*, **11**, 49.
- [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. *British Journal of Anaesthesia*, **107**, 998–1004.
- [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. *BMJ*, **343**, d5694, 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. *BMJ*, **343**, d4797.
- [78] Huang, C. et al. (2011) Projecting heat-related mortality under climate change scenarios: A systematic review. *Environmental Health Perspectives*, **119**, 1681–90.
- [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. *Environmental Health Perspectives*, **119**, 1719–25.
- [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. *BMJ Open*, **1**, e000188.
- [81] Wolkewitz, M., Allignol, A., Graves, N., and **Barnett, A. G.** (2011) Is 27 really a dangerous age for famous musicians? Retrospective cohort study. *BMJ*, **343**, over 10,000 downloads in first 10 days after publication. Data available <https://researchdatafinder.qut.edu.au/display/q1>.

- [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. *PNAS*, **108**, 20084–9.
- [83] Strand, L., **Barnett, A. G.**, and Tong, S. (2012) Maternal exposure to ambient temperature and the risk of preterm birth and stillbirth. *American Journal of Epidemiology*, **175**, 99–107, **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. *Occupational and Environmental Medicine*, **69**, 163–9.
- [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. *International Journal of Biometeorology*, **56**, 719–726.
- [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. *Science of the Total Environment*, **416**, 48–52.
- [87] Huang, C., **Barnett, A. G.**, Wang, X., and Tong, S. (2012) The impact of temperature on years of life lost in Brisbane, Australia. *Nature Climate Change*, **2**, 265–270, **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. *Environmental Research*, **112**, 218–224.
- [89] **Barnett, A. G.**, Huang, C., and Turner, L. (2012) Benefits of publicly available data (Research Letter). *Epidemiology*, **23**, 500–501.
- [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. *The Journal of Nuclear Cardiology*, **19**, 474–81, **Featured in Editorial**.
- [91] Graves, N. et al. (2012) Evaluating the economics of the Australian national hand hygiene initiative. *Healthcare Infection*, **17**, 5–10.
- [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). *Critical Care*, **16**, 9.
- [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. *Caries Research*, **46**, 213–20.
- [94] Turner, L. R., **Barnett, A. G.**, Connell, D., and Tong, S. (2012) Ambient temperature and cardiorespiratory morbidity: A systematic review and meta-analysis. *Epidemiology*, **23**, 594–606.
- [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. *Spatial and Spatio-temporal Epidemiology*, **3**, 225–234.
- [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. *Environmental Health*, **11**, 23.
- [97] Shekar, K. et al. (2012) Increased sedation requirements in patients receiving extracorporeal life support for respiratory and cardio-respiratory failure. *Anaesthesia and Intensive Care*, **40**, 648–655.
- [98] **Barnett, A.**, Baker, P., and Dobson, A. (2012) Analysing seasonal data. *R Journal*, **4**, 5–10.
- [99] Plonka, K. et al. (2012) Mutans streptococci and lactobacilli colonization in preterm children from the neonatal period to seven months of age. *Caries Research*, **46**, 213–220.

- [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. *Circulation: Cardiovascular Quality and Outcomes*, **5**, 609–14.
- [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. *International Journal of Molecular Sciences*, **13**, 10911–10919.
- [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. *Journal of Critical Care*, **27**, 742.
- [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. *Critical Care*, **16**, R194.
- [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. *Scientific Reports*, **2**, 830.
- [105] **Barnett, A. G.** (2012) Air pollution trends in four Australian cities. *Air Quality and Climate Change*, **46**, 28–34.
- [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. *BMC Anesthesiology*, **12**, 29.
- [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. *Caries Research*, **47**, 117–27.
- [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. *International Journal of Paediatric Dentistry*, **23**, 23–31.
- [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. *Pediatric Dentistry*, **35**, 550–555.
- [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. *International Journal of Paediatric Dentistry*, **23**, 216–24.
- [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. *JECH*, **67**, 113–118.
- [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. *Pediatric Dentistry*, **35**, 414–8.
- [113] Paynter, S. et al. (2013) Sunshine, rainfall, humidity and child pneumonia in the tropics: time series analyses. *Epidemiology and Infection*, **141**, 1328–36.
- [114] Guo, Y., **Barnett, A. G.**, and Tong, S. (2013) Spatiotemporal model or time series model for assessing city-wide temperature effects on mortality? *Environmental Research*, **120**, 55–62.
- [115] Guo, Y., Wang, Z., Li, S., Tong, S., and **Barnett, A. G.** (2013) Temperature sensitivity in Indigenous Australians. *Epidemiology*, **24**, 471–472.
- [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. *Infection Control and*

Hospital Epidemiology, **34**, 424–9.

- [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. *Environmental Health Perspectives*, **121**, 415–419, 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. *BMJ Open*, **3**, e002799.
- [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. *Australian Critical Care*, **26**, 18–22.
- [120] Page, K., Graves, N., Halton, K., and **Barnett, A. G.** (2013) Humans, things and space: Costing hospital infection control interventions. *Journal of Hospital Infection*, **84**, 200–5.
- [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. *BMJ Open*, **3**, e002579.
- [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. *BMJ Open*, **3**, e002800.
- [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. *BMC Public Health*, **13**, 593.
- [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. *BMJ Open*, **3**.
- [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. *BMC Health Services Research*, **13**, 410.
- [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. *Malaria Journal*, **12**, 452.
- [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. *JBI Database of Systematic Reviews & Implementation Reports*, **11**, 1–235.
- [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. *American Journal of Infection Control*, **42**, 164–7.
- [129] Spooner, A. et al. (2014) Head-of-bed elevation improves end-expiratory lung volumes in mechanically ventilated subjects: A prospective observational study. *Respiratory Care*, **59**, 1583–9.
- [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. *The Journal of Heart Valve Disease*, **23**, 105–11.
- [131] Brightwell, R. E., **Barnett, A. G.**, and Walker, P. J. (2014) Changes in temperature affect the risk of abdominal aortic aneurysm rupture. *ANZ Journal of Surgery*, **84**, 871–876.
- [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. *Journal of Hospital Infection*, **86**, 77–82.
- [133] **Barnett, A. G.** and Knibbs, L. (2014) Higher fuel prices are associated with lower air pollution levels. *Environment International*, **66**, 88–91.

- [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. *BMJ Open*, **4**, e003978.
- [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. *Critical Care*, **18**, R64.
- [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. *BMJ Open*, **4**, e004462.
- [137] Hondula, D. and **Barnett, A. G.** (2014) Heat-related morbidity in Brisbane, Australia: Spatial variation and area-level predictors. *EHP*, **122**, 831–836.
- [138] **Barnett, A. G.**, et al. (2014) Changes in healthcare associated *Staphylococcus aureus* bloodstream infections after the introduction of a national hand hygiene initiative. *Infection Control and Hospital Epidemiology*, **35**, 1029–36.
- [139] **Barnett, A. G.** (2014) It's safe to say there's no safe level of air pollution. *Australian & New Zealand Journal of Public Health*, **38**, 407–408.
- [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. *BMJ*, **349**, g5060.
- [141] Fanning, J., et al. (2014) The silent and apparent neurological injury in transcatheter aortic valve implantation study (SANITY): concept, design and rationale. *BMC Cardiovascular Disorders*, **14**, 45.
- [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. *Environmental Research*, **135**, 204–211.
- [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. *Healthcare Infection*, **19**, 128–134.
- [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. *Intensive Care Medicine Experimentale*, **2**, 29.
- [145] **Barnett, A. G.**, Herbert, D. L., Clarke, P., and Graves, N. (2014) The research lottery: the pressures on the Australian grant system. *AQ - Australian Quarterly*, **85**, 4–9.
- [146] **Barnett, A. G.** (2015) Turning temperature measures outside-in (research letter). *Epidemiology*, **26**, e11–e12.
- [147] Huang, C., Chu, C., Wang, X., and **Barnett, A. G.** (2015) Unusually cold and dry winters increase mortality in Australia. *Environmental Research*, **136**, 1–7.
- [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. *BMJ Open*, **5**, e006912.
- [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. *Anaesthesia and Intensive Care*, **43**, 88–91.
- [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. *International Migration*, **53**, 321–337.
- [151] White, K. M., et al. (2015) Key beliefs of hospital nurses' hand hygiene decisions: protecting your peers and needing effective reminders. *Health Promotion Journal of Australia*, **26**, 74–78.
- [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. *Annals of Behavioral Medicine*, **49**, 487–499.
- [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. *BMC Health Services Research*, **15**, 59.
- [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. *BMC Health Services Research*, **15**, 55.
- [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. *BMJ Open*, **5**, e007226.
- [156] Guo, Y. and **Barnett, A. G.** (2015) Invited commentary: Acute air pollution exposure and risk of suicide completion. *American Journal of Epidemiology*, **181**, 304–8.
- [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. *Crit Care Resusc*, **17**, 43–6.
- [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. *Intensive Care Medicine*, **41**, 887–94.
- [159] Knibbs, L. D. and **Barnett, A G** (2015) Assessing environmental inequalities in ambient air pollution across urban Australia. *Spatial and Spatio-temporal Epidemiology*, **13**, 1–6.
- [160] Seow, K. et al. (2015) Relative cost-effectiveness of home visits and telephone contacts in preventing early childhood caries. *Community Dentistry and Oral Epidemiology*, **43**.
- [161] Herbert, D., Graves, N., Clarke, P., and **Barnett, A. G.** (2015) Using simplified peer review processes to fund research: a prospective study. *BMJ Open*, **5**, e008380.
- [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. *Antimicrobial Resistance and Infection Control*, **4**, 29.
- [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. *BMJ Open*, **5**, e008714.
- [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. *Health Education Research*, **30**, 959–970.
- [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. *Intensive Care Medicine Experimental*, **3**, 31.
- [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. *Critical Care*, **19**, 437.
- [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. *Critical Care Medicine*, **44**, 734–46.

- [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. *Journal of Clinical Epidemiology*, **69**, 147–151.
- [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. *Safety Science*, **82**, 29–43.
- [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. *BMJ Open*, **6**, e009746.
- [171] Bellapart, J., et al. (2016) Cerebral microcirculation during experimental normovolaemic anaemia. *Frontiers in Neurology*, **2**, 6.
- [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. *PLoS ONE*, **11**, e0148190.
- [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. *Journal of Hospital Infection*, **93**, 92–99.
- [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. *BMJ Open*, **6**, e010204.
- [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. *Environmental Research*, **144**, 60–5.
- [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. *Implementation Science*, **11**, 44.
- [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. *Quality of Life Research*, **25**, 2579–92.
- [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. *Int J Environ Res Public Health*, **13**, 454.
- [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. *JDR Clinical & Translational Research*.
- [180] Bellapart, J., et al. (2016) Cerebral microcirculation during mild head injury after a contusion and acceleration experimental model in sheep. *Brain Injury*.
- [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. *European Journal of Clinical Nutrition*, **70**, 1138–43.
- [182] Wolkewitz, M., Cooper, B., Palomar-Martinez, M., Alvarez-Lerma, F., Olaechea-Astigarraga, P., **Barnett, A. G.**, and Schumacher, M. (2016) Multiple time scales in modeling the incidence of potentially transmission-associated infections in hospitals. *BMC Medical Research Methodology*, **16**, 116.
- [183] Rowhani-Farid, A. and **Barnett, A. G.** (2016) Has open data arrived at the British Medical Journal (BMJ)? an observational study. *BMJ Open*, **6**, e011784, 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. *BMJ Open*, **6**, e012924.
- [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. *Research Integrity and Peer Review*, **1**, 16.
- [186] Knight, A., Schilling, C., **Barnett, A. G.**, Jackson, R., and Clarke, P. (2016) Revisiting the Christmas holiday effect in the southern hemisphere. *JAHA*, **5**, e005098.
- [187] Wang, Q. et al. (2017) Environmental ambient temperature and blood pressure in adults: A systematic review and meta-analysis. *Science of the Total Environment*, **575**, 276–86.
- [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. *Nature Climate Change*, **7**, 103–106.
- [189] **Barnett, A. G.**, Stephen, D., Huang, C., and Wolkewitz, M. (2017) Time series models of environmental exposures: good predictions or good understanding. *Environmental Research*, **154**, 222–225.
- [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. *BMC Health Services Research*, **17**, 137.
- [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? *Research Ideas and Outcomes*, **3**, e11931.
- [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. *BMJ Open*, **7**, e012212.
- [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. *BMC Geriatr*, **17**, 76.
- [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. *Anaesthesia and Intensive Care*, **45**, 235–243.
- [195] Rowhani-Farid, A., Allen, M., and **Barnett, A. G.** (2017) What incentives increase data sharing in health and medical research? A systematic review. *Research Integrity and Peer Review*, **2**, 4.
- [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. *Environmental Health Perspectives*, **125**, 127001.
- [197] **Barnett, A. G.**, Clarke, P., Vaquette, C., and Graves, N. (2017) Using democracy to award research funding: an observational study. *Research Integrity and Peer Review*, **2**, 16.
- [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. *BMJ Open*, **7**, e017661.
- [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. *BMJ Open*, **7**, e017284.
- [200] Mitchell, B. et al. (2017) Variation in hospital cleaning practice and process in Australian hospitals: a structured mapping exercise. *Infection, Disease & Health*, **22**, 195–202.
- [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. *BMJ Open*, **7**,

- e017393.
- [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. *BMJ Open*, **7**, e017592.
 - [203] Hanigan, I. C., et al. (2017) Blending multiple nitrogen dioxide data sources for neighborhood estimates of long-term exposure for health research. *Environmental Science & Technology*, **51**, 12473–12480.
 - [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. *Research Integrity and Peer Review*, **2**, 19.
 - [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. *PLOS ONE*, **12**, e0189173.
 - [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. *BMC Geriatrics*, **17**, 11.
 - [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. *Cochrane Database of Systematic Reviews*.
 - [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. *PLOS ONE*, **13**, e0190093.
 - [209] Wozniak, T., Graves, N., and **Barnett, A. G.** (2018) How much do superbugs cost Australian hospitals? an evidence-based open-access tool. *Infection, Disease & Health*, **23**, 54–56.
 - [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. *Infection, Disease & Health*, **23**, 87–92.
 - [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. *Anaesthesia and Intensive Care*, **46**, 313–320.
 - [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. *PLOS ONE*, **13**, e0192290.
 - [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. *Environmental Research*, **163**, 16–25.
 - [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. *Therapeutic Advances in Neurological Disorders*, **11**, 1756286418759493.
 - [215] Nghiem, S., Vu, X.-B., and **Barnett, A.** (2018) Trends and determinants of weight gains among OECD countries: An ecological study. *Public Health*, **159**, 31–39.
 - [216] Rowhani-Farid, A. and **Barnett, A. G.** (2018) Badges for sharing data and code at Biostatistics: an observational study. *F1000Research*, **7**, 90.
 - [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. *The Australian and New Zealand Journal of Obstetrics and*

Gynaecology.

- [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. *PLOS ONE*, **13**, e0195613.
- [219] **Barnett, A. G.** (2018) Missing the point: are journals using the ideal number of decimal places? [version 3; peer review: 2 approved]. *F1000Research*, **7**.
- [220] Bellapart, J., Cuthbertson, K., et al. (2018) Cerebral microcirculation and histological mapping after severe head injury: a contusion and acceleration experimental model. *Frontiers Neurology*, **9**, 227.
- [221] Dhanani, J. et al. (2018) Characterisation of 40 mg/ml and 100 mg/ml tobramycin formulations for aerosol therapy with adult mechanical ventilation. *Pulmonary Pharmacology & Therapeutics*, **50**, 93–99.
- [222] Sheng, R. et al. (2018) Effect of traffic legislation on road traffic deaths in Ningbo, China. *Annals of Epidemiology*, **28**, 576–581.
- [223] Prosser, S. J., **Barnett, A. G.**, and Miller, Y. D. (2018) Factors promoting or inhibiting normal birth. *BMC Pregnancy and Childbirth*, **18**, 241.
- [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. *IJERPH*, **15**, 1663.
- [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]. *F1000Research*, **7**, 77.
- [226] Swierkowski, P. and **Barnett, A. G.** (2018) Identification of hospital cost drivers using sparse group lasso. *PLOS ONE*, **13**, e0204300.
- [227] Mudge, A. et al. (2018) Hospital-associated complications of older people: a proposed multi-component outcome for acute care. *Journal of the American Geriatrics Society*, **67**, 352–356.
- [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]. *F1000Research*, **7**, 1030.
- [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. *The American Journal of Cardiology*.
- [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. *Journal of Environmental Research*, **170**, 101–109.
- [231] Wallis, M. et al. (2018) The geriatric emergency department intervention model of care: a pragmatic trial. *BMC Geriatrics*, **18**.
- [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. *Journal of Exposure Science & Environmental Epidemiology*, **29**, 821–830.
- [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. *Journal of Critical Care*, **49**, 77–83.
- [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. *Environmental Health Perspectives*, **127**, 026001.
- [235] Dean, A. et al. (2019) Beyond the ‘extinction of experience’: novel pathways between nature experience and support for nature conservation. *Global Environmental Change*, **55**, 48–57.
- [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. *Lancet Infectious Diseases*, **19**, 410–418.
- [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. *Energy and Buildings*, **191**, 127–142.
- [238] Sewell, L. and **Barnett, A. G.** (2019) The impact of caring for children on women’s research output: a retrospective cohort study. *PLOS ONE*, **14**, e0214047.
- [239] White, N. and **Barnett, A. G.** (2019) Analysis of multi-site intervention studies using generalized linear mixed models. *ICHE*, **40**, 910–917.
- [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]. *F1000Research*, **8**, 583.
- [241] Asumadu-Sakyi, A. B. et al. (2019) Seasonal temperature patterns and durations of acceptable temperature range in houses in Brisbane, Australia. *Science of the Total Environment*, **683**, 470–479.
- [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. *Science of the Total Environment*, **687**, 898–906.
- [243] Meloncelli, N., Jersey, S. D., and **Barnett, A. G.** (2019) Staff resourcing, guideline implementation and models of care for gestational diabetes mellitus management. *The Australian and New Zealand Journal of Obstetrics and Gynaecology*.
- [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. *Physiotherapy*.
- [245] White, N. M., et al. (2019) Cost-effectiveness of an environmental cleaning bundle for reducing healthcare associated infections. *Clinical Infectious Diseases*.
- [246] McCreanor, V. et al. (2019) Pharmaceutical use and costs in patients with coronary artery disease, using Australian observational data. *BMJ Open*, **9**, e029360.
- [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. *MJA*, **9**, e029360.
- [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. *BMJ*, **367**, l6460.
- [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. *BMJ Open*, **9**, e032506.
- [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. *Emergency Medicine Australasia*, **32**, 422–429.
- [251] Clarke, P., Buckell, J., and **Barnett, A.** (2020) Registered reports: Time to radically rethink peer review in health economics. *PharmacoEconomics - Open*.
- [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. *Research Integrity and Peer Review*, **5**.
- [253] Varghese, B. et al. (2020) Heat-related injuries in Australian workplaces: perspectives from health and safety representatives. *Safety Science*, **126**, 104651.
- [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. *Obstetrics & Gynecology*.
- [255] Pisaniello, D. et al. (2020) Determinants of heat-related injuries in Australian workplaces: perceptions of health and safety professionals. *STOTEN*, **718**, 137138.
 - [256] Nickels, M. et al. (2020) Acceptability, safety and feasibility of in-bed cycling with critically ill patients. *Australian Critical Care*, **33**, 236–243.
 - [257] Rowhani-Farid, A., Aldcroft, A., and **Barnett, A. G.** (2020) Did awarding badges increase data sharing in BMJ Open? A randomized controlled trial. *Royal Society Open Science*, **7**, 191818.
 - [258] Sutt, A.-L. et al. (2020) Earlier tracheostomy is associated with an earlier return to walking, talking and eating. *Australian Critical Care*, **33**, 213–218.
 - [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). *BMC Health Services Research*, **20**, 335.
 - [260] Clarke, P. et al. (2020) Group testing for SARS-CoV-2: Forward to the past? *PharmacoEconomics - Open*, **4**, 207–210.
 - [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. *F1000Research*, **8**, 1810.
 - [262] Nickels, M. et al. (2020) Effect of in-bed cycling on acute muscle wasting in critically ill adults: A randomised clinical trial. *Journal of Critical Care*, **59**, 86–93.
 - [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. *Statistics in Medicine*, **39**, 3947–3967.
 - [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. *Clinical Epidemiology*, **12**, 925–928.
 - [265] **Barnett, A. G.** and Doubleday, Z. (2020) Meta-research: The growth of acronyms in the scientific literature. *eLife*, **9**, e60080.
 - [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. *BMC Geriatr*, **20**, 262.
 - [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. *IJE*.
 - [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. *Pharmacoeconomics Open*.
 - [269] Senanayake, S. et al. (2020) Deceased donor kidney allocation: an economic evaluation of contemporary longevity matching practices. *BMC Health Services Research*.
 - [270] **Barnett, A. G.** (2020) How scrambling your data can help you think more clearly. *Significance*, **17**, 42–44.
 - [271] **Barnett, A. G.** (2020) [rp] Estimating trends and seasonality in coronary heart disease. *ReScience C*, **6**.
 - [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. *Infection Control and Hospital Epidemiology*, **41**, 1315–1320.
- [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. *Journal of Medical Ethics*.
- [274] **Barnett, A. G.** (2021) Facebook epidemiology in place of textbook epidemiology. *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. *BMJ Open*.
- [276] Doran, M., Lott, W., **Barnett, A. G.**, Leach, J., and Ioannidis, J. (2021) The future of grant proposals is video. *Nature*.
- [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. *Health Economics Review*, **11**.
- [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. *Nature Medicine*.
- [279] **Barnett, A. G.** and Doubleday, Z. (2021) Demonstrating the ascendancy of COVID-19 research using acronyms. *Scientometrics*.
- [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. *Research Integrity and Peer Review*, **6**, 11.
- [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. *BMC Medical Research Methodology*.
- [282] Cho, S.-M., et al. (2021) Ischemic and hemorrhagic stroke among critically ill patients with coronavirus disease 2019. *Critical Care Medicine*.
- [283] Duch, R. et al. (2021) Citizens from 13 countries share similar preferences for COVID-19 vaccine allocation priorities. *PNAS*, **118**, e2026382118.
- [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. *Frontiers in Medicine, section Intensive Care Medicine and Anesthesiology*.
- [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. *Journal of Empirical Research on Human Research Ethics*.
- [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. *JAMA Internal Medicine*.
- [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. *BMJ Open*, **11**, e053377.
- [288] Lazarevic, N. et al. (2021) Prenatal exposure to mixtures of persistent environmental chemicals and fetal growth outcomes in Western Australia. *International Journal of Hygiene and Environmental Health*.
- [289] Flaws, D., **Barnett, A. G.**, et al. (2022) A protocol for tracking outcomes post intensive

- care. *Nursing in Critical Care*, **27**, 341–347.
- [290] Zaaqoq, A. M., et al. (2022) Beneficial effect of prone positioning during venovenous extracorporeal membrane oxygenation for coronavirus disease 2019. *Critical Care Medicine*, **50**, 275–285.
- [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. *Applied Health Economics and Health Policy*, **20**, 55–65.
- [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. *Quality of Life Research*.
- [293] Blythe, R. et al. (2022) A Bayesian approach for incorporating the EQ-5D visual analogue scale when estimating health-related quality of life. *Value in Health*.
- [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. *PLOS ONE*, **17**, e0264360.
- [295] Urner, M. et al. (2022) Venovenous extracorporeal membrane oxygenation in patients with acute respiratory failure from COVID-19: A comparative effectiveness study. *BMJ*.
- [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. *eLife*, **11**, e76123.
- [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. *BMC Geriatrics*, **22**.
- [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. *Artificial Organs*.
- [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. *European Journal of Epidemiology*.
- [300] Shipton, E., Meloncelli, N., D’Emden, M., McIntyre, H. D., Callaway, L., **Barnett, A. G.**, and de Jersey, S. Gestational diabetes screening from the perspective of consumers: Insights from early in the COVID-19 pandemic and opportunities to optimise experiences. *Australian and New Zealand Journal of Obstetrics and Gynaecology*.
- [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. *Journal of Paediatrics and Child Health*.
- [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. *F1000Research*, **7**, 1176.
- [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. *BMC Geriatrics*, **22**.
- [304] Schulz, R., et al. (2022) Is the future of peer review automated? *BMC Research Notes*, **15**.
- [305] **Barnett, A. G.** and Gadd, E. (2022) University league tables have no legs to stand on. *Significance*, **19**, 4–7.
- [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. *Journal of Science and Medicine in Sport*, **26**, 164–168.
- [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. *Journal of Open Source Software*, **8**, 5328.

- [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. *Journal of Clinical Epidemiology*.
- [309] **Barnett, A. G.** (2023) Automated detection of over- and under-dispersion in baseline tables in randomised controlled trials. *F1000Research*, **11**, 783.

Editorials/Letters

- [1] Underwood, M., **Barnett, A.**, and Hajooff, S. (1998) Cluster randomization: a trap for the unwary. *British Journal of General Practice*, **48**, 1089–1090.
- [2] **Barnett, A. G.** (2003) On the use of the bispectrum to detect and model non-linearity. *Bulletin of the Australian Mathematical Society*, **67**, 527–528.
- [3] **Barnett, A. G.** (2005) Meta-analysis of the risk of metachronous hernia in infants and children: an updated analysis. *American Journal of Surgery*, **189**, 126–127.
- [4] **Barnett, A. G.** and Graves, N. (2008) Risk factors for the development of nosocomial pneumonia and mortality on intensive care units: Application of competing risks models (Commentary). *Critical Care*, **12**, 134.
- [5] **Barnett, A. G.**, Graves, N., Cooper, B. S., Batra, R., and Edgeworth, J. (2008) Hospitals are dangerous places (Christmas issue). *The Medical Journal of Australia*, **189**, 672.
- [6] Denton, K. and **Barnett, A. G.** (2008) Effects of early growth on blood pressure of British European and South Asian origin infants at one year of age: The Manchester children's growth and vascular health study (Editorial). *Journal of Hypertension*, **26**, 392–393.
- [7] **Barnett, A.** (2008) Reduction in measurement error confounds cumulative pollution exposure. *Environmental Health Perspectives*, **116**, A419–A420.
- [8] **Barnett, A.**, Tong, S., and Clements, A. C. A. (2010) Time series analysis on the health effects of temperature: two areas for future research. *Environmental Research*, **110**, 639.
- [9] Graves, N., **Barnett, A. G.**, and Clarke, P. (2011) Cutting random funding decisions. *Nature*, **469**, **Invited letter**, %.
- [10] Graves, N. et al. (2011) Cutting funding for health and medical research in Australia may do more harm than good. *MJA Insight*.
- [11] Graves, N. et al. (2011) The importance of good data, analysis and interpretation for showing the economics of reducing healthcare associated infection. *Infection Control and Hospital Epidemiology*.
- [12] **Barnett, A. G.** (2011) Time-dependent exposures and the fixed cohort bias. *Environmental Health Perspectives*, **119**, A422.
- [13] Wolkewitz, M., Cooper, B., **Barnett, A. G.**, Binder, N., and Schumacher, M. (2011) Treatment of hospital-acquired pneumonia. *Lancet Infectious Diseases*, **11**, 729.
- [14] Graves, N. and **Barnett, A. G.** (2011) Administrative burdens: Bureaucracy savings should go to research. *Nature*, **477**.
- [15] Robotham, J. et al. (2011) Response to editorial by Kluytmans and Harbarth. *BMJ*, **343**.
- [16] Strand, L., **Barnett, A. G.**, and Tong, S. (2012) Response to “Epidemiology studies of the health associations of environmental exposures on preterm births”. *American Journal of Epidemiology*, **175**, 113.
- [17] **Barnett, A. G.** and Åström, C. (2012) Commentary: What measure of temperature is the best predictor of mortality? *Environmental Research*, **118**, 149–151.
- [18] **Barnett, A. G.** (2012) Fast food drive-through staff may be exposed to dangerous levels of exhaust fumes. *Australian & New Zealand Journal of Public Health*, **36**, 586.

- [19] Herbert, D. L., **Barnett, A. G.**, and Graves, N. (2013) Funding: Australia’s grant system wastes time. *Nature*, **495**, 314.
- [20] Huang, C. and **Barnett, A. G.** (2014) News & views: Winter weather and health. *Nature Climate Change*, **4**, 173–174.
- [21] **Barnett, A. G.**, Dobson, A., and van der Pols, J. (2015) Correction to “regression to the mean: what it is and how to deal with it”. *International Journal of Epidemiology*.
- [22] **Barnett, A. G.** (2016) Funding by lottery: political problems and research opportunities. *mBio*, **7**, e01369–16.
- [23] **Barnett, A. G.**, Campbell, M., and Burns, C. (2016) Research funding for telemedicine: An Australian perspective. *Journal of Telemedicine and Telecare*, **22**, 189–191.
- [24] Bespalov, A., **Barnett, A. G.**, and Begley, C. G. (2018) Industry is more alarmed about reproducibility than academia. *Nature*, **563**, 626.
- [25] **Barnett, A.** and Byrne, J. (2023) Retract or be damned: the “bystander effect” is worsening the situation. *BMJ*, p. p1654.

Blogs/Other

- [1] **Barnett, A. G.** (2011) Counting the ways vehicle emissions (still) make us sick. *The Conversation*.
- [2] Graves, N., **Barnett, A. G.**, and Clarke, P. (2011) Fingers crossed: the role of randomness in medical research funding. *The Conversation*.
- [3] Graves, N., **Barnett, A. G.**, and Clarke, P. (2012) Submission to the strategic review of health and medical research. <http://www.mckeeonreview.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. *The Conversation*.
- [5] **Barnett, A. G.**, Graves, N., and Rocklöv, J. (2012) Creating a stink about traffic pollution. *The Conversation*.
- [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. *QUT eprints*.
- [7] Graves, N., **Barnett, A. G.**, and Clarke, P. (2013) Reform Australian universities by cutting their bureaucracies. *The Conversation*.
- [8] **Barnett, A.** (2013) Opinion: Air pollution produces postcode lottery. *Newcastle Herald*.
- [9] **Barnett, A. G.**, Herbert, D., and Graves, N. (2013) The end of written grant applications: let’s use a formula. *The Conversation*.
- [10] **Barnett, A. G.** and Herbert, D. (2014) The personal cost of applying for research grants. *The Guardian*.
- [11] Clarke, P., **Barnett, A. G.**, Herbert, D., and Graves, N. (2014) Better ways to spend the medical research future fund. *The Conversation*.
- [12] **Barnett, A. G.** (2014) Dirty air, dodgy politics: why it’s easier to attack science than listen to morwell fire death stats. *The Conversation*.
- [13] **Barnett, A. G.** (2014) Applying for funding is the worst part of my job. *AusHSI*.
- [14] **Barnett, A. G.** and Knibbs, L. (2015) Diesel fumes and your health: VW cover-up shows we need to test local cars. *The Conversation*.
- [15] **Barnett, A. G.** (2015) Reducing grant application numbers: The shame stick or prize carrot? *AusHSI*.
- [16] **Barnett, A. G.** (2015) When should I quit research? an evidence-based approach. *AusHSI*.
- [17] **Barnett, A. G.** (2015) Cold weather is a bigger killer than extreme heat: here’s why. *The Conversation*.

- [18] **Barnett, A. G.** (2015) The NHMRC have an unhealthy obsession with appearances. *AusHSI*.
- [19] **Barnett, A. G.** (2016) Could the review of the NHMRC's grant programme save centuries of researchers' time? *Croakey*.
- [20] **Barnett, A. G.** (2016) A change to judging career disruption. *AusHSI*.
- [21] **Barnett, A. G.** (2016) Improving peer review using peer-reviewed studies #PeerRevWk16. *BMJ Blogs: BMJ Open*.
- [22] **Barnett, A. G.** (2016) Research needs less 'excellence', more competence. *Nature Index*.
- [23] **Barnett, A. G.** (2016) It's time to break ranks on university assessment. *Nature Index*.
- [24] **Barnett, A. G.** (2016) I made my grant application public, here's why you should too. *Nature Index*.
- [25] **Barnett, A. G.** (2017) Success is just a bolt from the blue. *Nature Index*.
- [26] **Barnett, A. G.** (2017) The unethical waste of research dollars. *Nature Index*.
- [27] **Barnett, A. G.** (2017) Australian funding agency turns a blind eye to evidence. *Nature Index*.
- [28] **Barnett, A. G.** (2017) Regression to the mean: or why perfection rarely lasts. *The Conversation*.
- [29] **Barnett, A. G.** (2017) 77 clinical trials, \$29 million and 8 years but still no published results. *Nature Index*.
- [30] **Barnett, A. G.** (2017) Reading between the lines on citation value. *Nature Index*.
- [31] **Barnett, A. G.** (2017) Beneficiaries by ballot: Should research funding be allocated through voting? *Nature Index*.
- [32] **Barnett, A. G.** (2018) Random audits could shift the incentive for researchers from quantity to quality. *LSE Impact Blog*.
- [33] **Barnett, A. G.** and Sisson, S. (2018) A survey needs to involve how many people before I'm convinced. *The Conversation*.
- [34] **Barnett, A. G.** and Sisson, S. (2018) Could Australia win, really? The science of predicting the World Cup champion. *The Conversation*.
- [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. *LSE Impact Blog*; republished in *Australasian Human Research Ethics Consultancy Services*.
- [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. *LSE Impact Blog*.
- [37] **Barnett, A. G.** and Sisson, S. (2019) Here's how to make opinion polls more representative and hones. *The Conversation*.
- [38] **Barnett, A. G.** (2019) A call for a national inquiry into the burden of research ethics and governance. *AHRECS*.
- [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. *BMJ*.
- [40] Page, L. and **Barnett, A. G.** (2022) Research funding is broken. using a lottery approach could fix it. *STAT+*.

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: [19], [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

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.

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

2.8 Web pages

- *shiny* web page to help researchers compile their publication lists:
<https://aushsi.shinyapps.io/orcid/>. Is heavily used and was in the 2017 Instructions to Authors for the Australian Research Council.
- *shiny* web page to help researchers create a network diagram of their publications:
<https://aushsi.shinyapps.io/work-pals/>.

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–, 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)
- 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”
- Twitter: aidybarnett
- Mastodon: aidybarnett
- Github (code-sharing): agbarnett