

Curriculum Vitae—Charlotte M. Jones-Todd

Personal Details

Position: Lecturer

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Education

- **PhD in statistics** **Scotland, UK**
University of St Andrews 2013–2017
- **MSc in statistics *dissertation distinction*** **Scotland, UK**
University of St Andrews 2012–2013
- **BSc (Hons) in mathematics *first class*** **Wales, UK**
Aberystwyth University 2009–2012

Employment

- **Department of Statistics, University of Auckland** **Auckland, NZ**
Lecturer 07/2019–present
- **National Institute of Water and Atmospheric Research** **Hamilton, NZ**
Statistician 01/2018–07/2019
- **University of St Andrews** **Scotland, UK**
Consultant, School of Mathematics and Statistics & Sea Mammal Research Unit 02/2017–12/2017
- **University of Auckland** **Auckland, NZ**
Consultant, School of Epidemiology & Biostatistics 02/2017–05/2017
- **University of St Andrews** **Scotland, UK**
Tutor, School of Mathematics and Statistics 2014–2016
- **University of St Andrews** **Scotland, UK**
Tutor, Centre for Academic, Professional and Organisational Development 2014–2016
- **John Downes Veterinary Surgery** **Wales, UK**
Veterinary Assistant, Receptionist 2007–2012

Scholarships and Awards

- **Statistical Excellence Award for Early-Career Writing—Finalist**
Royal Statistical Society 2017
- **RSS 2015 Challenge—Finalist**
Royal Statistical Society 2015
- **School of Mathematics and Statistics PhD Scholarship**
University of St Andrews 2013–2016
- **EPSRC MSc Scholarship**
University of St Andrews 2012
- **Pennington Prize for Pure Mathematics**
Aberystwyth University 2012

Publications

Published

Jones-Todd, C. M., Pirotta, E., Durban, J., Claridge, D., Baird, R., Falcone, E., Schorr, G., Watwood, S., & Thomas, L. (**Under review**) Continuous-time discrete-space models of marine mammal exposure to Navy sonar.

Semadeni-Davies, A., **Jones-Todd, C. M.**, Srinivasan, MS., Muirhead, R., Elliott, A., Shankar, U., & Tanner, C. (**In press**) CLUES model calibration: residual analysis to investigate potential sources of model error. *New Zealand Journal of Agricultural Research*.

Semadeni-Davies, A., **Jones-Todd, C. M.**, Elliott, A., Shankar, U., Tanner, C., Srinivasan, MS., & Muirhead, R. (2020) CLUES model calibration and its implications for estimating contaminant attenuation. *Agricultural Water Management*, 228, 105853.

Soriano-Redondo, A., **Jones-Todd, C. M.**, Bearhop, S., Hilton, G. M., Lock, L., Stanbury, A., Votier, S. C., & Illian, J. B. (2019) Understanding species distribution in dynamic populations: a new approach using spatio-temporal point process models. *Ecography*, 42 (6), 1092–1102.

Jones-Todd, C. M., Caie, P., Illian, J. B., Stevenson, B. C., Savage, A., Harrison D, J., & Bown, J. (2019) Identifying prognostic structural features in tissue sections of colon cancer patients using point pattern analysis. *Statistics in Medicine*, 38 (8), 1421–1441.

Python, A., Illian, J. B., **Jones-Todd, C. M.**, & Blángiardo, M. A Bayesian approach to modelling subnational spatial dynamics of worldwide non-state terrorism, 2010–2016. (2019) *Journal of the Royal Statistical Society, Series A (Statistics in Society)*, 182 (1), 323–344.

Kool, B., Buller, S., Kuriyan, R., **Jones-Todd, C. M.**, Newcombe, D., & Jones, P. (2018) Alcohol and injury among attendees at a busy inner city New Zealand emergency department. *Injury*, 49 (4), 798–805.

Jones-Todd, C. M., Swallow, B., Illian, J. B., & Toms, M. (2018) A spatio-temporal multi-species model of a semi-continuous response. *Journal of the Royal Statistical Society, Series C (Applied Statistics)*, 67 (3), 705–722.

Python, A., Illian, J. B., **Jones-Todd, C. M.**, & Blángiardo, M. (2016) Explaining the lethality of Boko Haram's terrorist attacks in Nigeria, 2009-2014: A hierarchical Bayesian approach. *Bayesian Statistics in Action: BAYSM 2016*, 231–239.

Other reports.....

Reports

Python, A., Illian, J. B., **Jones-Todd, C. M.**, & Blángiardo, M. (**In press**). Statistics and Terrorism: Insights on terrorism lethality from Bayesian modeling. *Wiley StatsRef-Statistics Reference Online*.

Dudley, B., & **Jones-Todd, C. M.** New Zealand coastal water quality assessment update. Ministry for the Environment. May 2018.

Graham, E., **Jones-Todd, C. M.**, Wadhwa, S., & Storey, R. Analysis of stream responses to riparian management on the Taranaki ring plain. Taranaki Regional Council. March 2018.

Magazine Articles

Jones-Todd, C. M. A time to kill: Great British serial killers. *Significance Online*.

Python, A., Illian, J. B., **Jones-Todd, C. M.**, & Blángiardo, M. The Deadly Facets of Terrorism. *Significance*

Service

- Member of the International Statistical Ecology Conference (ISEC) 2020 local organising committee.
- Department of statistics, University of Auckland
 - *Department of Statistics sustainability working group coordinator*
 - *Member of the Faculty of Science sustainability committee*
 - *Ecological statistics group coordinator*
- Judge at the Waikato Science and Technology Fair 2018

Other Service

- **Conference session chair**
 - Co-organiser and presenter at the Women in Data Science Conference, Auckland, March 2020.
 - Statistics in Ecology and Environmental Monitoring (SEEM) Conference, December 2019.
- **Manuscript reviewing**
 - *Journal of Peace Research*
 - *Advances in Statistical Analysis*
 - *Scientific Reports*
 - *Ecology*
 - *Journal of the Royal Statistical Society, Series C*
 - *Ecology and Evolution*
 - *Ecological Research*
- **Interview panel member**
Centre for Academic, Professional and Organisational Development (CAPOD).

Technical Skills

Advanced user of: R, Git, Bash, \LaTeX , C++, HTML, CSS, Python

Memberships

- New Zealand Statistical Association (NZSA)
- International Biometric Society (IBS), Australasian Region