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.**, 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.

Semadeni-Davies, A., **Jones-Todd, C. M.**, Srinivasan, MS., Muirhead , R., Elliott, A., Shankar, U., & Tanner, C. (2020) CLUES model calibration: residual analysis to investigate potential sources of model error. New Zealand Journal of Agricultural Research, 1–24.

Soranio-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. Statistics and Terrorism: Insights on terrorism lethality from Bayesian modeling. *Wiley StatsRef-Statistics Reference Online*. July 2020.

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
  - *Chair of the Christmas function organising committee, 2020*
  - *Department of Statistics working from home committee*
  - *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

- **Associate Editor**
  - *Journal of Statistical Theory and Practice*
- **Conference session chair**
  - virtual International Statistical Ecology Conference (vISEC), July 2020.
  - Statistics in Ecology and Environmental Monitoring (SEEM) Conference, December 2019.
- **Student paper judge**
  - virtual International Statistical Ecology Conference (vISEC), July 2020.
- **Manuscript reviewing**
  - *Methods in Ecology and Evolution*
  - *Spatial Statistics*
  - *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