# Helen Ogden

**Curriculum Vitae** 

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# Education

2010 - 2014	PhD in Statistics, University of Warwick
2009 - 2010	MPhil in Statistical Sciences, University of Cambridge
2006 - 2009	BA in Mathematics, University of Cambridge (MA 2013)

# Academic Employment

Sept. 2016 –	Lecturer in Statistics, Mathematical Sciences, University of Southampton.
	(Break for maternity leave Oct. 2020 – April 2021)
2019 - 2023	Turing Fellow, Alan Turing Institute
2013 - 2016	Research Fellow, Department of Statistics, University of Warwick.
	Funded by EPSRC programme grant i-like (Intractable Likelihood: New Challenges
	from Modern Applications).

# Teaching

2022 – 2019 – 2023	Lecturer for Introduction to Probability and Statistics, University of Southampton Lecturer for Statistical Modelling module, Academy for Postgraduate Training in Statistics (APTS)
May 2019	Lecturer for graduate course on Pseudo Likelihoods, University of Trento
2019 - 2020	Lecturer for Statistical Modelling II, University of Southampton
2017 - 2018	Lecturer for Statistical Theory and Linear Models, University of Southampton
2016/17/19	Lecturer for Statistical Distribution Theory, University of Southampton
2015 - 2016	Lecturer for Graphical Models part of Topics in Statistics, University of Warwick

## PhD Supervision

Current PhD students: Theodora Nearchou (supervised with Dave Woods), Ysanne Pritchard (with Ruben Sanchez-Garcia and Sumeet Mahajan).

Former PhD students: Matthew Morton (supervised with Dankmar Böhning).

# **Selected Other Activities**

2024 -	Director of EDI, School of Mathematical Sciences, University of Southampton
2023 -	Associate Editor, Biometrika
2023 -	Deputy Director, Southampton Statistical Sciences Research Institute
2023 - 2024	Member of Scientific Committee, International Workshop in Statistical Modelling
2020 -	Member of Royal Statistical Society Conference Board
2018 -	Chair of Mathematical Sciences Equality, Diversity and Inclusion committee
2017 – 20, 23	Organizer of Southampton Statistical Sciences Research Institute seminar series
April 2016	Organizer of CRiSM workshop on Estimating Constants

## Awards

Oct. 2013	Giving to Warwick prize, in recognition of academic excellence and outstanding con-
	tribution to the teaching programme in the department of Statistics
2010	Bartlett Prize for Applied Probability, University of Cambridge

#### **Recent Talks & Organised Conference Sessions**

Feb. 2024	Statistics seminar, King's College London
Dec. 2023	CMStatistics conference, Berlin
Mar. 2023	Statistics seminar, Imperial College London
Feb. 2023	Statistics seminar, Durham University
Dec. 2022	CMStatistics conference, London. Organised session on "Advances in flexible regres-
	sion"
Sep. 2022	Royal Statistical Society Conference, Aberdeen
July 2022	Australian Pharmaceutical Biostatistics Group mid-year meeting
June 2022	Statistical Society of Australia Canberra branch meeting
Feb. 2022	Statistics seminar, University of Bath

# Publications

#### Refereed research papers

- 1. Ogden, H. E. (2015). A sequential reduction method for inference in generalized linear mixed models. *Electron. J. Statist.* **9**, 135–152.
- 2. Ogden, H. E. (2016). A caveat on the robustness of composite likelihood estimators: The case of a mis-specified random effect distribution. *Statistica Sinica* **26**, 639–651.
- 3. Ogden, H. E. (2017). On asymptotic validity of naive inference with an approximate likelihood. *Biometrika* **104**(1), 153–164.
- Böhning, D. and H. E. Ogden (2021). General flation models for count data. *Metrika* 84(2), 245–261.
- 5. Ogden, H. (2021). On the error in Laplace approximations of high-dimensional integrals. *Stat* **10**(1), e380.
- 6. Geroldinger, A., R. Blagus, H. Ogden, and G. Heinze (2022). An investigation of penalization and data augmentation to improve convergence of generalized estimating equations for clustered binary outcomes. *BMC Medical Research Methodology* **22**(1), 168.
- 7. Pritchard, Y., A. Sharma, C. Clarkin, H. Ogden, S. Mahajan, and R. J. Sánchez-García (2023). Persistent homology analysis distinguishes pathological bone microstructure in non-linear microscopy images. *Scientific Reports* **13**(1), 2522.

#### Submitted papers

1. Ogden, H. (2024). Flexible Models for Simple Longitudinal Data. arXiv: 2401.11827 [stat.ME].

#### Papers in conference proceedings

 Draaijer, S., S. Jordan, and H. Ogden (2018). Calculating the Random Guess Score of Multiple-Response and Matching Test Items. In: *Technology Enhanced Assessment*. Ed. by E. Ras and A. E. Guerrero Roldán. Cham: Springer International Publishing, pp.210–222.

#### Theses

- 1. Jordan, H. E. (2010). "Sampling formulae for marine populations". In previous name, Helen Jordan. MPhil Thesis. University of Cambridge.
- 2. Ogden, H. E. (Feb. 2014). "Inference for generalised linear mixed models with sparse structure". PhD thesis. University of Warwick. http://wrap.warwick.ac.uk/60467/.

#### R packages

1. Ogden, H. (2019). *glmmsr: Fit a Generalized Linear Mixed Model*. R package version 0.2.3. https://CRAN.R-project.org/package=glmmsr.