Professor Jane Luise Hutton

Department of Statistics, The University of Warwick, Coventry, CV4 7AL
Tel: 024 7652 8357 Fax: 024 7652 4532 Email: J.L.Hutton@warwick.ac.uk

Higher education and professional qualifications

BSc (Hons) Maths & Stats (First Class) 1982 University of Edinburgh
Diploma in Mathematical Statistics 1983 University of Cambridge
PhD in Statistics, Diploma of Imperial College 1986 University of London
Chartered Statistician 1994 Royal Statistical Society

Employment history: appointments held

The University of Warwick: Professor (2004), Reader (2002), Senior Lecturer (2000),
Department of Statistics, October 2000 - present
Head of Department of Statistics, 2005-2008.
Non-executive Director, Universities Superannuation Fund, Nov 2015 - Oct 2019.
The University of Newcastle: Senior Lecturer
Department of Mathematics & Statistics, January 1996 - September 2000.
The University of Liverpool: Lecturer,
Departments of Stats & Computational Maths, and Public Health, Oct 1986 - Dec 1995.

Honours

International Biometric Society Rob Kempton Award 2016.
Suffrage Science: Women in Maths & Computing 2016.
Royal Society Wolfson Research Merit Award, 2013-2017.
Royal Statistical Society Mardia Prize, 2023: Statistics and the Law workshops

Statistical Societies: membership and roles

International Statistical Insitute: Elected member, 2002
International Biometric Society:
- Education Committee, chair 2002-2003, member 2004-2005, 2013-2019 - Liaison with International Statistical Insitute, 2016-2019 Royal Statistical Society:
- Statistics & the Law Section, chair 2019-2021, member 2015-2018
- Vice-president, 2001-2002
- Medical Section, chair 2002-2004, member 1999-2002

Selected Grants

Medical Research Council: Feb 2001 - Dec 2004. "Life expectancy in children and young adults with cerebral palsy." £229,000. Principle investigator, with POD Pharoah.
Medical Research Council: July 2005 - Dec 2008. "Models for selection bias, applied to controlled trials and observational studies of anti-epileptic drugs." £199,000. Principle investigator, with D Chadwick, AG Marson, PR Williams.
National Institute for Health Research: Dec 2012 - May 2013. "Exploring the role of Chain Event Graphs in modeling and managing chronic diseases. £28,000. Principle investigator.

Career and achievements

A defining feature of my career is the translation of statistical theory into tangible societal benefits, through research publications, teaching and consulting. I am qualified to provide statistical evidence on the design and analysis of studies in science and other areas of research. My particles in statistical, medical and philosophical journals span a wide range of science, social science and philosophical research. I have been invited to provide expert reviews for national and international grant awarding bodies. Nationally, these include the Royal Society, the Engineering and Physical Science Research Council (RC), the Medical, Social Science, Natural Environment, Biological & Biosciences and Arts & Humanities RCs, the National Institute for Health Research and the Wellcome and Leverhulme Trusts. Internationally, these include the Health Research Board, Eire; the Netherlands Organisation for Scientific Research; and the National Research Foundation, South Africa.

Research publications

My research bridges methodological innovation and practical applications in health, social sciences and policy. My principal theoretical interests are survival analysis, meta-analysis and selection biases. My methodological research is motivated by questions raised by professionals including doctors, scientists, lawyers as well as their clients and patients. In the investigation of time-to-event data (e.g. recidivism rates, failure times), I proved that conclusions can differ substantially depending on the choice between two common models (proportional hazards and accelerated life models), particularly with variable quality data. Meta-analysis aims to provide accurate quantitative summaries of the range of research on a topic. I have demonstrated how substantial biases often arise from selective reporting and outcome selection. Understanding the impact of selected data and missing information is essential for robust interpretation of statistical and epidemiological studies. I have also developed methods to handle missing information in longitudinal studies, including the use of skew-normal distributions and staged trees to extract and understand patterns of missing data. My publications in ethics and statistics arise from my exploration of the interplay of information, knowledge and truth.

I have published over 150 articles, reports and reviews. My full professional academic curriculum vitae is available at go.warwick.ac.uk/jlhutton.

Impact of Research

My research has impacted people and policies. My work on life expectancy of people with cerebral palsy showed that they live much longer than previously assumed. This affected health and social service planning. My collaborations in systematic reviews and meta-analyses of anti-epileptic drugs led to revised treatment guidelines for people with epilepsy, nationally and internationally. Her theoretical work on biases in meta-analysis resulted in international guidelines on the choice of outcome measurements of treatments for patients. The COMET Initiative (Core Outcome Measures in Effectiveness Trials) is the international standard, and is endorsed by research funders and the pharmaceutical industry.

Teaching, professional development and mentorship

I teach at all university levels, to specialist mathematicians, non-mathematical students in medicine, engineering, life, physical and social sciences, and provide medical doctors and lawyers with statistics professional development coursess. I contributed to the "Statistics and probability for advocates" guide (2017) and the Royal Societies "The use of statistics in legal proceedings" primer (2020). I organised four interdisciplinary workshops on statistics and the law, and ongoing projects. I am committed to national and international capacity building.

Expert Witness
Since 1995, I served as an expert witness in over 500 cases across the UK, Ireland, Hong Kong, Australia, Canada, and South Africa. The majority of my reports address life expectancy in cerebral palsy, traumatic brain injury, spinal cord injury, other accidental injuries, and survival with cancer or amputations. From 2021-2022 financial year to mid-July 2026, I have provided 198 reports. I have provided life expectancy reports for cerebral palsy (35), traumatic brain injury (39), aquired brain injury (7), spinal cord injury (17), and after road traffice accidents (18). Other reports include negligence or delayed diagnosis and assault. I have contributed several reports in cases which addressed adverse events from medical or medical implants and commercial disputed.

Notable commercial cases include:
- Colin Gee and others v Deput International Limited. Neutral Citation Number: [2018] EWHC 1208 (QB)
- Cardiorentis AG v IQVIA Limited. Neutral Citation Number: [2022] EWHC 250 (Comm).
- Secretary of State for Health and Social Care -v- PPE Medpro. Neutral citation number: [2025] EWHC 2486 (Comm)

I provided a report for the criminal case in which Anuradha Bhupathiraju is charged with gross negligence manslaughter of James Dwerryhouse, and gave evidence in Southwark Crown Court in December 2025.

I had an afternoon of witness familiarisation training in 2021 with an expert trainer from Bond Solon. This was a three hour in person meeting of myself with the trainer.

I provide reports as a professional statistician, with "statistics" as understood by the Royal Statistical Society, the International Statistical Institute and the International Biometric Society. Statistics includes the design and evaluation of data collection methods; the initial examination of data to assess quality, bias and distribution; clear statements of the assumptions made in the choice and implementation of statistical models; consideration of how models might be affected by biased data or implausible assumptions; and presentation of results with appropriate measures of uncertainty.

Selected Refereed Publications

[1] J L Hutton, T Cooke, and P O D Pharoah. Life expectancy in children with cerebral palsy. *Brit. Med. J*, 309:431–435, 1994.

[2] G Maudsley, J L Hutton, and P O D Pharoah. Cause of death in cerebral palsy: a descriptive study. *Arch. Dis. Ch*, 81:390–394, 1999.

[3] J L Hutton, A F Colver, and P C Mackie. Effect of severity of disability on survival in north east England cerebral palsy cohort. *Arch. Dis. Ch*, 83:468–474, 2000.

[4] J L Hutton and P O D Pharoah. Effects of cognitive, sensory and motor impairment on the survival of people with cerebral palsy. *Arch. Dis. Ch*, 86:84–89, 2002.

[5] SN Jarvis, SV Glinianaia, MG Torrioli, MJ Platt, M Miceli, PS Jouk, A Johnson, J L Hutton, G Hagberg, H Dolk, J Chalmers, and K Hemming. Cerebral palsy and intrauterine growth in single births: a European collaborative study. *Lancet*, 362:1106–1111, 2003.

[6] M Topp, L D Huusom, J Langhoff-Roos, C Delhumeau, J L Hutton, and H Dolk. Multiple birth and cerebral palsy in Europe: a multicenter study. *Acta Obstet Gynecol Scand*, 83:548–553, 2004.

[7] K Hemming, J L Hutton, A Colver, and MJ Platt. Regional variation in survival of people with cerebral palsy in the United Kingdom. *Pediatrics*, 116:1383–1390, 2005.

[8] K Hemming, J L Hutton, and POD Pharoah. Long term survival for a cohort of adults with cerebral palsy. *Dev. Med. & Child. Neur.*, 48:90–95, 2006.

[9] P O D Pharoah and J L Hutton. Life expectancy in severe cerebral palsy. *Arch. Dis. Ch*, 91:254–258, 2006. doi:0.1136/adc.2005.075002.

[10] K Hemming, J L Hutton, S Bonellie, and J Kurinczuk. Intrauterine growth and survival in cerebral palsy. *Arch Dis Child Fetal Neonatal Ed*, 93:F121–F126, 2008. doi:10.1136/adc.2007.121129.

[11] K Hemming, A Colver, J L Hutton, POD Pharoah, and J Kurinczuk. The influence of gestational age on severity of disability in bilateral and unilateral spastic cerebral palsy. *J. Peds*, 153:203–208.e4, 2008.

[12] G Surman, K Hemming, M J Platt, J Parkes, A Green, J L Hutton, and J J Kurinczuk. Children with cerebral palsy: severity and trends over time. *Paed. Peri Epidem.*, 36:513–21, 2009. DOI: 10.1111/j.1365-3016.2009.01060.x.

[13] K Hemming, J L Hutton, and S Bonellie. A comparison of customized and population-based birth-weight standards: The influence of gestational age. *Eur.J.Obs. & Gyne. Rep. Biol.*, 146:41–45, 2009.

[14] K Hemming, S Bonellie, and J L Hutton. Fetal growth and birth-weight standards as screening tools: methods for evaluating performance. *B.J.Obs.Gyne.*, 118:1477–1483, 2011.

[15] J L Hutton. Life expectancy with cerebral palsy and other neurological injuries. In PJ Aston, AJ Mulholland, and KMM Tant, editors, *UK Success Stories in Industrial Mathematics*, pages 237–241. Springer, Switzerland, 2016.

[16] JL Hutton. Expert evidence: civil law, epidemiology and data quality. *Law, Probability And Risk*, 17:101–110, 2018.

[17] JL Hutton. Forensic statistics: How to estimate life expectancy after injury. In A Pollice, N Salvati, and FS Spagnolo, editors, *Book of short papers - SIS 2020*, pages 564–569. Pearson, www.pearson.com, 2020. ISBN 9788891910776.

[18] A Beiderman, C Champod, JL Hutton, G Jackson, Lord Kitchin, T Neocleous, D Spiegelhalter, S Willis, and A Wilson. *The use of statistics in legal proceedings: a primer for courts*. The Royal Society and The Royal Society of Edinburgh, London and Edinburgh, 2020.

[19] P R Williamson and J L Hutton. Minimising bias and increasing relevance in clinical trials: basis for the international standard. In PJ Aston, editor, *More UK Success Stories in Industrial Mathematics*. Springer Cham, Switzerland, 2024. eBook.