

Nicholas Tibor Longford

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Education¹

Leeds University, Leeds	1982	PhD.	Statistics
Sussex University, Brighton	1979	MSc.	Statistics
Charles University, Prague, Czechoslovakia	1978	Prom. Math.	Mathematics/ Statistics

Employment History

9/2015–	Senior Statistician, Department of Medicine, Imperial College, London
6/2004–	Statistical Consultant (self-employed), SNTL, Statistics Research and Consulting, Barcelona, Spain
9/2006–9/09	Adjunct Professor, Department of Economics and Business, Universitat Pompeu Fabra, Barcelona, Spain
9/1995–6/04	Senior Research Fellow, Department of Medical Statistics, De Montfort University, Leicester
1994–95	Senior Research Scientist, Division of Statistics and Psychometric Research, Educational Testing Service, Princeton, NJ, USA
1990–94	Research Scientist, Division of Statistics and Psychometric Research, Educational Testing Service, Princeton, NJ, USA
1986–90	See <i>Visiting Appointments</i> , p. 2.
1983–86	Research Fellow, Centre for Applied Statistics, Lancaster University, Lancaster
1983	Statistician, Division of Research and Development, Boots plc, Nottingham
1982–83	Statistician, Institute of Hearing Research, Medical Research Council, Nottingham

¹All places are in the UK, unless stated otherwise

Visiting Appointments and Secondments²

May–June 2013 Oct.–Nov. 2014	Visiting Professor, Universidad del Valle, Cali, Colombia
May–June 2011 May–June 2012 Febr.–April 2013	Visiting Professor, CEPS/INSTEAD, Esch-Belval, Luxembourg
May–June 2009 April–May 2010	Visiting Professor, Department of Statistics, Sapienza University of Rome, Italy
Jan.–Febr. 2007	Visiting Professor, Department of Statistics, University of Khartoum, Sudan
June 2005–Dec. 2006	Visiting Professor, Department of Economics and Business, Universitat Pompeu Fabra, Barcelona, Spain
July–Nov. 2003	Academic Visitor, Institute of Information Science and Technology, Massey University, New Zealand
Jan.–Febr. 2002	Visiting Professor, Department of Statistics, University of Khartoum, Sudan
2001–2004	Secondment to the Office for National Statistics, London
March–July 1995	Visiting Professor, Department of Economics and Business, Universitat Pompeu Fabra, Barcelona, Spain
June–July 1994	Visitor, Department of Statistics, University of Adelaide, Australia
May–June 1994	Visiting Professor, Zentrum für Umfragen, Methoden, und Analysen, Mannheim, Germany
June–July 1991	ESRC Visiting Research Fellow, University of London Institute of Education, London
Jan.–Sept. 1991	Visiting Lecturer, Institute for Electronic Systems, Aalborg University, Aalborg, Denmark
1989–90	Visiting Associate Professor, Department of Mathematics, UCLA, Los Angeles, CA, USA
Jan.–Febr. 1989	Visiting Scientist, Institute of Pure and Applied Mathematics, the Brazilian Academy of Sciences, Rio de Janeiro, Brazil
1986–89	Visiting Research Scientist, Research Statistics Group, Educational Testing Service, Princeton, NJ, USA

²Appointments for periods shorter than one month are not listed

Lecturing Experience³

June–July 2014	Summer Course in Statistical Computing, Universitat Pompeu Fabra, Barcelona, Spain
May–June 2013 Oct.–Nov. 2014	MSc. in Statistics, Universidad del Valle, Cali, Colombia
May–June 2010	MSc. in Epidemiology and Medical Statistics, King Saud bin Abdelaziz University for Health Sciences, Riyadh, Saudi Arabia (collaboration with Liverpool School of Tropical Medicine)
2007–08	Department of Economics and Business, Universitat Pompeu Fabra, Barcelona, Spain
Jan.–Febr. 2007	Department of Statistics, Khartoum University, Sudan (MSc. course in Statistics)
Sept.–Dec. 2005 Sept.–Dec. 2006	Department of Economics and Business, Universitat Pompeu Fabra, Barcelona, Spain (GPEFM Programme)
Aug.–Nov. 2003	Institute of Information Systems and Technology, Massey University, Palmerston North, New Zealand
Jan.–Febr. 2002	Department of Statistics, Khartoum University, Sudan (MSc. course in Statistics)
August 1998	Summer University Course in Statistics for Social Sciences, Central European University, Budapest, Hungary
Jan.–Sept. 1991	Institute for Electronic Systems, Aalborg University, Aalborg, Denmark
1989–90	Department of Mathematics, UCLA, Los Angeles, CA

³Courses of lectures given over one week or a shorter period are not listed.

PhD. Graduates

- 1998 Jixian Wang, *Design and Analysis of Pharmacokinetic and Pharmacodynamic Trials* (supervision with B. Jones)
- 1999 Joanna J. Worth, *Learning Styles and Electronic Library Systems* (supervision with C. Fidler and S. Bennett)
- 2000 Liaqat Ali, *Towards a Strategic Information Systems Planning for Pakistani Business* (supervision with S. Rogerson and C. Fidler)
- 2000 Yunus Zakharia, *Management Regimes for Commercial Exploitation of Tropical Forests* (supervision with R. Weddeburn)
- 2002 Nicole Blackman, *Criteria for Demonstrating the Efficacy of a Medical Test*
- 2003 Ricky Autar, *Advancing Clinical Practice in the Management of Deep Vein Thrombosis* (supervision with F. Dewhurst)
- Patrick Johnson, *Maximal and Submaximal Oxygen Uptake in Men and Women* (supervision with E. Winter and A. Nevill)
- 2004 Margaret Ely, *Dealing with Missing Data by Multiple Imputation in an Epidemiological Study of Alcohol Consumption* (UC London, supervision with M. Wadsworth)
- Katy D. Taylor, *Equine Headshaking Syndrome: An Epidemiological Study* (supervision with D. Mills and B. Jones)
- 2005 Carola Deppe, *Designs for Sensory Multi-session Trials with Preparation Constraints* (supervision with R. Carpenter and B. Jones)
- Ula Nur, *Handling Missing Data in Analyses of the Women's Cohort Study* (Leeds University, supervision with J. Cade and D. Greenwood)
- 2011 Javier Palacios Fenech, *Adoption and Discontinuance of Innovations* (supervision with M. Greenacre)

Also extensive assistance provided to:

Mercedes Andrade Bejarano, *Monthly Average Temperature Modelling for Valle del Cauca (Colombia)*. University of Reading; 2008. (Appointment by University of Reading)

Tiodora H. Siagian, *Assessment of natural hazards to vulnerable populations in Indonesia*. Institut Teknologi Sepuluh Nopember, Surabaya, Indonesia; 2014. (StatMentoring scheme)

Consulting Experience (selected projects)⁴

- 2008–11 World Bank and ECORYS, Rotterdam, the Netherlands
(Measurement of poverty and its aspects in Ukraine)
- 2008–09 Hospital Clínic, University of Barcelona (Technical audit
of studies of intermittent prevention treatment of malaria)
- 2008, 2013 AIS International, Barcelona (A house price index for Mexico)
- 2005–08 National Standards Association for Ireland, Dublin, Ireland
(Audit of the Mail Monitor; Irish Post Office)
- 2004–05 Home Office, Research Statistics and Development, London
(Estimation of Juvenile Reconviction Rates)
- 2003–05 World Bank and Ukrainian Ministry of Labour and Social Affairs
(Small-area estimation of poverty rates)
- 2003–09 Valuation Consultants, New Zealand (Prediction of house prices)
- 2001–04 Scottish Homes/Communities Scotland (Surveyor inconsistency)
- 2001–02 Agilent Technologies (Management of customer relationship)
- 1–5/2000 UK Department of Trade and Industry
(E-commerce: Mapping measures of success)
- 1999–00 The Planning Unit, De Montfort University, Leicester
(Widening participation project)
- 1999 Consortium for Automotive Recycling (The future of used-car disposal)
- 1997–98 The National Household Health Expenditure Survey in Malaysia
University of Malaya, Kuala Lumpur (Survey analysis)
- 1995–99 Member of CliniStat, a statistics consulting group at De Montfort
University, Leicester
- 1995–98 Interuniversity Council of Catalonia
(Assessing the quality of essay rating)
- 1994–95 Centers for Disease Control, Atlanta, GA, USA
(Adolescent HIV/STD Prevention)
- 1993–96 Institute for Employment and Labour Market Research,
Nürnberg, Germany (Trends in wage differences)

⁴No projects listed after 2010

Professional Activities

Research Grants and Awards

- 2014 Outstanding Reviewer award from the Journal of Educational and Behavioral Statistics
- 2011–15 Programmatic Research Grant from the Spanish Ministry of Education and Science (with A. Satorra)
- 2009 Travel grant from the project Access to Research Infrastructure, CEPS/INSTEAD, Differdange, Luxembourg
- 2006–10 Programmatic Research Grant from the Spanish Ministry of Education and Science (with A. Satorra)
- 2005–06 Research Grant from the Spanish Ministry of Education and Science for a Sabbatical at Universitat Pompeu Fabra, Barcelona, Spain
- 2000–04 EURAREA — Enhancing Small-Area Estimation Techniques to Meet European Needs. FP5 Research Grant from Eurostat (member of a consortium)
- 2000–02 Champion Fellowship 2000 (award from the Royal Statistical Society)
- 1999–00 Three grants under the Training and Mobility of Researchers Programme of the European Union, Universities of Bergen, Norway, and Cologne, Germany, and CEPS/INSTEAD, Luxembourg
- 1997–00 Antecedents of midlife alcohol consumption and problems with alcohol (with Prof. M. Wadsworth, UC London). Two grants from the Alcohol Education Research Council, UK
- 1996–98 Small-area estimation of U. S. state-level means in NAEP (National Assessment of Educational Progress). Grant from NCES, U. S. Department of Education
- 1994–97 Subjective rating in large-scale educational surveys. Grant from NCES, U. S. Department of Education
- 1994–95 Statistical models in social sciences (with Prof. A. Satorra, Universitat Pompeu Fabra, Barcelona). Grant from the Spanish Ministry of Education and Science
- 1992–93 Model-based substitutes for jackknife in NAEP (National Assessment of Educational Progress). Grant from NCES, U. S. Department of Education

Offices Held

- 1994–95 President of the Princeton-Trenton (NJ) Chapter of ASA

Affiliation

American Statistical Association

Other professional activities

- 2016– Associate Editor, Statistical Methods in Medical Research
- 2013– Reviewer for Mathematical Reviews
- 2010– Associate Editor, Journal of Educational and Behavioral Statistics
- 2008 External PhD. examiner, University of Jyväskylä, Finland
- 2005–09 Member of the Research Section Committee of the Royal Statistical Society
- 2004 Associate Editor, Journal of the Royal Statistical Society, Series A
- 2003–04 External PhD. examiner, Massey University, New Zealand
- 2003–05 Member of the EPSRC Peer Review College
- 2002 External PhD. examiner, Universitat Pompeu Fabra, Barcelona, Spain
- 2002–07 Member of the Editorial Board, British Journal of Mathematical and Statistical Psychology
- 2001 External PhD. examiner, Universitat Pompeu Fabra, Barcelona, Spain
- 2001–04 Member of the Social Statistics Section and the Programme Committees, the Royal Statistical Society
- 2001–03 Associate Editor, Journal of the Royal Statistical Society, Series D (The Statistician)
- 2000–04 Editor (Member of the Board), Journal of Multivariate Analysis
- 1998 External PhD. examiner, Universitat Politècnica de Catalunya, Barcelona, Spain
- 1996–04 Supervision of PhD. students at De Montfort University
- 1995–02 Associate Editor of the Journal of Educational and Behavioral Statistics
- 1994–95 Member of a PhD. Thesis Committee at the Graduate School of Education, Rutgers University, New Brunswick, NJ
- 1992–95 Supervision of pre- and post-doctoral interns at ETS

Publications⁵

Monographs

Statistical Studies of Income, Poverty and Inequality in Europe. Computing and Graphics in R using EU-SILC. Chapman and Hall/CRC, New York, 2015.

Statistical Decision Theory. Springer-Verlag, Heidelberg, Germany, 2013.

Studying Human Populations. An Advanced Course in Statistics. Springer-Verlag, New York, 2008.

Missing Data and Small-Area Estimation. Analytical Equipment for the Survey Statistician. Springer-Verlag, New York, 2005.

Models for Uncertainty in Educational Testing. Springer-Verlag, New York, 1995.

Random Coefficient Models. Oxford University Press, Oxford, 1993.

Software

VARCL – Software for variance component analysis of data with nested random effects (maximum likelihood). iec ProGamma, Groningen, the Netherlands, 1993.

In Refereed Journals (88 items)

Estimation under model uncertainty. *Statistica Sinica* **26**, 2016; to appear.

Duration of post-operative atrial fibrillation after cardiac surgery is associated with worsened long-term survival (with M. I. Sigurdsson *et al.*). *The Annals of Thoracic Surgery* **101**, 2016; to appear.

Comparing two treatments by decision theory. *Pharmaceutical Statistics* **15**, 2016; to appear.

Decision theory for selecting the winners, ranking and classification. *Journal of Educational and Behavioral Statistics* **41**, 2016; to appear.

Classification in two-stage screening. *Statistics in Medicine* **34**, 3281–3297, 2015.

Policy-oriented inference and the analyst-client cooperation. An example from small-area estimation. *Statistics in Transition* **16**, 65–82, 2015.

Equating without an anchor for non-equivalent groups of examinees. *Journal of Educational and Behavioral Statistics* **40**, 227–253, 2015.

On the inefficiency of the restricted maximum likelihood. *Statistica Neerlandica* **69**, 171–196, 2015.

Decision theory for the variance ratio in one-way ANOVA with random effects (with M. Andrade Bejarano). *Revista Colombiana de Estadística* **38**, 181–207, 2015.

Policy-related small-area estimation. *South African Journal of Statistics* **49**, 105–119, 2015.

A study of income stability in the Czech Republic by finite mixtures (with J. Bartošová). *Prague Economic Papers*, **23**, 330–348, 2014.

A confusion index for measuring separation and clustering (with J. Bartošová). *Statistical Modelling* **14**, 229–255, 2014.

⁵Multi-author items are listed only when NTL is the first or second author.

Tests for spatial and temporal correlation in mixed models for climate data (with M. Andrade Bejarano and D. Tovar-Rios). *Revista Brasileira de Biometria* **32**, 130–142, 2014.

Sample size calculation for comparing two normal random samples using equilibrium priors. *Communications in Statistics — Simulation and Computation* **43**, 2149–2161, 2014.

The international rate of discontinuance of some old products (with J. Palacios Fenech). *Journal of Global Marketing* **27**, 59–73, 2014.

Survey on the clinical assessment and utility of near-infrared cerebral oximetry in cardiac surgery. (Zacharias, D.G., *et al.*) *Journal of Cardiothoracic and Vascular Anesthesia* **28**, 308–316, 2014.

A decision-theoretical alternative to testing many hypotheses. *Biostatistics* **15**, 154–169, 2014.

Screening test items for differential item functioning. *Journal of Educational and Behavioral Statistics* **39**, 3–21, 2014.

The effect of unemployment benefits on labour market behaviour in Luxembourg (with I. Salagean). *Statistics in Transition* **14**, 249–272, 2013.

Searching for contaminants. *Journal of Applied Statistics* **40**, 2041–2055, 2013.

Assessment of precision with aversity to overstatement. *South African Journal of Statistics* **47**, 49–59, 2013.

Screening as an application of decision theory. *Statistics in Medicine* **32**, 849–863, 2013.

Alternatives to the poverty gap for international comparisons. *Ukrainian Journal of Demography and Social Economics* **2**, 132–141, 2012.

Comparing normal random samples, with uncertainty about the priors and utilities. *Scandinavian Journal of Statistics* **39**, 729–742, 2012.

Handling the limit of detection by extrapolation. *Statistics in Medicine* **31**, 3133–3146, 2012.

Mixtures of autoregressions with an improper component for panel data (with P. D’Urso). *Journal of Classification* **29**, 341–362, 2012.

Small-sample estimators of the quantiles of the normal, lognormal and Pareto distributions. *Journal of Statistical Computation and Simulation* **82**, 1383–1395, 2012.

‘Which model?’ is the wrong question. *Statistica Neerlandica* **66**, 237–252, 2012.

Poverty and inequality in European regions (with M. G. Pittau, R. Zelli and R. Massari). *Journal of Applied Statistics* **39**, 1557–1576, 2012.

Allocating a limited budget to small areas. *Journal of Indian Society for Agricultural Statistics* **66**, 31–41, 2012.

A revision of school effectiveness analysis. *Journal of Educational and Behavioral Statistics* **37**, 157–179, 2012.

Well-being and obesity of rheumatoid arthritis patients (with C. Nicodemo, M. Núñez and E. Núñez). *Health Services and Outcomes Research Methodology* **11**, 27–43, 2011.

Mixture models with an improper component (with P. D’Urso). *Journal of Applied Statistics* **38**, 2511–2521, 2011.

An assessment of empirical Bayes and composite estimators for small areas. *Statistical Modelling* **11**, 137–157, 2011.

Outliers in mixed models for monthly average temperatures (with M. Andrade Bejarano). *Austrian Journal of Statistics* **39**, 203–221, 2010.

Bayesian decision making about small binomial rates with uncertainty about the prior. *The American Statistician* **64**, 164–169, 2010.

Small-sample inference about variance and its transformations. *SORT*, Journal of the Catalan Institute of Statistics, **34**, 3–29, 2010.

Estimation of the effect size in meta-analysis with few studies. *Statistics in Medicine* **29**, 421–430, 2010.

Small-area estimation with spatial similarity. *Computational Statistics and Data Analysis* **54**, 1151–1166, 2010.

Efficient estimation of the standardized value. *Journal of Educational and Behavioral Statistics* **34**, 522–529, 2009.

Analysis of all-zero binomial outcomes. *Journal of Applied Statistics* **36**, 1259–1265, 2009.

The impact of handling missing data on alcohol consumption estimates in the UK Women’s Cohort Study (with U. Nur, J. E. Cade and D. C. Greenwood). *European Journal of Epidemiology* **24**, 589–595, 2009.

Inference with the lognormal distribution. *Journal of Statistical Planning and Inference* **139**, 2329–2340, 2009.

An application of shrinkage to dealing with extreme values. *Statistics in Transition* **12**, 196–207, 2008.

An alternative analysis of variance. *SORT*, Journal of the Catalan Institute of Statistics **32**, 77–91, 2008.

On standard errors of model-based small-area estimators. *Survey Methodology* **33**, 69–79, 2007. (De l’erreur-type des estimateurs pour petits domaines fondés sur un modèle. *Techniques d’enquête* **33**, 81–92, 2007.)

Stability of household income in European countries in the 1990’s (with M. G. Pittau). *Computational Statistics and Data Analysis* **51**, 1364–1383, 2006.

Sample size calculation for small-area estimation. *Survey Methodology* **32**, 87–96, 2006. (Calcul de la taille de l’échantillon pour l’estimation pour petits domaines. *Techniques d’enquête* **32**, 97–106, 2006.)

Analysis of a long-term study of neurotic disorder, with insights into the process of non-response (with P. Tyrer, U. Nur and H. Seivewright). *Journal of the Royal Statistical Society Ser. A* **169**, 507–523, 2006.

Using small-area estimates. *Statistics in Transition* **9**, 715–735, 2005.

Dealing with incomplete data in food frequency questionnaires (with U. Nur, D. Greenwood and J. Cade). *Statistics in Transition* **9**, 111–134, 2005.

Editorial: Model selection and efficiency. Is ‘Which model ...?’ the right question? *Journal of the Royal Statistical Society Ser. A* **168**, 469–472, 2005.

On selection and composition in small-area and mapping problems. *Statistical Methods in Medical Research* **14**, 3–16, 2005.

Missing data and small area estimation in the UK Labour Force Survey. *Journal of the Royal Statistical Society Ser. A* **167**, 341–373, 2004.

An alternative to model selection in ordinary regression. *Statistics and Computing* **13**, 67–80, 2003.

- Effects of fatigue on the torque-velocity relation in muscle (with O. Spendiff and E. M. Winter). *British Journal of Sports Medicine* **36**, 431-435, 2002.
- Estimation of the rates and composition of employment in Norwegian municipalities. *Journal of Official Statistics* **17**, 391-406, 2001.
- Multilevel analysis with messy data. *Statistical Methods in Medical Research* **10**, 429-444, 2001.
- Synthetic estimators with moderating influence: Carry-over in cross-over trials revisited. *Statistics in Medicine* **20**, 3189-3203, 2001.
- Attitudes to immigration in an international social survey. *Statistics in Transition* **5**, 267-280, 2001.
- Simulation-based diagnostics in random coefficient models. *Journal of the Royal Statistical Society Ser. A* **164**, 259-273, 2001.
- Handling missing data in diaries of alcohol consumption (with M. Ely, R. Hardy, and M. E. J. Wadsworth). *Journal of the Royal Statistical Society Ser. A* **163**, 381-402, 2000.
- On estimating standard errors in multilevel analysis. *The Statistician* **49**, 389-398, 2000.
- An alternative definition of individual bioequivalence. *Statistica Neerlandica* **54**, 14-36, 2000.
- An experiment in primary health-care provision. *Journal of the Royal Statistical Society Ser. A* **162**, 291-302, 1999.
- Statistics vs. statistical science in the regulatory process (with J. A. Nelder). *Statistics in Medicine* **18**, 2311-2320, 1999.
- Selection bias and treatment heterogeneity in clinical trials. *Statistics in Medicine* **18**, 1467-1474, 1999.
- Multivariate shrinkage estimation of small-area means and proportions. *Journal of the Royal Statistical Society Ser. A* **162**, 227-245, 1999.
- Monitoring the university admissions process in Spain (with A. Cuxart i Jardí). *Higher Education in Europe* **23**, 385-396, 1998.
- A two-level regression model for comparing growth curves of crossed correlated treatment measures (with M. M. Ojeda). *Biometrical Journal* **40**, 447-454, 1998.
- Count data and treatment heterogeneity in 2×2 crossover trials. *Applied Statistics* **46**, 217-229, 1998.
- Shrinkage estimation of linear combinations of true scores. *Psychometrika* **62**, 237-244, 1997.
- Model-based estimation in surveys with stratified clustered design. *Australian Journal of Statistics* **38**, 333-352, 1996.
- Small-area prediction using adjustment for covariates. *Qüestió* **20**, 187-212, 1996. Statistical Institute of Catalonia, Barcelona, Spain.
- Reconciling experts' differences in setting cut-scores for pass/fail decisions. *Journal of Educational and Behavioral Statistics* **21**, 203-213, 1996.
- Hierarchical models and social sciences. *Journal of Educational and Behavioral Statistics* **20**, 205-209, 1995.
- Reliability of essay rating and score adjustment. *Journal of Educational and Behavioral Statistics* **19**, 171-201, 1994.
- Empirical Bayes methods for estimating hospital specific mortality rates (with N. Thomas and J.E. Rolph). *Statistics in Medicine* **13**, 889-903, 1994.

- Logistic regression with random coefficients. *Computational Statistics and Data Analysis* **17**, 1–15, 1994.
- Regression analysis of multilevel data with measurement error. *British Journal of Mathematical and Statistical Psychology* **46**, 301–311, 1993.
- Factor analysis for clustered observations (with B. O. Muthén). *Psychometrika* **57**, 581–597, 1992.
- Multivariate variance component analysis: An application in test development. *Journal of Educational Statistics* **15**, 91–112, 1990.
- Normal variance component modelling and exponential family extensions. *Austrian Journal of Statistics and Information Science* **17**, 352–359, 1987.
- A fast scoring algorithm for maximum likelihood estimation in unbalanced mixed models with nested random effects. *Biometrika* **74**, 817–827, 1987.
- Industry effects and the proportionality assumption in ratio analysis: A variance component analysis (with S. Fieldsend and S. McLeay). *Journal of Business Finance and Accounting* **14**, 497–517, 1987.
- Statistical modelling issues in school effectiveness studies (with Discussion, with M. A. Aitkin). *Journal of the Royal Statistical Society Ser. A* **149**, 1–43, 1986.
- Mixed linear models and an application to school effectiveness. *Computational Statistics Quarterly* **2**, 109–117, 1985.
- An eigenvalue decomposition for first hitting times in random walks (with J. T. Kent). *Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete* **63**, 71–84, 1983.

In Edited Volumes

- Decisions in everyday statistics. Chapter 4 in K. Chapman (Ed.), *Decision and Game Theory: Perspectives, Applications and Challenges*, pp. 49–73. Nova Science Publishers, Hauppauge, NY, U.S.A., 2015.
- Decision theory for some elementary statistical problems. In V.M.R. Muggeo, V. Capursi, G. Boscaino, G. Lovison (Eds.) *Proceedings of the 28th International Workshop on Statistical Modelling*, Volume 1, pp. 239–244. Instituto Poligrafico Europeo, Palermo, Italy, 2013.
- Multivariate and multilevel longitudinal analysis. Chapter 3 in K. van Montfort, J. Oud and A. Satorra (Eds.) *Longitudinal Research with Latent Variables*, pp. 97–117. Springer-Verlag, New York, NY, 2010.
- Analysis of Covariance. Multivariate Analysis of Variance. Articles in E. Baker, P. Peterson and B. McGaw (Eds.) *International Encyclopedia of Education*, 3rd Ed. Volume 7, pages 18–24 and 319–323. Elsevier, 2010.
- Missing data. In J. de Leeuw and E. Meijer (Eds.), *Handbook of Multilevel Analysis*. Chapter 10, pp. 377–399. Springer-Verlag, New York, NY, 2008.
- Probabilistic models of measurement errors. In T. Rudas (Ed.), *Handbook of Probability: Theory and Applications*. Chapter 15, pp. 239–253. Sage Publications, Thousand Oaks, CA, 2008.
- On standard errors of model-based small-area estimators. In the *Bulletin of the International Statistical Institute, 56th Session*. Proceedings of the 2007 Conference, Lisbon, Portugal (CD-ROM), 2007.

Patterns of house price inflation in New Zealand, 1996–2002. (with I. McCarthy and G. Dowse). In K. van Montfort, J. Oud and A. Satorra (Eds.), *Longitudinal Analysis in Behavioural and Related Sciences*, Chapter 17, pp. 403–433. L. Erlbaum and Associates, Mahwah, NJ, 2006.

Is ‘Which model ...?’ the right question? In A. Rizzi and M. Vichi (Eds.), *Compstat 2006. Proceedings in Computational Statistics*, pp. 337–349. Physica-Verlag, Heidelberg, 2006.

Three articles (‘Variance Components’, Predicting Random Effects’ and ‘Conditional Independence’) in the *Encyclopedia of Statistics in Behavioral Science*, B. Everitt, Chief Editor, Wiley, 2005.

Further 15 items in Edited Volumes from 1988–2000.

Reviews⁶

Bioequivalence Studies in Drug Development: Methods and Applications, by D. Hauschke, V. Steinijans, and I. Pigeot, Wiley, Hoboken, 2007. Review in *Journal of the Royal Statistical Society Ser. A* **171**, 1037, 2008.

Research Methodology in the Social, Behavioural and Life Sciences, by H. J. Adèr and G. Meltenbergh (eds.), Sage, London, 1999. Review in *The Statistician* **49**, 620–621, 2000.

The New Statistical Analysis of Data, by T. W. Anderson and J. D. Finn, Springer-Verlag, New York, 1996, and *The SPSS Guide to The New Statistical Analysis of Data*, by S. B. Gerber and K. E. Voelkl, Springer-Verlag, New York, 1998. Reviews in *Statistics in Medicine* **18**, 1019–1022, 1999.

The Theory of Sample Surveys, by M. E. Thompson. Chapman and Hall, London, 1997. Review in *The Statistician* **48**, 156–157, 1999.

Seeing Through Statistics, by J. Utts. Duxbury Press, 1996. Review in *Statistics in Medicine* **16**, 2931–2932, 1997.

Nonlinear Models for Repeated Measurement Data, by M. Davidian and D. M. Giltinan. Chapman and Hall, 1995. Review in *Journal of Applied Statistics* **23**, 452–453, 1996.

Hierarchical Linear Models: Applications and Data Analysis Methods, by A. S. Bryk and S. W. Raudenbush. Sage Publications, 1992. Review in *Contemporary Sociology* **22**, 293–295, 1993.

Contextual Analysis, by G. R. Iversen. Sage Publications, 1991. Review in *Contemporary Sociology* **21**, 551, 1992.

Bayesian and Likelihood Methods in Statistics and Econometrics. Essays in Honor of George A. Barnard; S. Geisser, J. S. Hodges, S. J. Press, and A. Zellner (Eds.). North-Holland, Amsterdam, 1990. Review in *Journal of the American Statistical Association* **86**, 245, 1991.

Other

Discussion of Varin, C., Cattelan, M., and Firth, D. ‘Statistical modelling of citation exchange between statistics journals.’ *Journal of the Royal Statistical Society Ser. A* **179**, 55, 2016.

Psychology and statistics, continued . . . : Readers respond to the BASP ban on p-values. Letter in *Significance* **12**, Issue 3, p. 36, 2015.

Sat navs and the ‘human’ factor. Letter in *Significance* **11**, Issue 5, p. 85, 2014.

⁶Reviews that have appeared in *Mathematical Reviews*, two in 2013, three in 2014, two in 2015 and one in 2016, are not listed.

Discussion of C. Hennig and T. Liao, ‘How to find an appropriate clustering for mixed-type variables with application to socio-economic stratification.’ *Journal of the Royal Statistical Society Ser. C* **62**, 351, 2013.

Discussion of K. Imai, D. Tingley and T. Yamamoto, ‘Experimental designs for identifying causal mechanisms.’ *Journal of the Royal Statistical Society Ser. A* **176**, 42, 2013.

Discussion of D. Spiegelhalter *et al.*, ‘Statistical methods for healthcare regulation: rating, screening and surveillance.’ *Journal of the Royal Statistical Society Ser. A* **175**, 36–37, 2012.

Random Coefficient Models. In M. Lovrić (Ed.) *The International Encyclopedia Statistical Sciences*. Springer Science + Business Media, LLC2010, Heidelberg, Germany, 2010.

Random Coefficient Models. In **StatProb** *The Encyclopedia sponsored by Statistics and Probability Societies*. <http://statprob.com>, Springer-Verlag, New York, 2010.

Mixture models with a black-hole component (with P. D’Urso). In Borgelt, C. *et al.* (Eds.) *Combining Soft Computing and Statistical Methods in Data Analysis*. Springer-Verlag, Berlin, Germany, 2010; pp. 427–435.

Completing sub-national coverage of national accounts: an auxiliary information approach (with M. G. Pittau and R. Zelli). In the Proceedings of the 31st General Conference of the International Association for Research in Income and Wealth, St. Gallen, Switzerland, 22–28th August, 2010.

A sensitivity analysis of some poverty definitions in EU-SILC (with C. Nicodemo). In the proceedings of the workshop *Finanční potenciál domácností 2009* (CD), Jindřichův Hradec, Czech Republic, 11th December 2009.

Multiple imputation tailored for a specific database (with M. G. Pittau). In *Statistics Methods for the Analysis of Large Datasets*. Proceedings of the 2009 Conference of the Italian Statistical Society, University G. d’Annunzio, Chieti-Pescara, 23–25 September 2009; pp. 281–282.

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Inflated assessments of disability

Monitoring the progress of infants with low birthweight

N. T. Longford

London, May 2016.