Elizabeth Alison Thompson

a. Professional Preparation

Instutution	Major	Degree	Year
Cambridge University, UK	Mathematics	B.A. honors	1967-1970
Cambridge University, UK	Mathematical Statistics	Diploma	1970-1971
Cambridge University, UK	Statistics	Ph.D.	1971-1974
Stanford University, CA, USA	Genetics	postdoc	1974-1975

b. Appointments

1985(Dec)-	Professor, Department of Statistics, University of Washington and Chair, Department of Statistics, 1989-1994 and 2011-2014 and Adjunct Professor of Biostatistics, from 2006 and Adjunct Professor of Genome Sciences, from 2000 and Professor, Department of Biostatistics, 1988-2004
1981–85	Official Fellow, College Lecturer and Director of Studies in Mathematics, Newnham College, Cambridge
1978–81	Official Fellow and Financial Tutor, King's College, Cambridge
1976–85	University Lecturer, Department of Pure Mathematics and Mathematical Statistics, Cambridge University (tenured from March 1979)
1975–78	Research fellow, King's College, Cambridge

Significant temporary appointments:

2006/11-12	Visiting Rothschild Professor, University of Cambridge, UK.
2002/09-2003/03	Visiting Professor, Department of Statistics, North Carolina State University, and Guggenheim Fellow.
1991/12–1992/03	Visiting Professor, Rutgers University (Center for Theoretical and Applied Genetics)
1987/12–1988/03	Research Consultant, DMS Systems Inc., Salt Lake City, Utah
1976/06-08	Visiting Research Consultant, University of Utah

c. Products:

Total: Papers in refereed journals ∼132, Books 4, Book chapters and Conference Proceedings ∼70)

Five most closely related

Koepke, H. A., and Thompson, E. A. (2013) Efficient identification of equivalences in dynamic graphs and pedigree structures. Journal of Computational Biology 20: 551-570.

Thompson, E. A. (2013) Identity by descent: Variation in meiosis, across genomes, and in populations. Genetics 194: 301-326.

Brown, M. D., Glazner, C. G., Zheng, C., and Thompson, E. A. (2012) Inferring coancestry in population samples in the presence of linkage disequilibrium. Genetics, 190: 1447–1460.

Glazner, C. G., and Thompson, E. A. (2012) Improving pedigree-based linkage analysis by estimating coancestry among families, Statistical Applications in Genetics and Molecular Biology 11: Issue 2, Article 11.

Thompson, E. A. (2008) The IBD process along four chromosomes. Theoretical Population Biology 73: 369-373.

Five other significant products

Thompson, E.A. (2010) The structure of genetic linkage data: from LIPED to 1M SNPs. Human Heredity, 71: 86-96.

Thompson, E. A. (2000) *Statistical Inferences from Genetic Data on Pedigrees* NSF-CBMS Regional Conference Series in Probability and Statistics. Volume 6. IMS, Beachwood, OH. (169 pages)

Geyer, C.J. and Thompson, E.A. (1992) Constrained Monte Carlo maximum likelihood for dependent data (with Discussion). J. Roy. Statist. Soc. (B), 54: 657-699.

Thompson, E.A. (1983) Gene extinction and allelic origins in complex genealogies. Proc. Roy. Soc. (Lond.) B 219: 241-251.

Thompson, E.A. (1974). Gene identities and multiple relationships. Biometrics 30: 667-680.

d. Synergistic Activities

• Developer of Statistical Genetics Ph.D. pathways in Statistics and Biostatistics, and Director of Statistical Genetics Interdisciplinary Certificate Program, University of Washington. • Developer and distributor of the freely available MORGAN software package for Monte Carlo Analysis of genetic data on related individuals (www.stat.washington.edu/thompson/Genepi/pangaea.shtml). • Elected member of International Statistical Instutute (from 1981), the American Academy of Arts and Sciences (from 1998) and the US National Academy of Sciences (from 2008). • Recipient of a Doctor of Science degree from the University of Cambridge; the Jerome Sacks award for cross-disciplinary research from the National Institute for Statistical Science; the Weldon Prize for contributions to Biometric Science from Oxford University, UK; a Guggenheim fellowship; and honorary fellowship of Newnham College, Cambridge. • Member, Scientific Advisory Board, Insitute for Pure and Applied Mathematics (IPAM), and previously also of BIRS (2005-2009) and of PIMS (2002-2005). International Biometric Society; Member of Council (2006-2013), General Officer Nominating Committee (2010-2012), International Program Committee (2012-2014).

e. Collaborators & other affiliations

Collaborators and co-editors (Outside the University of Washington, and not including former students/postdocs listed below.)

• Basu, S. – University of Minnesota, MN; • Bink, M.C.A.M.—Biometris, Wageningen Universitity, Netherlands; • Caflisch, R. E.—UCLA, CA. • Churchill, Gary—Jackson Laboratories, Bar Harbor, Maine; • Dechter, Rina (and advisees)—UC Irvine, CA; • Geiger, Dan (and advisees) —Technion, Haifa, Israel; • Jewell, Nick—UC Berkeley, CA; • Mitchell, A – NYC Chief Medical Examiner's Office; • Pankow, J. S.—University of Minnesota, MN; • RoyChoudhury, A. — Columbia University; • Ryder, O. A. (and colleagues) — UC San Diego; • Stephens, M. — University of Chicago;

Thesis advisor and Postdoctoral sponsor.

• Thesis advisor; Dr. A. W. F. Edwards, Cambridge University.

• Post-doc advisor; Prof. L L. Cavalli-Sforza, Dept. Genetics, Stanford University

Thesis Advisees and Postgraduate Scholars Sponsored

Postdoctoral Scholars; last 5 years. (total 1981-2013; 9)

• Chaozhi Zheng (Biometris, Wageningen University); • Jesse Raffa (current)

Ph.D. Students; last 5 years. (total 1981-2013; 27)

• Yanming Di (Statistics, Oregon State University); • Chris Glazner (current) • Ming Su (Bellevue, WA); • Serge Sverlov (current);