

# Curriculum Vitae: Matthew Spencer

## Contact details

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## Research interests

Community ecology.

## Experience and education

- 2006-present. School of Environmental Sciences, University of Liverpool, UK. Lecturer in quantitative biology.
- 2009-2019. B.Sc. Mathematics and Statistics, Open University, UK (1st class).
- September 2012-Jan 2013. Visiting Research Associate Professor, University of Tennessee, USA.
- 2006-2007. University of Liverpool, UK. Certificate in Professional Studies, Learning and Teaching in Higher Education, with distinction.
- 2004-2006. Department of Mathematics and Statistics, Department of Biochemistry and Molecular Biology, Dalhousie University, Canada. Postdoctoral researcher, statistical and evolutionary bioinformatics.
- 2000-2004. Department of Biochemistry, University of Cambridge, UK. Postdoctoral researcher, phylogenetic analysis of medieval texts, extraction of ancient DNA from parchment.
- 1998-1999. Institute of Evolution, University of Haifa, Israel. Postdoctoral researcher, ecology of temporary freshwater pools.
- 1997-1998. Ecological consultant, self-employed. Projects included development of ecologically-based toxicity benchmarks for wildlife and Monte Carlo simulation of heavy metal accumulation in aquatic organisms.
- 1996-1997. Applied Biomathematics, Setauket, New York. Development of commercial Monte Carlo software for assessing the effects of pollutants on ecological systems. Ecological risk assessments for birds, mammals and plants affected by human activity.
- 1992-1996. Ph.D., University of Sheffield, UK. Effects of habitat size on food web structure.
- 1989-1992. B.Sc. Ecology, University of Leeds, UK (1st class).

## Publications

Hale, K., **Spencer, M.**, Peterken, G.F., Mountford, E.P. and Bradshaw, R.H.W. (2019). Rapid carbon accumulation within an unmanaged, mixed, temperate woodland. *Scandinavian Journal of Forest Research*, <https://doi.org/10.1080/02827581.2019.1575975>.

Boit, A. and **Spencer, M.** (2019). Equivalence and dissimilarity of ecosystem states. *Ecological Modelling* 396:12-22.

Carlos Jr., L.A., **Spencer, M.**, Neves, D.M., Moulton, T.P., de Oliveria Pires, D., Barreira e Castro, C., Ventura, C.R.R., Ferreira, C.E.L., Serejo, C.S., Oigman-Pszczol, S., Casares, F.A., Mantelatto, M.C. and Creed, J.C. (2019). Rarity and beta diversity assessment as tools for guiding conservation strategies in marine tropical subtidal communities. *Diversity and Distributions*, in press.

Chong, F. and **Spencer, M.** (2018). Analysis of relative abundances with zeros on environmental gradients: a multinomial regression model. *PeerJ* 6:e5643.

Duchet, C., Moraru, G.M., **Spencer, M.**, Saurav, K., Bertrand, C., Fayolle, S., Gershberg Hayoon, A., Shapir, R., Steindler, L. and Blaustein, L. (2018). Pesticide-mediated trophic cascade and an ecological trap for mosquitoes. *Ecosphere* 9:02179.

Gomes, M.P., Queros de Albuquerque, C., Andrades, R., Silva Martins, A., Robinson, L.A. and **Spencer, M.** Influence of detached macroalgae on fish size and condition in nearshore habitats. *Estuarine, Coastal and Shelf Science* 211:227-237.

Duchet, C., Moraru, G.M., Segev, O., **Spencer, M.**, Gershberg Hayoon, A. and Blaustein, L. Effect of flash flooding on mosquito and community dynamics in experimental ponds. *Journal of Vector Ecology* 42:254-263.

Allen, K.A., Bruno, J.F., Chong, F., Clancy, D., McClanahan, T.R., **Spencer, M.** and Żychaluk, K. (2017). Among-site variability in the stochastic dynamics of East African coral reefs. *PeerJ* 5:e3290.

Clare, D.S., **Spencer, M.**, Robinson, L.A. and Frid, C.L.J. (2017). Explaining ecological shifts: the roles of temperature and primary production in the long-term dynamics of benthic faunal composition. *Oikos* 126:1123-1133.

Clare, D.S., **Spencer, M.**, Robinson, L.A. and Frid, C.L.J. (2016). Species-specific effects on ecosystem functioning can be altered by interspecific interactions. *PLoS ONE* 11:e0165739.

Clare, D.S., **Spencer, M.**, Robinson, L.A. and Frid, C.L.J. (2016). Species densities, biological interactions and benthic ecosystem functioning: an *in situ* experiment. *Marine Ecology Progress Series* 547:149-161.

Borrelli, J.J., Allesina, S., Amarasekare, P., Arditi, R., Chase, I., Damuth, J., Holt, R.D., Logofet, D.O., Novak, M., Rohr, R.P., Rossberg, A.G., **Spencer, M.**, Tran, J.K. and Ginzburg, L.R. (2015). Selection on stability across ecological scales. *Trends in Ecology and Evolution* 30:417-425.

Cooper, J.K., **Spencer, M.** and Bruno, J.F. (2015). Stochastic dynamics of a warmer Great Barrier Reef. *Ecology* 96:1802-1811.

**Spencer, M.** (2015). "Size" change, "shape" change, and the growth space of a community. *Journal of Theoretical Biology* 369: 23-41.

Bower, M.A., Whitten, M., Nisbet, R.E.R., **Spencer, M.**, Dominy, K.M., Murphy, A.M., Cassidy, R., Barrett, E., Hill, E.W. and Binns, M. (2013). Thoroughbred racehorse mitochondrial DNA demonstrates closer than expected links between maternal genetic history and pedigree records. *Journal of Animal Breeding and Genetics* 130:227-235.

Mieszowska, N., Milligan, G., Burrows, M.T., Freckleton, R. and **Spencer, M.** (2013). Dynamic species distribution models from categorical survey data. *Journal of Animal Ecology* 82:1215-1226.

Bracewell, S.A., **Spencer, M.**, Marrs, R.H., Iles, M. and Robinson, L.A. (2012). Cleft, crevice, or the inner thigh: 'another place' for the establishment of the invasive barnacle *Austrominius modestus* (Darwin, 1854). *PLoS ONE* 7(11):e48863.

Kershenbaum, A., **Spencer, M.**, Blaustein, L. and Cohen, J.E. (2012). Modelling evolutionarily stable strategies in oviposition site selection, with varying risks of predation and intraspecific competition. *Evolutionary Ecology* 26:955-974.

**Spencer, M.**, Mieszowska, N., Robinson, L.A., Simpson, S.D., Burrows, M.T., Birchenough, S.N.R., Capasso, E., Cleall-Harding, P., Crummy, J., Duck, C., Eloire, D., Frost, M., Hall, A.J., Hawkins, S.J., Johns, D.G., Sims, D.W., Smyth, T.J. and Frid, C.L.J. (2012). Region-wide changes in marine ecosystem dynamics: state-space models to distinguish trends from step changes. *Global Change Biology* 18:1270-1281.

Żychaluk, K., Bruno, J.F., Clancy, D., McClanahan, T.R. and **Spencer, M.** (2012). Data-driven models for regional coral-reef dynamics. *Ecology Letters* 15:151-158.

Yamanaka, T., White, P.C.L., **Spencer, M.** and Raffaelli, D. (2012). Patterns and processes in abundance-body size relationships for marine benthic invertebrates. *Journal of Animal Ecology* 81:463-471.

Lowe, P.K., Bruno, J.F., Selig, E.R. and **Spencer, M.** (2011). Empirical models of transitions between coral reef states: effects of region, protection, and environmental change. *PLoS ONE* 6: e26339. doi:10.1371/journal.pone.0026339.

- Spencer, M.**, Birchenough, S.N.R., Mieszkowska, N., Robinson, L.A., Simpson, S.D., Burrows, M.T., Caspasso, E., Cleall-Harding, P., Crummy, J., Duck, C., Eloire, D., Frost, M., Hall, A.J., Hawkins, S.J., Johns, D.G., Sims, D.W., Smyth, T.J. and Frid, C.L.J. (2011). Temporal change in UK marine communities: trends or regime shifts? *Marine Ecology* 32:10-24.
- Whelan, S., Blackburne, B.E., and **Spencer, M.** (2011). Phylogenetic substitution models for detecting heterotachy during plastid evolution. *Molecular Biology and Evolution* 28:449-458.
- Campana, M.G., Bower, M.A., Bailey, M.J., Stock, F., O'Connell, T.C., Edwards, C.J., Bradley, D.G., Checkley-Scott, C., Knight, B., **Spencer, M.**, and Howe, C.J. (2010). A flock of sheep, goats and cattle: ancient DNA analysis reveals complexities of historical parchment manufacture. *Journal of Archaeological Science* 37:1317-1325.
- Clancy, D., Tanner, J.E., McWilliam, S. and **Spencer, M.** (2010). Quantifying parameter uncertainty in a coral reef model using Metropolis-Coupled Markov Chain Monte Carlo. *Ecological Modelling* 221:1337-1347.
- Forster, P., Forster, L., Watson, S., **Spencer, M.**, Huang, C., Röhl, A. and Brinkmann, B. (2010). Evaluating length heteroplasmy in the human mitochondrial DNA control region. *International Journal of Legal Medicine* 124:133-142.
- Fenton, A., **Spencer, M.** and Montagnes, D.J.S. (2010). Parameterising variable assimilation efficiency in predator-prey models. *Oikos* 119:1000-1010.
- Fenton, A. and **Spencer, M.** (2010). Linking population, community and ecosystem ecology within main-stream ecology. In Raffaelli, D.G. and Frid, C.L.J. (eds), *Ecosystem Ecology: a New Synthesis*. Cambridge University Press, Cambridge, pp. 19-39.
- Sangaralingam, A., Susko, E., Bryant, D. and **Spencer, M.** (2010). On the artefactual parasitic eubacteria clan in conditioned logdet phylogenies: heterotachy and ortholog identification artefacts as explanations. *BMC Evolutionary Biology* 10:343.
- Spencer, M.** and Sangaralingam, A. (2009). A phylogenetic mixture model for gene family loss in parasitic bacteria. *Molecular Biology and Evolution* 26:1901-1908.
- Koenig, J., Boucher, Y., Charlebois, R., Nesbø, C., Zhaxybayeva, O., Bapteste, E., **Spencer, M.**, Stokes, H.W. and Doolittle, W.F. (2008). Integron-associated gene cassettes in Halifax Harbour: assessment of a mobile gene pool in marine sediments. *Environmental Microbiology* 10: 1024-1038.
- Spencer, M.** and Tanner, J.E. (2008). Lotka-Volterra competition models for sessile organisms. *Ecology* 89: 1134-1143.
- Wang, H.-C., Susko, E., **Spencer, M.** and Roger, A.J. (2008). Topological estimation biases with covarion evolution. *Journal of Molecular Evolution* 66:50-60.
- Spencer, M.** (2008). Past states of continuous-time Markov models for ecological communities. *Mathematical Biosciences* 211:299-313.
- Smith, D.L., Wareing, B.M., Fogg, P.C.M., Riley, L.M., **Spencer, M.**, Cox, M.J., Saunders, J.R., McCarthy, A.J. and Allison, H.E. (2007). Multilocus characterization scheme for Shiga toxin-encoding bacteriophages. *Applied and Environmental Microbiology* 73:8032-8040.
- Spencer, M.**, Bryant, D. and Susko, E. (2007). Conditioned genome reconstruction: how to avoid choosing the conditioning genome. *Systematic Biology* 56:25-43.
- Wang, H.-C., **Spencer, M.**, Susko, E. and Roger, A.J. (2007). Testing for covarion-like evolution in protein sequences. *Molecular Biology and Evolution* 24:294-305.
- Liepelt, S., Sperisen, C., Deguilloux, M.-F., Petit, R.J., Kissling, R., **Spencer, M.**, de Beaulieu, J.-L., Taberlet, P., Gielly, L. and Ziegenhagen, B. (2006). Authenticated DNA from ancient wood remains. *Annals of Botany* 98:1107-1111.
- Eagleton, C. and **Spencer, M.** (2006). Copying and conflation in Geoffrey Chaucer's *Treatise on the astrolabe*: a stemmatic analysis using phylogenetic software. *Studies in History and Philosophy of Science* 37:237-268.
- Spencer, M.** and Howe, C.J. (2006). Optimal strategies for accurate transcription of manuscripts. *Literary and Linguistic Computing* 21:353-362.
- Spencer, M.**, Susko, E. and Roger, A.J. (2006). Modelling prokaryote gene content. *Evolutionary Bioinformatics Online* 2:165-186.
- Spencer, M.** (2006) Sensitivity analysis of Markov models for communities of competing sessile organisms. *Journal of Animal Ecology* 75:1024-1033.
- Spencer, M.** and Susko, E. (2005). Continuous-time Markov models for species interactions. *Ecology* 86:3272-3278.
- Susko, E., **Spencer, M.** and Roger, A.J. (2005). Biases in phylogenetic estimation can be caused by random sequence segments. *Journal of Molecular Evolution* 61:351-359.
- Karp, N. A., **Spencer, M.**, Lindsay, H., O'Dell, K., and Lilley, K. S. (2005). Impact of replicate types on proteomic expression analysis. *Journal of Proteome Research* 4:1867-1871.
- Spencer, M.**, Susko, E. and Roger, A.J. (2005). Likelihood, parsimony, and heterogeneous evolution. *Molecular Biology and Evolution* 22:1161-1164.

- Bower, M.A., **Spencer, M.**, Matsumara, S., Nisbet, R.E.R. and Howe, C.J. (2005). How many clones need to be sequenced from a single forensic or ancient DNA sample in order to determine a reliable consensus sequence? *Nucleic Acids Research* 33:2549-2556.
- Windram, H.F., **Spencer, M.** and Howe, C.J. (2005). The identification of exemplar change in the Wife of Bath's prologue using the maximum chi-squared method. *Literary and Linguistic Computing* 20:189-204.
- Spencer, M.** and Howe, C.J. (2004). Authenticity of ancient DNA results: a statistical approach. *American Journal of Human Genetics* 75:240-250.
- Kiflawi, M. and **Spencer, M.** (2004). Confidence intervals and hypothesis testing for beta diversity. *Ecology* 85:2895-2900.
- Plaisow, S.J., Johnstone, R.A., Colegrave, N. and **Spencer, M.** (2004). Evolution of alternative mating tactics: conditional versus mixed strategies. *Behavioral Ecology* 15:534-542.
- Spencer, M.** and Howe, C.J. (2004). Collating texts using progressive multiple alignment. *Computers and the Humanities* 38:253-270.
- Spencer, M.**, Davidson, E.A., Barbrook, A.C. and Howe, C.J. (2004). Phylogenetics of artificial manuscripts. *Journal of Theoretical Biology* 227:503-511.
- Spencer, M.**, Wachtel, K. and Howe, C.J. (2004). Representing multiple pathways of textual flow in the Greek manuscripts of the Letter of James using reduced median networks. *Computers and the Humanities* 38:1-14.
- Spencer, M.** (2003). Exact significance levels for the maximum chi-squared method of detecting recombination. *Bioinformatics* 19:1368-1370.
- Spencer, M.**, Bordalejo, B., Robinson, P. and Howe, C.J. (2003). How reliable is a stemma? An analysis of Chaucer's Miller's Tale. *Literary and Linguistic Computing* 18:407-422.
- Spencer, M.**, Bordalejo, B., Wang, L.-S., Barbrook, A.C., Mooney, L.R., Robinson, P., Warnow, T. and Howe, C.J. (2003). Analyzing the order of items in manuscripts of The Canterbury Tales. *Computers and the Humanities* 37:97-109.
- Schlarb-Ridley, B.G., Navarro, J.A., **Spencer, M.**, Bendall, D.S., Hervás, M., Howe, C.J. and De la Rosa, M.A. (2002) The role of electrostatics in the interaction between plastocyanin and photosystem I of the cyanobacterium *Phormidium laminosum*. *European Journal of Biochemistry* 269:5893-5902.
- Spencer, M.**, Blaustein, L. and Cohen, J.E. (2002). Oviposition habitat selection by mosquitoes (*Culiseta longiareolata*) and consequences for population size. *Ecology* 83:669-679.
- Spencer, M.**, Schwartz, S.S. and Blaustein, L. (2002). Are there fine-scale spatial patterns in community similarity among temporary freshwater pools? *Global Ecology and Biogeography* 11:71-78.
- Spencer, M.** and Howe, C.J. (2002). How accurate were scribes? A mathematical model. *Literary and Linguistic Computing* 17:311-322.
- Spencer, M.**, Wachtel, K. and Howe, C.J. (2002). The Greek Vorlage of the Syra Harclensis: A Comparative Study on Method in Exploring Textual Genealogy. *TC: a journal of biblical textual criticism*, 7 [<http://purl.org/TC>] (<http://rosetta.reltech.org/TC/vol07/SWH2002/>).
- Spencer, M.** and Blaustein, L. (2001). Hatching responses of temporary pool invertebrates to signals of environmental quality. *Israel Journal of Zoology* 47:397-418.
- Spencer, M.**, Colegrave, N. and Schwartz, S.S. (2001). Hatching fraction and timing of resting stage production in seasonal environments: effects of density dependence and uncertain season length. *Journal of Evolutionary Biology* 14:357-367.
- Spencer, M.** and Blaustein, L. (2001). Risk of predation and hatching of resting eggs in the ostracod *Heterocypris incongruens*. *Journal of Crustacean Biology* 21:575-581.
- Spencer, M.**, Fisher, N.S, Wang, W.-X. and Ferson, S. (2001). Temporal variability and ignorance in Monte Carlo contaminant bioaccumulation models: a case study with selenium in *Mytilus edulis*. *Risk Analysis* 21:383-394.
- Spencer, M.** and McGee, B.L. (2001) A field-based population model for the sediment toxicity test organism *Leptocheirus plumulosus*. I. Model development. *Marine Environmental Research* 51:327-345.
- McGee, B.L. and **Spencer, M.** (2001) A field-based population model for the sediment toxicity test organism *Leptocheirus plumulosus*. II. Model application. *Marine Environmental Research* 51:347-363.
- Mooney, L.R., Barbrook, A.C., Howe, C.J. and **Spencer, M.** (2001). Stemmatic analysis of Lydgate's "Kings of England": a test case for the application of software developed for evolutionary biology to manuscript stemmatics. *Revue d'Histoire des Textes* 31:275-297.
- Spencer, M.** and Howe, C.J. (2001). Estimating distances between manuscripts based on copying errors. *Literary and Linguistic Computing* 16:467-484.
- Howe, C.J., Barbrook, A.C., **Spencer, M.**, Robinson, P., Bordalejo, B. and Mooney, L.R. (2001). Manuscript evolution. *Trends in Genetics* 17:147-152 (reprinted in *Endeavour* 25:121-126).
- Spencer, M.** (2000). Are predators rare? *Oikos* 89:115-122.

**Spencer, M.**, Blaustein, L., Schwartz, S.S. and Cohen, J.E. (1999). Species richness and the proportion of predatory animal species in temporary pools: relationships with habitat size and permanence. *Ecology Letters* 2:157-166.

**Spencer, M.**, Fisher, N.S. and Wang, W.-X. (1999). Exploring the effects of consumer-resource dynamics on contaminant bioaccumulation by aquatic herbivores. *Environmental Toxicology and Chemistry* 18:1582-1590.

**Spencer, M.** (1997). The effects of habitat size and energy on food web structure: an individual-based cellular automata model. *Ecological Modelling* 94:299-316.

**Spencer, M.**, Ginzburg, L.R. and Goldstein, R.A. (1997). Community-level risk assessment, food chains and bioaccumulation. *The Environmental Professional* 19:90-97.

**Spencer, M.** and Warren, P.H. (1996). The effects of habitat size and productivity on food web structure in small aquatic microcosms. *Oikos* 75:419-430.

**Spencer, M.** and Warren, P.H. (1996). The effects of energy input, immigration and habitat size on food web structure: a microcosm experiment. *Oecologia* 108:764-770.

Warren, P.H. and **Spencer, M.** (1996). Community and food web responses to the manipulation of energy input and disturbance in small ponds. *Oikos* 75:407-418.

## Grants

- 2013. Dynamics of community composition. NERC standard grant, £383066.
- 2012. From short-term dynamics to long-term consequences in species-rich communities. NIMBioS Sabbatical Fellowship, up to \$17250.
- 2011. Changes in population dynamics of rocky shore organisms at range edges. British Ecological Society, £2495, and Marine Biological Association, £1500, with Rob Freckleton (University of Sheffield), Nova Mieszkowska (Marine Biological Association), and Mike Burrows (Scottish Association for Marine Science).
- 2009. Mapping selective events during endosymbiosis and plastid evolution onto phylogenetic trees, CoSyst, £8550, with Simon Whelan (University of Manchester, administrative lead) and Chris Howe (University of Cambridge).
- 2007. Improved phylogenetic tools for gene content data, BBSRC, £94609.82.

## Recent presentations

- School of Mathematics, University of Leeds, 2016. Seminar on compositional dynamics of coral reefs.
- Centre Interfacultaire Bernoulli, EPFL, Lausanne, Switzerland, 2014. Invited workshop presentation on the history of ideas about ecosystem-level selection.
- Department of Animal and Plant Sciences, University of Sheffield, 2013. Invited seminar on measuring rates of succession.
- National Institute for Mathematical and Biological Synthesis, University of Tennessee, Knoxville, 2012. Seminar on measuring rates of succession.
- Department of Mathematics and Statistics, University of Otago, New Zealand. 2012. Seminar on density-structured population models.
- Department of Biological Sciences, Old Dominion University, Virginia, 2012. Invited seminar on alternative stable states in coral reefs.
- Department of Mathematics and Statistics, Dalhousie University, Halifax, 2011. Invited seminar on identifying changes in evolutionary processes using stochastic mapping and covarion models.
- British Ecological Society, Leeds, 2010. Oral presentation on semiparametric models for coral reef dynamics.
- Centre for Research in Statistical Methodology, Warwick, 2010. Invited keynote speaker, continuous-time and continuous-space processes in ecology.

## Current teaching

- MSc project (level 4): typically supervise up to two students.
- MMarBiol project (level 4): typically supervise up to two students.
- Marine ecology: theory and applications (level 3): module coordinator, deliver half the module.
- Ecology and marine biology honours project (level 3): typically supervise three to six students.
- Ecology and marine biology field course (level 3): typically supervise five student projects on a one-week field course.
- Statistics for environmental scientists (level 2): module coordinator, deliver one third of the module.
- Marine biology practical skills (level 2): deliver a one-day field practical class and a one-day data analysis class.
- Quantitative skills for ecology and marine biology (level 1): module coordinator, deliver all the module (new module for 2017/18).

## PhD supervision

Co-supervised three students (graduated), one Science without Borders sandwich student (one-year visit, graduated), ongoing co-supervision of two students.

## Departmental administration

- Acting head of admissions and recruitment, School of Environmental Sciences (2014), and in charge of admissions and recruitment for ecology and marine biology (2010-present).
- School of Environmental Sciences representative on NERC Centre for Doctoral Training bid (2016: unsuccessful, ranked second overall).
- School of Environmental Sciences representative on successful NERC Doctoral Training Partnership bid, 2013-2016.
- School of Environmental Sciences representative on postgraduate travel fund panel, 2014-2016.

## Responsibilities

- Academy of Finland aquatic sciences review panel, 2014 round.
- Member, British Ecological Society Review College, 2012 - 2015.
- Academy of Finland population and community ecology review panel, 2012 round.
- Associate Editor, *Methods in Ecology and Evolution*, 2012 - 2015.
- Editorial board member, *Systematic Biology*, 2011 - 2013.
- Grant reviews for Engineering and Physical Sciences Research Council and Natural Environment Research Council (UK), National Science Foundation (USA), Marsden Fund (New Zealand), Israel Science Foundation, Deutsche Forschungsgemeinschaft (Germany).
- Manuscript reviewer for journals including *Proceedings of the National Academy of Sciences*, *Proceedings of the Royal Society Series B*, *Conservation Letters*, *Coral Reefs*, *Ecology*, *American Naturalist*, *Molecular Biology and Evolution*, *Journal of Applied Ecology*.
- 2011. PhD external examiner, University of Manchester.
- 2011. PhD external examiner, Dalhousie University.
- Co-organizer, 44th European Marine Biology Symposium, Liverpool, 7-11 September 2009.
- Co-organizer, one-day workshop on evolution of stochastic gene expression, University of Liverpool, 5 December 2007.
- Isaac Newton Institute for Mathematical Sciences, Cambridge. Visiting fellow, phylogenetics programme, 3-23 September 2007.
- Canadian Institute for Advanced Research (CIAR), 2005-2006. Program reporter for the evolutionary biology program. Responsible for producing reports for non-specialists on CIAR meetings.

## Awards

- Open University, 2014. Leslie Walshaw Award for best results in the region on module MS221.
- Association for Literary and Linguistic Computing, 2001. Bursary for attendance at Association for Computers in the Humanities/Association for Literary and Linguistic Computing conference, New York University.
- Woods Hole Oceanographic Institute/Office of Naval Research, 1995. Bursary for attendance at Food Webs summer school, Cornell University.
- University of Leeds, 1992. Broadhead Prize for best summer field project (joint winner).