

Curriculum Vitae
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Professional History

- 09/07 – Lecturer in Global Change Biology. Division of Biology, Imperial College London.
- 10/05 – 09/07 Post Doctoral Research Associate. 'Phylogenetic imbalance and species-area relationships : unifying macroevolution with macroecology.' Prof. Andy Purvis. Division of Biology, Imperial College London.
- 10/02 – 09/05 Post Doctoral Research Associate. 'Global biodiversity hotspots: evolution, ecology and extinction.' with Prof. Ian Owens. Division of Biology, Imperial College London.

Qualifications

- 1998 – 2002 PhD - Body size and macroevolutionary patterns of species richness. Imperial College London
- 1996 – 1997 MSc Marine Environmental Protection (Distinction) University of Wales, Bangor
- 1992 – 1995 BA Natural Sciences (Upper second class) Cambridge University

Postgraduate Teaching

- Course Director, MSc and MRes in Ecology, Evolution and Conservation, Department of Life Sciences, Imperial College London (2012-).
- Statistics (2007 –) One week module for Conservation Science MSc. students with follow-up project planning workshop. (27 contact hours)
- Statistics (2011 –) One week module with Dr. Aidan Keane for EEC, QB and BIG Masters students. (15 contact hours)
- Macroecology and Global Change (2004 – present) 1 week module introduction to macroecology and GIS techniques for Ecology, Evolution and Conservation MSc students. (12 contact hours)

Undergraduate Teaching

- Marine Ecology and Conservation Field Course (2013 –) Two week residential field course for 2nd year Biology undergraduates. Course convener. (~100 contact hours)
- Linear modelling (2012 –) 2nd year undergraduate statistics programme. Module convener. (22 contact hours).
- Marine Ecology Field Course (2003 – 2011) Two week residential field course for 2nd year Biology undergraduates. Course convener. (~100 contact hours)
- Computing in Biology. (2007 – 2011) One week 1st year undergraduate module. Module convener. (16 contact hours).

Postgraduate Supervision

- I have supervised four PhD students to the successful completion of their PhDs and am currently supervising two further PhD students. I am on the Postgraduate Review Panel for a further 7 students.
- I have directly supervised the projects of 5 MSc students in the past four years and advise many more in my role as EEC Course Director.

Grants and research management

- “What are the diversity, distribution and fate of forest mycorrhizal communities?” Submitted NERC Standard Grant (£418K). Co-I with Dr. Martin Bidartondo (PI, RGB Kew). Funded December 2012.
- “A taxonomy of countries’ climate change mitigation strategies”. AVOID Programme scoping project with the Grantham Institute for Climate Change. (2011, £24K)
- “Entangled Bank: integrating biodiversity databases” with Prof. Georgina Mace, Prof Tim Coulson. Collaborative project funded by the Centre for Population Biology and Microsoft Research. (2009 – 2012)
- GIS research support and teaching lab, with Prof. Andy Purvis. Funded by an Imperial College Research Excellence Award.

Invited talks and other activities

- Invited seminar “Macroecological perspectives on the dynamics of species ranges” at the sixth annual meeting of the Specialist Group on Macroecology of the GfÖ, Frankfurt, Germany. March 2012.
- Invited seminar “Distribution of biological diversity” at the sixth Annual Meeting on Ecology and Behaviour, Tours, France. April 2010.
- Associate Editor, *Methods in Ecology and Evolution* (2010 - present).

Publications

Bibliometrics from Google Scholar, March 2014. Total citations: 2962, h-index 24

- Bland, L. M., Bielby, J., Orme, C. D. L., and Collen, B. (In revision). “Predicting the conservation status of Data Deficient species”. *Conservation Biology*.
- Broadhurst, M. and Orme, C. D. L. (In press). “Spatial and temporal benthic species assemblage responses with a deployed marine tidal energy device: a small scaled study”. *Marine Environmental Research*.
- Cantu-Salazar, L., Orme, C. D. L., Rasmussen, P. C., Blackburn, T. M., and Gaston, K. J. (2013). “The performance of the global protected area system in capturing vertebrate geographic ranges”. *Biodiversity and Conservation* 22, 1033–1047.
- Jones, F. A., Sobkowiak, B., Orme, C. D. L., Govaerts, R., and Savolainen, V. (2013). “Macroecological correlates of global monocot species richness”. *Early Events in Monocot Evolution*. Cambridge University Press, 99–117.
- Barbosa, A. M., Estrada, A., Márquez, A. L., Purvis, A., and Orme, C. D. L. (2012). “Atlas versus range maps: robustness of chorological relationships to distribution data types in European mammals”. *Journal of Biogeography* 39, 1391–1400.
- Baselga, A. and Orme, C. D. L. (2012). “betapart: an R package for the study of beta diversity”. *Methods in Ecology and Evolution* 3, 808–812.
- Bland, L. M., Collen, B., Orme, C. D. L., and Bielby, J. (2012). “Data uncertainty and the selectivity of extinction risk in freshwater invertebrates”. *Diversity and Distributions* 18, 1211–1220.
- Hilborn, A., Pettorelli, N., Orme, C. D. L., and Durant, S. M. (2012). “Stalk and chase: how hunt stages affect hunting success in Serengeti cheetah”. *Animal Behaviour* 84, 701–706.

- Pigot, A. L., Owens, I. P. F., and Orme, C. D. L. (2012). "Speciation and Extinction Drive the Appearance of Directional Range Size Evolution in Phylogenies and the Fossil Record". *PLoS Biology* 10, e1001260.
- Whitmee, S. and Orme, C. D. L. (2012). "Predicting dispersal distance in mammals: a trait-based approach". *Journal of Animal Ecology* 82, 211–221.
- Whitton, F. J. S., Purvis, A., Orme, C. D. L., and Olalla-Tárraga, M. Á. (2012). "Understanding global patterns in amphibian geographic range size: does Rapoport rule?". *Global Ecology and Biogeography* 21, 179–190.
- Kisel, Y., McInnes, L., Toomey, N. H., and Orme, C. D. L. (2011). "How diversification rates and diversity limits combine to create large-scale species-area relationships". *Philosophical Transactions of the Royal Society B-Biological Sciences* 366, 2514–2525.
- McInnes, L., Orme, C. D. L., and Purvis, A. (2011). "Detecting shifts in diversity limits from molecular phylogenies: what can we know?". *Proceedings of the Royal Society Series B - Biological Sciences* 278, 3294–3302.
- Olalla-Tárraga, M. Á., McInnes, L., Bini, L. M., Diniz-Filho, J. A. F., Fritz, S. A., Hawkins, B. A., Hortal, J., Orme, C. D. L., Rahbek, C., Rodríguez, M. Á., and Purvis, A. (2011). "Climatic niche conservatism and the evolutionary dynamics in species range boundaries: global congruence across mammals and amphibians". *Journal of Biogeography* 38, 2237–2247.
- Pigot, A. L., Owens, I. P. F., and Orme, C. D. L. (2010). "The environmental limits to geographic range expansion in birds". *Ecology Letters* 13, 705–715.
- Pigot, A. L., Phillimore, A. B., Owens, I. P. F., and Orme, C. D. L. (2010). "The Shape and Temporal Dynamics of Phylogenetic Trees Arising from Geographic Speciation". *Systematic Biology* 59, 660–673.
- Powney, G. D., Grenyer, R., Orme, C. D. L., Owens, I. P. F., and Meiri, S. (2010). "Hot, dry and different: Australian lizard richness is unlike that of mammals, amphibians and birds". *Global Ecology and Biogeography* 19, 386–396.
- Strassburg, B. B. N., Kelly, A., Balmford, A., Davies, R. G., Gibbs, H. K., Lovett, A., Miles, L., Orme, C. D. L., Price, J., Turner, R. K., and Rodrigues, A. S. L. (2010). "Global congruence of carbon storage and biodiversity in terrestrial ecosystems". *Conservation Letters* 3, 98–105.
- Jones, K. E., Bielby, J., Cardillo, M., Fritz, S. A., O'Dell, J., Orme, C. D. L., Safi, K., Sechrest, W., Boakes, E. H., Carbone, C., Connolly, C., Cutts, M. J., Foster, J. K., Grenyer, R., Habib, M., Plaster, C. A., Price, S. A., Rigby, E. A., Rist, J., Teacher, A., Bininda-Emonds, O. R. P., Gittleman, J. L., Mace, G. M., and Purvis, A. (2009). "PanTHERIA: a species-level database of life history, ecology, and geography of extant and recently extinct mammals". *Ecology* 90, 2648–2648.
- McInnes, L., Purvis, A., and Orme, C. D. L. (2009). "Where do species' geographic ranges stop and why? Landscape impermeability and the Afrotropical avifauna". *Proceedings of the Royal Society Series B - Biological Sciences* 276, 3063–3070.
- Olson, V. A., Davies, R. G., Orme, C. D. L., Thomas, G. H., Meiri, S., Blackburn, T. M., Gaston, K. J., Owens, I. P. F., and Bennett, P. M. (2009). "Global biogeography and ecology of body size in birds". *Ecology Letters* 12, 249–259.
- Davies, T. J., Fritz, S. A., Grenyer, R., Orme, C. D. L., Bielby, J., Bininda-Emonds, O. R. P., Cardillo, M., Jones, K. E., Gittleman, J. L., Mace, G. M., and Purvis, A. (2008). "Phylogenetic trees and the future of mammalian biodiversity". *Proceedings of the National Academy of Sciences* 105, 11556–11563.
- Phillimore, A. B., Orme, C. D. L., Thomas, G. H., Blackburn, T. M., Bennett, P. M., Gaston, K. J., and Owens, I. P. F. (2008). "Sympatric speciation in birds is rare: Insights from range data and simulations". *The American Naturalist* 171, 646–657.
- Thomas, G. H., Orme, C. D. L., Davies, R. G., Olson, V. A., Bennett, P. M., Gaston, K. J., Owens, I. P. F., and Blackburn, T. M. (2008). "Regional variation in the historical components of global avian species richness". *Global Ecology and Biogeography* 17, 340–351.
- Bielby, J., Mace, G. M., Bininda-Emonds, O. R. P., Cardillo, M., Gittleman, J. L., Jones, K. E., Orme, C. D. L., and Purvis, A. (2007). "The fast-slow continuum in mammalian life history: An empirical reevaluation". *The American Naturalist* 169, 748–757.

- Davies, R. G., Orme, C. D. L., Webster, A. J., Jones, K. E., Blackburn, T. M., and Gaston, K. J. (2007a). "Environmental predictors of global parrot (Aves : Psittaciformes) species richness and phylogenetic diversity". *Global Ecology and Biogeography* 16, 220–233.
- Davies, R. G., Orme, C. D. L., Storch, D., Olson, V. A., Thomas, G. H., Ross, S. G., Ding, T.-S., Rasmussen, P. C., Bennett, P. M., Owens, I. P. F., Blackburn, T. M., and Gaston, K. J. (2007b). "Topography, energy and the global distribution of bird species richness". *Proceedings of the Royal Society Series B - Biological Sciences* 274, 1189–1197.
- Gaston, K. J., Davies, R. G., Orme, C. D. L., Olson, V. A., Thomas, G. H., Ding, T.-S., Rasmussen, P. C., Lennon, J. J., Bennett, P. M., Owens, I. P. F., and Blackburn, T. M. (2007). "Spatial turnover in the global avifauna". *Proceedings of the Royal Society Series B - Biological Sciences* 274, 1567–1574.
- Grenyer, R., Orme, C. D. L., Davies, T. J., Jackson, S. F., Davies, R. G., Olson, V. A., Jones, K. E., Gaston, K. J., Blackburn, T. M., Thomas, G. H., Bennett, P. M., Rasmussen, P. C., Ding, T.-S., Gittleman, J. L., and Owens, I. P. F. (2007). "Effective global conservation strategies - Reply". *Nature* 450, E20–E20.
- Phillimore, A. B., Orme, C. D. L., Davies, R. G., Hadfield, J. D., Reed, W. J., Gaston, K. J., Freckleton, R. P., and Owens, I. P. F. (2007). "Biogeographical basis of recent phenotypic divergence among birds: A global study of subspecies richness". *Evolution* 61, 942–957.
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- Grenyer, R., Orme, C. D. L., Jackson, S. F., Thomas, G. H., Davies, R. G., Davies, T. J., Jones, K. E., Olson, V. A., Ridgely, R. S., Rasmussen, P. C., Ding, T.-S., Bennett, P. M., Blackburn, T. M., Gaston, K. J., Gittleman, J. L., and Owens, I. P. F. (2006). "Global distribution and conservation of rare and threatened vertebrates". *Nature* 444, 93–96.
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- Phillimore, A. B., Freckleton, R. P., Orme, C. D. L., and Owens, I. P. F. (2006). "Ecology predicts large-scale patterns of phylogenetic diversification in birds". *The American Naturalist* 168, 220–229.
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- Cardillo, M., Orme, C. D. L., and Owens, I. P. F. (2005). "Testing for latitudinal bias in diversification rates: An example using New World birds". *Ecology* 86, 2278–2287.
- Cardillo, M., Mace, G. M., Jones, K. E., Bielby, J., Bininda-Emonds, O. R. P., Sechrest, W., Orme, C. D. L., and Purvis, A. (2005). "Multiple causes of high extinction risk in large mammal species". *Science* 309, 1239–1241.
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- Purvis, A. and Orme, C. D. L. (2005). "Evolutionary Trends in Body Size". *Deciphering Growth*. Ed. by J.-C. Carel, P. A. Kelly, and Y. Christen. Berlin: Springer-Verlag, 1–18.
- Barker, C., Power, S., Bell, J., and Orme, C. D. L. (2004). "Effects of habitat management on heathland response to atmospheric nitrogen deposition". *Biological Conservation* 120, 41–52.
- Orme, C. D. L., Isaac, N. J. B., and Purvis, A. (2002). "Are most species small? Not within species-level phylogenies". *Proceedings of the Royal Society Series B - Biological Sciences* 269, 1279–1287.

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- Purvis, A., Orme, C. D. L., and Dolphin, K. (2002). "Why are most species small-bodied? A phylogenetic view". *Macroecology: Concepts and Consequences*. Ed. by K. J. Gaston and T. M. Blackburn. Blackwell Publishing Ltd.
- Dolphin, K., Belshaw, R., Orme, C. D. L., and Quicke, D. L. J. (2000). "Noise and incongruence: Interpreting results of the incongruence length difference test". *Molecular Phylogenetics and Evolution* 17, 401–406.