



## Professor Norman MacLeod

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Norman MacLeod (BSc, MSc, PhD, FGS, FLS) is Dean of Post-Graduate Education and Training at the Natural History Museum (London). Honorary Professor at University College London and Visiting Professor at the Nanjing Institute of Geology and Palaeontology, Chinese Academy of Sciences. He is the editor of *Automated Taxon Identification in Systematics: Theory, Approaches, and Applications* (CRC Press, Taylor & Francis Group, 2007, <http://www.crcpress.com/product/isbn/9780849382055>), the author of *The Great Extinctions: What Causes Them and How They Shape Life* (Natural History Museum, 2013, <http://www.nhm.ac.uk/business-centre/publishing/books/earth/great-extinctions/index.html>), the Editor-in-Chief of *Grzimek's Animal Life Encyclopedia: Extinctions*, 2nd ed., 2 vols. (Gale-Cengage, 2013, [http://www.cengage.com/search/productOverview.do;jsessionid=4EBB42963ECF0CFB547FCB0A490E4003?N=197&Ntk=P\\_EPI&Ntt=485547245146856566516057212231962043842&Ntx=mode+matchallpartial#Overview](http://www.cengage.com/search/productOverview.do;jsessionid=4EBB42963ECF0CFB547FCB0A490E4003?N=197&Ntk=P_EPI&Ntt=485547245146856566516057212231962043842&Ntx=mode+matchallpartial#Overview)) which received an Honorable Mention Professional and Scholarly Excellence (PROSE) Award: Multivolume Reference/Science category in 2014 by the Association of American Publishers (see <http://www.proseawards.com/current-winners.html>) and the co-editor of *Issues in Palaeobiology: A Global View—Interviews and Essays* (with Marcelo R. Sánchez-Villagra; Scidinge Hall, 2014, <http://www.amazon.com/Issues-Palaeobiology-Global-Interviews-Essays/dp/3905923173>). He is currently writing a book on the mathematical analysis of morphology. Professor MacLeod also serves as Co-Chief Editor of *Palaeoworld* (a Chinese palaeontology journal), Associate Editor of the journal *Systematic Biology*, and an Editorial Board Member of the journal *Royal Society Proceedings B (Biological Sciences)*.

Professor MacLeod has a wide range of research interests. He is perhaps best known for his work documenting patterns and understanding the causes of Phanerozoic extinctions, especially the end-Cretaceous mass extinction event where he is a leading proponent of the multiple-cause model. Equal in terms of output and prominence is his theoretical, methodological, and applied work in the field of morphometrics where he was an early proponent of geometric morphometrics, the use of outline semilandmarks to characterize form and shape, the morphometric characterization of 3D surfaces, and most recently the application of computer vision and machine learning methods to the analysis of morphology. Other research interests include macroevolution, evolutionary rates, quantitative biostratigraphy (esp. graphic correlation), applied statistics, and quantitative data analysis (esp. multivariate ordination, discriminant analysis, Monte Carlo simulation, bootstrapping, and jackknifing). Most recently Prof. MacLeod has developed minor intellectual sidelines in art history picture analysis (esp. with regard to scientific images) and the effect of human evolutionary biology and climate change on human history.