

Andrew Martin

Members of the WHO Expert Advisory Panel on The International Pharmacopoeia and Pharmaceutical Preparations serving the INN Expert Group

Biography

Andrew Martin is Professor of Bioinformatics and Computational Biology at University College London (UCL). He obtained his BA in Biochemistry from the University of Oxford in 1986 and his DPhil in molecular modelling of antibody combining sites in 1990. He collected his MA in 2013. After a brief stint at the National Institute for Medical Research in 1990 he became self-employed developing scientific software and contracting. In 1993 he was a guest scientist at the Deutsches Krebsforschungszentrum in Heidelberg before moving to UCL in 1994 as a post doctoral researcher with Professor Dame Janet Thornton. From 1998-1999, he was a temporary lecturer at UCL and Technical Director at Inpharmatica, a UCL spinout company. He then moved to the University of Reading as a lecturer in bioinformatics and returned to UCL in 2004.

He has two main areas of research: (1) the effects of mutations on protein structure and function, and (2) the sequence, structure and modelling of antibodies. He has developed software for predicting whether mutations will be pathogenic as well as a variety of widely-used general-purpose bioinformatics software. He developed the first automated software for modelling antibodies and has developed the abYsis database and workbench for the analysis of antibody data (www.abysis.org) allowing pharmaceutical companies to develop better antibody-based drugs in a timely fashion. The public website receives approximately 1 million hits per year. He has published over 100 articles, reviews, book chapters and books and is in regular demand as an expert advisor or witness in patent disputes related to antibodies and general bioinformatics. He has supervised 16 PhD students and 39 Masters students and mentored a further 25 PhD students.

Since 2016, he has been a special advisor on biologics and their annotation to the WHO-INN program, particularly as a result of his expertise in antibodies, and he has developed software for the comparison of proposed antibody names.