

Anne Chao

Institute of Statistics, National Tsing Hua University, Taiwan

Anne Chao is 60% statistician, 30% mathematician and 10% ecologist. She received her BS in mathematics from National Tsing Hua University, Taiwan, in 1973, and her PhD in statistics from the University of Wisconsin-Madison in 1977. Since 1978, she has been with the

Institute of Statistics, National Tsing Hua University, Taiwan, where she is currently a Tsing-Hua Distinguished Chair Professor. She is a Fellow of the Institute of Mathematical Statistics, and held a Taiwan National Chair Professorship. Chao has long been fascinated with mathematical and statistical issues arising in ecology and related sciences; her major research interests include ecological statistics, statistical inferences of biodiversity measures, and statistical analysis of ecological/environmental survey data. She and her collaborators have published more than 130 papers with citations > 20400 in Google Scholar. Their papers have (i) developed several biodiversity measures/estimators including Chao1, Chao2, ACE, and ICE for species richness, as well as some novel methods to infer entropy, diversity and related similarity/differentiation measures, (ii) established a unified mathematical/statistical framework for taxonomic, phylogenetic and functional diversities, and (iii) generalized the classic sample-size-based rarefaction method to sample-coverage-based rarefaction and extrapolation, to standardize biodiversity samples. To implement their methodologies, Chao and her colleagues/students have also developed statistical software including CARE (CApture-REcapture), SPADE (Species-richness Prediction And Diversity Estimation), iNEXT (iNterpolation/EXTrapolation), PhD (Phylogenetic Diversity) and FunD (Functional Diversity. For the past 20 years, Chao served in the editorial boards of four major statistical journals, and currently serves as an Associate Editor for Methods in Ecology and Evolution.

Website http://chao.stat.nthu.edu.tw/wordpress/

Google Scholar <u>https://scholar.google.com/citations?user=P-rr9foAAAAJ&hl=en</u> Research Gate <u>https://www.researchgate.net/profile/Anne_Chao</u>