Scientometrics of Horizontal Gene Transfer Research during 1991-2005. Taipei Medical University "2005 Academic of Joint Research Conference", 2006.

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Abstract

Horizontal gene transfer or lateral gene transfer, is the collective name for processes that permit the exchange of DNA among organisms of different species. Traditional thought was that microorganisms evolved clonally, passing genes from mother to daughter cells with little or no exchange of DNA among diverse species. Recent studies of microbial genomes have shown that genomes contain genes that are closely related to a number of different prokaryotes, sometimes to phylogenetically very distantly related ones. The horizontal movement of gene play an important role in the evolution of microorganisms. Our purpose was to study the horizontal gene transfer research based on 1,172 documents published in Science Citation Index (SCI)-indexed periodicals between 1991 and 2005. These documents were analyzed and evaluated according to publication distribution and were used to determine the quantitative characteristics of horizontal gene transfer research.