

Fundamental Theory of the Evolution Force: Gene Engineering utilizing Synthetic Evolution Artificial Intelligence

Authors : L. K. Davis

Abstract : The effects of the evolution force are observable in nature at all structural levels ranging from small molecular systems to conversely enormous biospheric systems. However, the evolution force and work associated with formation of biological structures has yet to be described mathematically or theoretically. In addressing the conundrum, we consider evolution from a unique perspective and in doing so we introduce the ‘Fundamental Theory of the Evolution Force: FTEF’. We utilized synthetic evolution artificial intelligence (SYN-AI) to identify genomic building blocks and to engineer 14-3-3 ζ ; docking proteins by transforming gene sequences into time-based DNA codes derived from protein hierarchical structural levels. The aforementioned served as templates for random DNA hybridizations and genetic assembly. The application of hierarchical DNA codes allowed us to fast forward evolution, while dampening the effect of point mutations. Natural selection was performed at each hierarchical structural level and mutations screened using Blosum 80 mutation frequency-based algorithms. Notably, SYN-AI engineered a set of three architecturally conserved docking proteins that retained motion and vibrational dynamics of native *Bos taurus* 14-3-3 ζ ;

Keywords : 14-3-3 docking genes, synthetic protein design, time-based DNA codes, writing DNA code from scratch

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