Significance to Biomedical Research

Studies on the NK-2 homeobox gene led to some novel ideas that enabled us to propose the strategy of the early phase of the gene program for the development of part of the CNS of D. melanogaster. These predictions can be tested experimentally using the NK-2 gene as the system. One of the major goals of neurobiology is to understand the developmental program for the assembly of the nervous system. Stochastic and deterministic strategies provide important advantages. A simpler but slightly modified strategy is that used for the assembly of part of the CNS of mammals.