A Perfect Path from Computational Biology to Quantum Computing

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I will revisit my contributions to the P versus NP millennium problem and the computational complexity of combinatorial problems, especially those arising in Computational Biology and Quantum Computing, through 20 PhD theses, mine and of my students. I will explain how the dichotomy NP-complete versus polynomial-time of long-standing problems together with their multivariate analysis is settled. Yet, intriguing questions remain.