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Structural phylogenetics of A family DNA polymerases

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Title, Date, and Authors of the Work:

Structural phylogenetics of A family DNA polymerases, 05/03/2024, Yagmur Bingul, Dr. Eugene Wu

Abstract/Summary:

DNA polymerases are essential to all of life and share a common architecture. In this paper, in order to relate DNA polymerases, we used structural phylogenetics techniques, as it often reveals deep evolutionary relationships for proteins that are not apparent in protein sequences. The results suggest an ancient relationship between the viral and eukaryotic A Family DNA polymerases, compared to bacterial A Family DNA polymerases, shedding light to the questions about the evolution of viral proteins.

Keywords (3-5):

Computational Biology, Evolution, Phylogenetics, DNA Polymerase

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