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CERTIFICATION LETTER
TO WHOM IT MAY CONCERN

This is to certify that the research work submitted for the Sun Pharma Science Scholar Award 2023 titled "Enhanced calcium sensitivity in evolved SARS-CoV-2 strains for fusion and entry" is original work and carried out under my supervision. Miss Puspangana Singh is the first author of this paper.

Through this research, she discovered the triggering factors for SARS-CoV-2 entry and fusion. The findings of this project have been published in Cell Reports (**Singh, P et. al. *Cell Reports*, 2022**). Her work has established that endosomal pH and calcium concentration are critical parameters for SARS-CoV-2 fusion, and that evolved SARS-CoV-2 strains has higher sensitivity to calcium concentration. Through many novel fluorescence techniques and cell-based virology assays, this work showed that the evolved strains of SARS-CoV-2 utilizes enhanced calcium sensitivity for infection.

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