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SUB: Comments on the project entitled 'Exploring Peptides with the Potential to Block SARS-CoV-2 Variants by Dr. Sankar Chandra Basu .

I am writing the review for the abovementioned proposal at a time when the Nobel prize in medicine goes to Katalin Karikó and Drew Weissman for their work on mRNA COVID-19 vaccines and in India, there is a ripple in social media about a movie vaccine war that highlights the role of big pharma in propagating the mRNA vaccine in developing countries under unacceptable conditions (e.g. the side effects of the mRNA vaccine can not be challenged in any local court). I know the PI of this project is one of the finest structural biologists in Eastern India, and to look into this COVID dilemma using structural biology tools is a hot pursuit of great importance. Such deeper aspects of COVID-19 cure is likely to get us rid of the conundrums of the COVID geopolitics and free us from the clutches of the big pharma monopoly.

This I think is the bigger purpose of the project in addition to the detective role suggested in the "Statement of the problem" (that this work will resolve the doubts on lab leak and zoonic origin of COVID).

Eventually, the project suggests, the creation of a new therapeutic regime, by the use of Antimicrobial Peptides (AMPs)], translated non-ribosomally to block the SARS-CoV-2 variants.

I think this project is timely and novel. Importantly, vaccines based on peptide designs would be easily scalable and will be stable and will prepare us for any future pandemic with much greater efficacy.

I recommend the sanction of the project, firstly due to its innovative content and secondly due to the credentials of the PI.

(Anjan Kr. Dasgupta, Oct 2,2023)

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