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### **Nomination for SUN PHARMA RESEARCH AWARDS-2021**


It is my pleasure to nominate Prof. Sanghamitra Bandyopadhyay for the “SUN PHARMA RESEARCH AWARDS-2021”. Prof. Bandyopadhyay is a leading computer scientist in India, working on the intersection of Artificial Intelligence and Biology. For her contributions has received most of the prestigious awards, including the Shanti Swarup Bhatnagar Award, Infosys Prize, the TWAS Prize, JC Bose Fellowship and Swarnajayanti Fellowship. She is a Fellow of INSA, INAE, NASI, IEEE, TWAS and IAPR. Bandyopadhyay has designed a number of innovative techniques that have proved to be immensely useful to the biosciences and healthcare community. In particular her methods are focussed on deepening our understanding of cancer biology, HIV1 pathogenesis and Alzheimer’s progression. Her research contributions have culminated in more than 190 journal publications, large number conference/workshop publications, several book chapters, and six books. As per Google Scholar, her works have been cited more than 17000 times, and her h-index is 56.

Prof. Bandyopadhyay has made all her methods open source and freely accessible for use by the research community. I am nominating her primarily for her valuable initiative towards developing a number of bioinformatics software representing new methods of analytics, whose codes are freely available. In addition, I am also nominating her for her recent works on transcriptomic analysis from single-cell data, and a series of algorithms for mapping short reads to the reference genome, including a recently developed alignment free method. Such mapping of short-reads to the reference genome is a fundamental process in almost all bioinformatics analysis. These contributions were not the focus of any of the awards she has received so far.

She also plays a major policy making role in the research landscape of the country, being a member of many apex level committees, including the Prime Minister’s Science, Technology and Innovation Advisory Council. To summarize, Prof. Bandyopadhyay is a committed scientist dedicated to research in applications of artificial intelligence to biological sciences and healthcare, and building skilled capacity in these areas.

With best regards

Yours Sincerely



G.P.S Raghava