To, Sun Pharma Science Foundation

Subject: Nomination of Prof. Vishal Rai for Sun Pharma Science Foundation Research Awards -2024

Dear Sir/Madam:

It gives me immense pleasure to nominate Prof. Vishal Rai for the Sun Pharma Science Foundation Research Awards for 2024. I have been following his research journey and am personally acquainted with his scientific contributions. I firmly believe that he has made an outstanding contribution to chemical biology to meet the technological demands of medical science. He has received Rashtriya Vigyan Puraskar: Vigyan Yuva - Shanti Swarup Bhatnagar, Swarnajayanti Fellowship, Ramanujan Fellowship, and many other awards and recognitions.

Prof. Rai's group played a seminal role in establishing the field of precision engineering of proteins. Until his contributions, it was believed that chemical methods were not capable of selective single-site modification of native proteins. However, a systematic effort from his research group led to discoveries and innovations that changed this perspective. In the process, they established comprehensive principles to regulate diverse features in post-translational protein engineering, including control over reactivity and diverse attributes of selectivity. After creating the core knowledge of chemically engineering the proteins, his research successfully delivered homogeneous antibody-drug conjugates for directed cancer chemotherapeutics and antibody-fluorophore conjugates for image-guided surgery. Besides empowering biologics, they are developing well-defined principles to make small-molecule precision therapeutics possible in the future. His group established the Precision Antibodies Engineering Center (SERB-PACE; https://serbpace.iiserb.ac.in). The technologies developed by his group are licensed to his startup, Plabeltech Private Limited (https://plabeltech.com). The company received the BIRAC-BIG Award and National Startup Award 2021 TDB, DST, and has successfully developed products and services. Plabeltech is currently providing services to Indian biopharma companies and working on its own products. The quality of his work is evident from a collection of high-quality papers that have received considerable national and international attention.

I congratulate Prof. Rai for his significant achievements and look forward to his research's impact on the Indian biotechnology and healthcare sectors. I strongly recommend Prof. Rai for the award. I hope that the screening committee will consider his nomination favorably. Please feel free to contact me if you need any further information.

Yours Sincerely,

Vinod K. Singh

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