

मूल कोशिका विज्ञान एवं पुनर्योजी औषधि संस्थान (डीबीटी-इनस्टेम) जैव प्रौद्योगिकी विभाग,भारत सरकार के अधीन स्वायत्त संस्थान Institute for Stem Cell Science and Regenerative Medicine (DBTinStem) AI under Department of Biotechnology, Govt. of India

It is great pleasure to nominate Dr. Praveen Kumar Vemula for the *Sun Pharma Science Foundation Research Award 2023* (*Category: Pharmaceutical Sciences*). I have known Dr. Vemula's work since he moved to India to establish an independent lab at the Institute for Stem Cell Science and Regenerative Medicine (DBT-inStem), Bengaluru. For the past ten years, he has been doing phenomenal research in chemical biology and biomedical fields. Vemula is one of the most innovative researchers I have seen who has immense interest and passion for translational research and developing new technologies that can be rapidly translated to help suffering patients.

What stands out is Vemula's focus on areas of critical translational need, where a few medicinal chemists, bioengineers and chemical biologists have been very successful. Additionally, one of the characteristics of his laboratory is its focus on solving diverse problems using chemical technologies. Instead of being confined to one area of research, depending on the need arises, Vemula's group develops technologies to solve them.

Since Sun Pharma Foundation Research Award is not meant for just one specific research topic/example, but for the overall scientific contribution, Vemula is an ideal nominee as his lab made major contributions in translational science in a wide range of medical applications.

Vemula is a true model for science-entrepreneur, who is actively translating the technologies developed in his lab to the clinic, by establishing spin-off companies his academic lab. Several fundamental technologies developed in his lab have formed the foundation for multiple products on the market, and currently under development. The technologies he developed in India have led to the launch of *five startup companies* including *Artus Therapeutics, Inc.* (a drug discovery company for inflammatory bowel diseases, in Boston, USA), *Sepio Health Pvt. Ltd.* (anti-pesticide technologies company, India), and *Color Threads Pvt. Ltd.* (Medical Textile company, in India, developed antiviral masks and apparel), *NeeDel Innovations Pvt Ltd.* (Medical Device Company, in India, developed painless injections for diabetic patients and infants), and *CaptureBio Pvt. Ltd.* (Medical Device Company, in India, developed new blood bags to enhance the quality and shelflife of stored blood). Thus far, >20 products that are developed based on his technologies are in the market worldwide. Vemula's translational research is a finest example to make an impact on society using basic science discoveries.

Overall, I believe his seminal contributions to chemical biology, pharmaceutical sciences and translational research will significantly impact society. Therefore, I highly recommend Vemula for this prestigious award.

Yours Sincerely,

Prof. Maneesha Inamdar

Director,

DBT-inStem (Institute for Stem Cell Science and Regenerative Medicine)

Bengaluru