Date: July 29th, 2023

Citation for Nomination of Dr. Jayanta Haldar for Sun Pharma Research Award 2023.

Prof. Haldar has made outstanding contributions in the field of antimicrobial research, contributing to the development of novel therapeutic and preventive strategies. This award is being presented for his research in the field of therapeutics, for development of strategies to tackle antimicrobial resistance and complex infections. Various small-molecular designs have been developed by him, which are easy to synthesize, and have excellent activity against drug-resistant Gram-positive and Gram-negative bacteria in different in vivo infection models. These rationally designed drug-candidates provide solutions in tackling antibacterial resistance and different states of chronic infection such as bacterial biofilms and persisters. Concurrently, he has also developed small molecular adjuvants, which can effectively repurpose obsolete antibiotics against multidrug-resistant Gram-negative pathogens. He has immensely contributed to development of semisynthetic glycopeptide antibiotics and metallo-betalactamase inhibitors, which can tackle vancomycin-resistant pathogens. His research has led to many high-impact publications in peer-reviewed journals, along with many national and international patents. For further translation of the inventions, Dr. Haldar is extensively pursuing industrial collaborations. The goal of Dr. Haldar's research is to merge basic science with applied research to address a major challenge of 21st century healthcare and society, which is the rapid emergence of antimicrobial resistance, through innovative chemical solutions. His is a name of repute on the global stage in the field of antimicrobial research and resistance. His research has contributed significantly in shaping the understanding of antimicrobial resistance and contributed to the global fight against it.