S.A.S. NAGAR

राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान
NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH (NIPER)
(Ministry of Chemicals & Fertilizers Govt. of India)
Sector 67, S.A.S Nagar (Mohali) Punjab-160062 (India)
Tel. : +91-172-2214682-87, Website : www.niper.gov.in
Fax : +91-172-2214692, 2230068

Nomination letter

It gives me great pleasure to nominate **Mr. Bhupesh Vaidya** for the **Sun Pharma Science Foundation Science Scholar Awards 2023 in the Pharmaceutical Sciences category.**

I have known Bhupesh since he joined the National Institute of Pharmaceutical Education and Research (NIPER) Mohali in 2016. He got admission in NIPER Mohali for M.S. (Pharm.) program after qualifying two national-level entrance examinations, Graduate Pharmacy Aptitude Test and NIPER-JEE 2016, in which he secured 56 and 9 ranks, respectively. Later he qualified NIPER-JEE for Ph.D. with an India Rank (AIR) of 8, CSIR-NET examination with an AIR of 61 and GATE with AIR of 708. Finally, he was admitted into the Ph.D. program at NIPER, SAS Nagar, under my guidance in 2019 on **CSIR-NET fellowship**. He has always shown commitment to his studies and research throughout his tenure and even ranked 1st in his class during his master's with a CGPA of 9.72.

In Master's and PhD research work, Bhupesh investigated the involvement of **Transient Receptor Potential Channel Canonical 5 (TRPC5) channels and Transient Receptor Potential Channel Melastatin 2 (TRPM2) in the pathophysiology of Parkinson's disease (PD)** using *in vitro* and in vivo model systems such as MPTP, MPP^+ and alpha-synuclein preformed fibrils. He has also used a range of genetic approaches, and tools spanning molecular, cell biological, and behavioral studies to understand the downstream pathways affected by TRP channels with an emphasis on mitochondrial dysfunctions, excitotoxicity, apoptosis and oxidative stress. Some of the investigated agents such as Clemizole are there in clinical trials and hence bear immense translational potential. Therefore, this research is expected to open new doors of opportunity for the development of TRPC5 modulators as a therapeutic option for neurodegenerative disorders.

As an outcome of his project, **Bhupesh has published 9 research and 7 review articles in peer-reviewed journals till date *viz.* Pharmacological Research, Current Neuropharmacology, ACS Chemical Neuroscience, Life Sciences, Molecular Neurobiology, Food & Function, European Journal of Pharmacology, Mitochondrion, Neuropharmacology, Pharmacology reports, Current Neurovascular Research, Open Biology and Eneuro** which clearly reflect his research capabilities. Furthermore, his work has also been cited more than 200 times in different peer-reviewed journals and he has an H index and i10 index of 10.

Recently, Bhupesh was invited to attend the **72nd Lindau Noble Laureate Meeting in June 2023 held at Lindau, Germany**. Furthermore, he also received an international travel grant from Science and Engineering Research Board to attend World Parkinson Congress in Barcelona, Spain in July 2023 to present his work on TRPC5 channels. He has also won the best oral presentation award in the Pharmacon-2022 and the best poster award in the 1st NIPER Research Symposium 2022. His work was also awarded in the 2nd National Biomedical Research Competition organized by PGIMER Chandigarh in 2019 and in the 37th Annual Conference of the Society of Toxicology, India in 2017. He is also a member of several professional bodies such as the Indian Pharmacological Society and the Indian Academy of Neurosciences.

Overall, Bhupesh is an excellent orator and committed researcher with the right scientific aptitude. I strongly recommend him for the Sun Pharma Science Foundation Science Scholar Awards 2023 to further help build on his scientific achievements.

I wish him success in the future.

Prof. Shyam S. Sharma

डॉ. श्याम सुन्दर शर्मा / Dr. Shyam S. Sharma
प्रोफेसर / Professor
भेषज एवं विष विज्ञान विभाग
Department of Pharmacology & Toxicology
राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान
National Institute of Pharmaceutical Education and Research
मोहाली नगर – 160062 पंजाब, भारत
Mohali-160062 Punjab, INDIA

August 22, 2023