राष्ट्रीय औषधीथ शिक्षा एवं अनुसंधान संस्थान, गुवाहाटी
NATIONAL INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH GUWAHATI
(Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers, Govt. of India)

Date: 27th August, 2024

Letter of Nomination

I am happy to nominate Ms. Navya Malladi for "The Sun Pharma Science Foundation Science Scholar Award 2024". She is doing her PhD under the supervision of Dr. Sanjay K Banerjee, Department of Biotechnology, National Institute of Pharmaceutical Education and Research (NIPER), Guwahati, and completed the course work followed by the Research work. During her tenure, she published six papers. To get admission into NIPER, she cleared two prestigious national examinations like Graduate Pharmacy Aptitude Test [GPAT] and NIPER- -JEE. She is the recipient of the Gold Medal in the year 2021 in MS (Pharm) – Biotechnology and topper in all India NIPER-JEE Ph.D. Examination in Biotechnology.

Her research is focused mainly on "**Lifestyle disorders and understanding the cardiovascular complications in diabetes and non-alcoholic fatty liver disease**". She is exploring the liver-heart axis in NAFLD. Her study with animal models of NAFLD in rats showed the correlation between fatty liver disease and cardiac dysfunction in a time-dependent manner. She tracked the disease progression in non-invasive manner using a small animal image system. She has established the method to score fat accumulation in liver and the presence of hypoxia in NAFLD rats. Her mechanistic study found the role of posttranslational modification of proteins (PTM) in NAFLD progression. She showed that FOXO3A and NFkB are acetylated in the liver of NAFLD rats and activate the oxidative stress and inflammation process, both of which are crucial for disease pathogenesis. Further, her study showed that Paricalcitol, a vitamin D receptor agonist and an FDA-approved drug in renal failure, is effective to reduce NAFLD in rats. Interestingly, Paricalcitol attenuates the NAFLD phenotype by decreasing the acetylation status of both FOXO3A and NFkB. She has published the same work in the journal "Cellular Signaling" in the year 2024. With collaboration with clinician, she is now looking to translate the findings to humans.

During her tenure, she demonstrated the ability to work independently with great creativity, professionalism, and a positive attitude and put in many long hours including holiday work. She is excellent in both narration and oration with her built-in talent of excellent communication skills. She has received best oral presentation award from International Society of Heat Research at AIIMS-Jodhpur and best poster award from Young Pharmacological Conclave organized by Indian Pharmacological Society in the year 2024. I have no hesitation in nominating M.S Navya to "**The Sun Pharma Science Foundation Science Scholar Award**" and I am happy to provide any further information if required.

Thanking you,

Sincerely.

Prof. USN Murty
Director, NIPER-Guwahati