# Indian Institute of Technology Kanpur

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Panel of Judges
Sun Pharma Research Awards
Office of Sun Pharma Science Foundation
8C, 8th Floor, Hansalaya Building
15-Barakhamba Road, Connaught Place,
New Delhi 110001

**Sub: Nomination of Prof. S. Ganesh, IIT Kanpur, for the Sun Pharma Research Awards 2021 – Pharmaceutical Sciences**

Members of the Panel:

It gives me great pleasure to forward the nomination of Prof. S. Ganesh, my colleague in the Department of Biological Sciences and Bioengineering at Indian Institute of Technology Kanpur, for the prestigious for the Sun Pharma Research Awards 2021 – Pharmaceutical Sciences.

Prof. S. Ganesh is one of the finest investigators we have in our Institute. He is an established scientist and has earned a name for himself amongst his peers in Human Disease Biology in this country and abroad. His unique distinction being his ability to combine clinical genetics and model systems, and to advance the basic research findings into therapeutics attempts. Over the past two decades, Prof. Ganesh has been looking at defective pathways leading the neurodegeneration and epilepsy and has made highly impactful contributions in restoring the defective pathways using model systems.

His greatest contribution is in elucidating the pathobiology of the Lafora disease – a genetic and fatal form of the neurodegenerative disorder with disease-defining epilepsy. Through a series of publications, Prof. Ganesh has shown that the Lafora disease proteins work together as a functional complex in a variety of cellular stress response pathways. These findings questioned the age-old wisdom that Lafora disease is a glycogen metabolic disorder, and have provided parallels between Lafora disease and other neurodegenerative disorders like Huntington, Parkinson and Alzheimer's diseases. His recent studies have demonstrated that neuroinflammation to be the major player in the susceptibility to induced seizures in the Lafora disease models, and that activation of autophagy or the heat shock response pathway could be suppressed neuroinflammation and ameliorate seizures.

Due to his outstanding contributions to understanding the disease biology of this fatal neurodegenerative disorder, Prof S. Ganesh has been elected as one of the regular

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speakers in the triennial International Workshop on Progressive Myoclonus Epilepsies, organized by the Sanford Consortium for Regenerative Medicine in La Jolla, California. It is worth noting that Prof. S. Ganesh is the only Asian to be elected to this prestigious group. Selection of Prof. Ganesh as the "Outstanding Young Scientist" of the year 2008 by SCOPUS (Elsevier South Asia), Department of Biotechnology (Govt. of India – National Bioscience Award for Career Development), and the B.M. Birla Science Centre (Birla Science Prize for Young Scientist in Biological Sciences 2009), as an "Outstanding Research Investigator" by the Science Research Council, Department of Atomic Energy, and the Tata Innovation Fellowship of the DBT, are a few testimonies to his excellent scientific caliber and outstanding contributions. He has also been the OPPI Scientist Award (Organization of Pharmaceutical Producers of India) for his contributions in identifying druggable targets for neurodegeneration and epilepsy.

Based on his outstanding track record and the immense prospects of his research in clinical translation, I very strongly recommend the candidature of Prof. S. Ganesh for the prestigious Sun Pharma Research Award.

Best regards. Sincerely,

**Prof Sandeep Verma**
Secretary
Science and Engineering Research Board
Department of Science and Technology
New Delhi

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