



**Chandrima Shaha, Ph.D, FTWAS, FNA, FASc, FNASc**  
**JC Bose Chair Distinguished Professor**

**10.07.2023**

**To**  
**The Chairperson**  
**The Sun Pharma Science Foundation Research Awards Selection Committee**

I write to provide my enthusiastic support for Dr. Anirban Basu, a Scientist at National Brain Research Centre, for Sun Pharma Research Awards-2023, in the Medical Sciences category (Basic Research). At the outset let me state that I am extremely impressed by his capabilities and like to nominate him for this award without any reservations.

The focus of Anirban's laboratory is to understand the patho-physiology of infection and inflammation in the central nervous system (CNS). His research has dissected the crucial regulatory role of neuroinflammation in the pathogenesis of Japanese encephalitis (JE), the leading cause of viral encephalitis in India and the entire Asia-Pacific region. JE virus infection generates a rapid inflammatory response in CNS. As the level of inflammation correlates well with the clinical outcome in JE patients, it is likely that therapies that target the "inflammation process" selectively may be highly effective.

Absence of safe, efficient as well as cost effective vaccine and/or anti-viral drug prompts Anirban and his group to explore the potential of neuroprotective/anti-inflammatory compounds as a therapeutic strategy for JE. Anirban's laboratory has identified minocycline, a second-generation tetracycline with a robust therapeutic potential in an experimental model of JE. Minocycline is an approved drug with a long-standing record of acceptable safety and has a similar spectrum to Doxycycline.

Based upon pre-clinical study undertaken in Anirban's laboratory at NBRC, a Phase II clinical trial has been conducted at King George Medical University (KGMU), Lucknow, where minocycline has been used as a therapy for JE patients and the patients with Acute Encephalitis Syndrome (AES). It has been observed in this trial that Minocycline has some beneficial effect in patients, especially in those patients who survive the initial days in hospital. These findings could form the basis for planning a larger study and possibly including minocycline in the management of AES and JE. Indian Council for Medical Research (ICMR) and the department of Health Research had decided that minocycline could be used for an observational study for patients with AES.

Former President - Indian National Science Academy, New Delhi; Professor of Eminence and Former Director,  
National Institute of Immunology, New Delhi

**Indian Institute of Chemical Biology, 4, Raja SC Mullick Road, Jadavpore, Kolkata 700032**  
email: cshaha04@gmail.com; chandrima.shaha@csiriicb.res.in



Anirban's work significantly enhances our knowledge of an existing drug for new indications and could be useful for millions in this country and elsewhere. Hence, I am nominating him for Sun Pharma Research Awards-2023, in the Medical Sciences category (Basic Research).

Please feel free to contact me if you need any further information regarding this nomination.

Sincerely

July 11, 2023

Chandrima Shaha

Former President - Indian National Science Academy, New Delhi; Professor of Eminence and Former Director,  
National Institute of Immunology, New Delhi

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