

जीव विज्ञान संस्थान INSTITUTE OF LIFE SCIENCES (An Autonomous Institute of the Department of Biotechnology, Govt. of India)



TO WHOMSOEVER CONCERNED

This is to endorse the candidature of Ms Debyashreeta Barik, 3rd Year, Ph.D student at DBT-Institute of Life Sciences for the Sun Pharma Science Scholar award. Ms Barik is working on the research work entitled "Bioinspired biomaterials for regenerative medicine". The work presented in her application is part of her doctoral thesis. The central theme of the thesis is to develop innovative materials for promoting bone regeneration post trauma or disease. In this perspective, she has been working towards developing Mucins as biomaterials. Mucins have tremendous potential to gel and exhibit mineralization ability making them an attractive protein for bone regeneration application. However, not a lot of work has been done on Mucins related to biomaterials. Debyashreeta has started her work by fully characterizing the protein and successfully performed some chemistries to develop the protein as a hydrogel that can support bone regeneration. Her research work so far has also been published in international journals of repute in the field of biomaterials (Macromolecular Biosciences, RSC Advances etc.) A part of her thesis involves in-vivo validation of the Mucin biomaterials which she has already developed.

Debyashreeta is extremely sincere and hard-working because of which she is an asset to the research world. She strives to know the latest developments in her field of interest and effectively implements them to find exciting research results. I personally feel the Sun Pharma Award will be a very appropriate motivation to her at this stage of her career. She will get the right impetus for a bright future ahead in research.

On the basis of the above justification, I recommend Ms. Barik for the Sun Pharma Science Scholar award 2021.

Dr Mamoni Dash

Mamoni Dust

Ramalingaswami Fellow, DBT-ILS

Bhubaneswar