SATHYABAMA
INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)
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Attestation by the Proposed Research Supervisor

The candidate is **S. Ravichandran, M.Sc., PhD Scholar**. He has three years of research experience in regeneration and stem cell biology. He has sequenced and identified regeneration-specific miRNAs and their target genes in the earthworm *Perionyx excavatus*. He found the complete miRNA profiling of the earthworm, *P. excavatus*, during the anterior regeneration. Notably, 55 miRNAs were identified from 30 miRNA families. Significant miRNAs, specific to wound healing and regeneration, were identified. Interestingly, novel miRNAs and their pre-miRNA secondary structures were predicted using MIREAP. miRNAs and their target mRNA transcripts were predicted using miRanda algorithms. These results indicate that the differentially expressed miRNome is responsible for the wound healing and regeneration processes in earthworms. This work was completed, and a research paper titled "Profiling microRNAs and finding their targets in the earthworm *Perionyx excavatus* during epimorphosis regeneration" is under review in the Journal of Genetics and Genomics (Impact Factor: 5.9). **Manuscript Number: JGG-D-23-00737**. Overall, he has published three book chapters.

I certify that I verified the candidate's information. I strongly recommend the Sun Pharma Science Scholars Awards-2023 candidate.

Place: Chennai
Date: 31.08.2023

Signature of the Nominator

Dr. S. Johnson Retnaraj Samuel, M.Sc., Ph.D.
Scientist 'D'
Centre for Molecular & Nanomedical Sciences
Sathyabama Institute of Science & Technology
Chennai - 600 119.