SATHYABAMA
INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)
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Justification letter by Nominator

I am Jackson Durairaj Selvan Christyraj, and I am working as a Scientist-D at Sathyabama Institute of Science and Technology's International Research Centre in Chennai, Tamil Nadu. **Mr. Kamarajan Rajagopalan** M-Tech., PhD Scholar is my nominee. He is now a Senior Research Fellow (SRF) in the DST-SHRI programme and a PhD student at Sathyabama Institute of Science and Technology's International Research Centre in Chennai, Tamil Nadu. B-Tech was finished with a 7.79 CGPA at the Kalasalingam Academy of Research and Education in Srivilliputhur, Tamil Nadu. During B-Tech, he worked on reverse vaccinology projects and successfully published two research articles on dengue virus and Covid-19 in Journal of Applied Pharmaceutical Science (IF: 1.37) and Journal of Bimolecular Structure and Dynamics (IF: 3.3). M-Tech was completed with an 8.60 CGPA at the International Research Centre of Sathyabama Institute of Science and Technology in Chennai, Tamil Nadu. In animal cell culture, he discovered that heat-inactivated coelomic fluid from the earthworm Perionyx excavatus is a viable alternative supply of foetal bovine serum, and his findings were reported in the Journal of Biotechnology Progress (IF: 2.86). He also has an Indian patent for it (Patent No: 201941009691). He was endeavoring to comprehend the molecular process of regeneration of earthworm blastema in-vitro in the second year of his M-Tech, and after much work, he was able to design a protocol for in-vitro culturing of earthworm tissue and organs. Under in-vitro circumstances, he discovered unique forms of earthworm *Eudrilus eugeniae* blastema regeneration. Following his M-Tech, he worked as a Project Assistant in the Human Genetics and Stem Cell Biology Lab at Bharathiar University in Coimbatore, Tamil Nadu. He was fortunate in submitting two articles on autism, Covid-19, to the Journal of Genes and Diseases (IF: 7.1) and the Science of Total Environment (IF: 10.75). After successfully completing the NRDMS project, he was hired as a Junior Research Fellow in the DST-SERB Project for two years, and he contributed to an article published in the Journal of Nature Scientific Reports (IF: 4.996). "Understanding the molecular mechanism of regeneration through AICP studies" is the topic of his PhD. Apoptosis-induced Compensatory Proliferation (AICP) is a study environment in which pro-apoptotic caspases stimulate stem cell proliferative signals for tissue loss compensation. As a preliminary step, he compared the survival and regeneration capability of juvenile and matured *Eudrilus eugeniae* under in vivo and in vitro maintenance. It was approved for publication in the Journal of In Vitro Cellular & Developmental Biology - Animal (IF: 2.416). Following that, he identified the primary view of AICP in earthworm, which was published in the International e-conference on Bio-engineering for Health and Environment (ICBHE 2021). Then, because he is convinced that cell fate factors such as TCTP/p53 have aided AICP progress, he focused on TCTP's role in regeneration. As a result, his study "Understanding the Multi-Functional Role of TCTP in the Regeneration Process of the Earthworm, Perionyx Excavatus" (IF: 4.5) was recently accepted for publication in the Journal of Tissue Engineering and Regenerative Medicine. **He has nine publications in total (five research papers, four reviews, three book chapters and one conference proceeding), 892 citations, H-index of Seven and i10-index of Six.**

(Google Scholar link: https://scholar.google.com/citations?user=ZHzmmWMAAAAJ&hl=en).

In addition, I will describe myself as a well-organized researcher with substantial hands-on experience and current technology knowledge. Finally, I believe that the most important aspect of reaching success is hard effort.

I have clearly read the terms and conditions given on the website https://sunpharmasciencefoundation.net/spsfn/12. I satisfy the minimum eligibility conditions for the Sun Pharma Science Scholars Awards-2023. I certify that to the best of his knowledge and belief the particulars given in the application are correct.

Place: Chennai

Date: 30.08.2023

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Signature of Nominator