## C.G. Bhakta Institute of Biotechnology



Date: 29/10/2021

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## SUN PHARMA SCIENCE FOUNDATION,

Mr. Prashant Shankar Giri has worked on the research study entitled "Decreased suppression of CDS+ and CD4+ T cells by peripheral regulatory T cells in generalized vitiligo due to reduced NFATCI and FOXP3 proteins" for the past 3.5 years (19/06/2018 to till date) at C. G. Bhakta Institute of Biotechnology, Uka Tarsadia University.

Overall, the findings from the study suggest, that the reduced expression of NFATC1 leads to decreased FOXP3 expression in Tregs. The reduced expression of these key Tregs transcription factors (NFATC1 & FOXP3) then results in decreased Treg suppressive function and decreased expression of downstream Treg associated suppressive genes (CD25, IL-10 and TGF- $\beta$ ), thereby leading to unchecked CD8+ and CD4+ T cells proliferation and IFN- $\gamma$  production resulting in melanocyte death and GV pathogenesis.

The novel research has has been published in highly reputed journals i.e., Pigment cell melanoma research (Impact Factor: 4.693), Experimental Dermatology (Impact Factor: 3.368) and Gene (Impact Factor: 3.688). These research findings open new doors for developing effective Treg based therapeutics for the treatment of generalized vitiligo.



Dr. Mitesh Kumar Dwivedi

(Assistant Professor)
Principal Investigator
DST - SERB Project
"Exploring the role of Tregs......
in Vitiligo Pathogenesis"



11