

Signed statement from the applicant to the effect that the research work under reference has not been given any award in the past. The applicant should also indicate the extent of the contribution of others associated with the research and he/she should clearly identify his/her achievements (not to exceed 500 words)

I declare that the research work under this award has not been given any award in the past. As the corresponding author in 15 publications, I was responsible for the conceptualization of this research problem, the study design and protocols to be applied. I have also supervised the work undertaken by technical staff and M.Sc. students. I have contributed to the analyses of the results and the writing of the paper also. In most of the papers I am responsible for conceptualization, formal analysis, writing, reviewing, editing, supervision and funding acquisition.

In the area of siRNA development and evaluation against chikungunya virus two proposal granted from ICMR & DST Nano Mission where I was Principal investigator. As the first and corresponding author, I was responsible for the concept of the problem, design of the studies, carrying out the experimental work, analysis of the data generated by the application of softwares, and writing of the paper. I have designed siRNA and in vitro and in vivo evaluation was done by me. I am first lead author of all granted patents also. In case of development of solid lipid nanoparticles for effective delivery of siRNA, the nanoparticles were developed by Dr. Sistla Ramakrishna's, group from CSIR-IICT, Hyderabad while for the other Zeolitic imidazolate framework delivery system, development was done in my lab and characterization was done by Dr. Ravi Shukla's group (RMIT, Australia). In all the above work, *in vitro* and *in vivo* evaluation was done by my lab under my supervision.

In antiviral studies extracts, compounds and formulations were provided by different collaborators, Dr. Rajesh K Joshi, ICMR-NITM, Belagavi; Dr. Prathama S Mainkar, CSIR-IICT, Hyderabad & Dr. S. Kaushik, Maharshi Dayanand University, Rohtak, Haryana. Again all *in vitro* and *in vivo* antiviral activity studies was done by Dengue & Chikungunya group (technical staff and M.Sc. students) under my leadership. In these studies, *in silico* studies were performed under the supervision of Dr. Sarah Cherian in the Bioinformatics group, ICMR-NIV, Pune. In case of repurposed drugs study, Dr. Sarah Cherian, Bioinformatics group, ICMR-NIV, Pune identified drugs for repurposing using systems biology approach and the drugs were evaluated by my group.

Alepti Parashar