Citation:

Dr. Sunil K. Arora currently working as Professor of Immunology in the Department of Immunopathology and Head Department of Translational & Regenerative Medicine at PGIMER Chandigarh, India. He is elected member of the National Academy of Medical Sciences (India) since 2004. He is current President of Indian Immunology Society and The Cytometry Society (India) and current Vice-President of Federation of Immunological Societies of Asia-Oceania (FIMSA). He is Professor-in-charge of the HIV Diagnosis and Disease Monitoring Centre at PGI. His research work focuses on the Immunological aspects of Infectious Diseases mainly HIV, HIV-TB co-infection, HCV and Experimental Leishmaniasis. His team has worked on identification and evaluation of protective efficacy of novel vaccine candidates for kala azar. The lab has identified and reported three novel genes of leishmania from an indigenously made cDNA library from the mRNA isolated from the promastigoes of Leishmania donovani parasite which was screened using immune sera and a lab generated leishmania-specific cell line. The lab reported a protective efficacy of 70-85% with these three recombinant clones used as protein as well as DNA vaccine. He has also shown the immunomodulatory potential of one of the proteins which facilitates the clearance of intracellular parasites when used alone or in conjunction with an anti-leishmania drug. Recently the lab has reported a novel T-cell epitope based multi-epitope vaccine candidate that induced a near 100% protection in the animal model. The lab used immuno-informatic tools to select T-cell epitopes having binding capability to most common HLA alleles in population. This is a remarkable progress in the field of vaccine development against this tropical disease, which indicates a consistent and focused approach by our group in this area of research. The proposed approach of selective epitope mapping and designing of multi-epitope constructs as vaccine candidate may not remain restricted to leishmaniasis but would be highly translatable to epitope-based vaccine designing for other emerging infections as well.

He has guided 25 PhDs to completion and 172 scientific publications to his credit in the peer-reviewed journals of repute. He has received many awards including Indo-US Young Investigator's award in 1991 and Senior Scientist Oration award in Immunology in 2018.