

International Journal of Molecular and Immuno Oncology

News

Editorial board tribute to Dr. Amit Verma

By IJMIO Editorial Board

India and the world are in the midst of a global pandemic and economic uncertainty. Amidst these challenging times, some incredible human beings are doing their best to spread hope, smiles and happiness. One of these honourable individuals who has set an example of going beyond his call of duty to serve humanity and save lives is India first molecular oncologist Dr. Amit Verma. Dr. Verma is the torch bearer for this emerging stream of medical speciality in India and is credited with pioneering work in the field of cancer genomics. After having pursued his MD in Clinical Biochemistry/Cancer Medicine in 2004 from the prestigious All India Institute of Medical Sciences, AIIMS, New Delhi, Dr. Verma became passionate for finding a cure for the dreaded disease that ruthlessly claims millions of lives each year. This fervour directed him to one of the world's best cancer institute, MD Anderson Cancer Center, Houston, Texas, USA, for pursuing advance level fellowship in Experimental Therapeutics-Cancer Medicine.

Beside his mainstream career, Dr Verma's special contribution during COVID Pandemic was unprecedented. Even during the COVID-19 pandemic, as a true Samaritan, he came forward to apply his knowledge and skills in an unrelated field; stepping out of his comfort zone to successfully develop an accurate diagnostic method for the novel Coronavirus. Further, he was instrumental in developing affordable kits (10 times cheaper than the imported kits) like Viral Transport Medium, RT PCR kits, Antigen testing kits, RNA extraction kits for the COVID-19. More than 10 Crores diagnostic kits (Pathkits) were supplied to various State Governments which led to substantial reduction of economic burden to India. In addition, he supervised conducting more than 200,000 COVID RT-PCR tests in the field and the laboratory (MolQ Laboratory). He worked unabatedly along with his team and successfully treated hundreds of patients through a unique concept of creating more than 1000 home intensive care units-ICUs as well as conversion of hotel into hospital at the acute shortage of the treatment during the crisis times [Figure 1].

The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing - in a global partnership. They recognize that everyone must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth while tackling climate change and preserving our habitat. Sustainable Development Goal 3 of the 2030 Agenda for Sustainable Development is to “ensure healthy lives and promoting well-being for all at ages.”

On 24th July, 2021; Dr. Amit Verma got felicitated as Goodwill SDG Ambassador for Good Health and Well-Being for his contribution to the nation during COVID pandemic, An initiative by the United Nation Assembly in association WHO, The Commonwealth and NITI AAYOG [Figure 2].

When the COVID pandemic hit globally at unprecedented speed, most of us in India, were not prepared to deal with it. COVID testing became a nightmare for many reasons. Lack of trained professionals, access to various diagnostic kits/technology, molecular testing infrastructure etc were the major challenges. On the demand side, the most immediate trade impact of the novel coronavirus pandemic had the sudden surge of the local demand for COVID-19 related medical supplies, which exceeded current domestic production levels thus resulting in increased import demand and simultaneously rising prices. Many patients were deprived of the basic healthcare needs, especially the timely diagnosis, and further many couldn't afford repeat testing

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Figure 1: Dr. Amit Verma.

because of the cost implications. In this catastrophe, there was immediate need to generate affordable resources in INDIA.

Dr. Verma understood the need and filled the gap with his expertise in the Molecular field [Figure 1]. He developed the indigenous COVID kits based on the published literatures and the prototype was validated by MolQ Laboratory, A unit of Molecular Quest Healthcare Pvt Ltd. The kits got approved by Indian Council of Medical Research (ICMR) (the highest body representing Govt. of India in Healthcare Sector). The innovation led to the development of high standard quality product with substantial reduction in the cost due to in-house production of the various key ingredients, optimisation of the formula, lower maintenance cost, high-throughput automated manufacturing protocols. The manufacturing and supply chain management at the large scale was taken up by Pathkits Healthcare Pvt Ltd. (founded by Dr. Amit Verma during the COVID times.) This tandem approach of research followed by development of multiple products, and in-house manufacturing on a large-scale capacity along with extended national distribution channel, achieved high productivity along with cost-efficiency. Most of the kits were supplied to state government at the lowest possible cost (far cheaper than the competitor price) thus saving substantial expenditure towards the COVID testing. The endeavour did not only reduce the cost but also generated huge employment opportunity during the economic crisis in this pandemic.

A well-known and experienced molecular oncologist as well as cancer geneticist with over 15 years of professional experience, Dr. Amit Verma does not believe in the one size fits all approach and strives to offer personalized treatment to patients by amalgamating diverse techniques ranging from cancer genomics, computational biology and tumour



Figure 2: SDG Award.

imaging. Relying on the scientific advancements in molecular biology and genetics of cells, he uses novel approaches such as Next-Generation Sequencing-NGS and others for an improved management of the disease. Being a pioneer in the field of cancer genomics, Dr. Verma has spearheaded the setting up of the first Personalized Cancer Medicine Clinic and first Molecular Oncology Tumour Board in India. To his academic achievement, Dr. Verma has been credited with numerous awards for his contribution to the field of oncology. Geeta Mittal Gold Medal award in 2005 for best resident in Oncology at AIIMS, Young Scientist Award in 2007 at American Association of Indian Scientists in Cancer Research and he has also been credited with a US patent for his research work in collaboration with MD Anderson Cancer Center. His efforts were recognised by the nation and he was bestowed with the Ramalinga-Swamy Fellowship Award in 2007 by the Govt. of India. Customarily, once again, he secured the first place in Multi-Disciplinary Tumour Board on the topics, Low grade Sarcoma in Gynaecological Malignancy as well as Young Breast Cancer with BRCA Mutation in the years 2017 and 2019 respectively.

IJMIO has been fortunate to have the guidance of Dr Amit Verma as an Editor of IJMIO from last five years. On the behalf of the editorial board of IJMIO (Int. J. Molecular. Immuno-oncology), we are grateful to him for his contributions to the journal. The above message is a token of appreciation for his efforts during the pandemic crisis of where his in-depth knowledge of immunology led him to invent a cheaper method of detection of Corona Virus (COVID-19). His contributions toward science and humanity in the above stated way has made the complete family of IJMIO proud to be associated with him