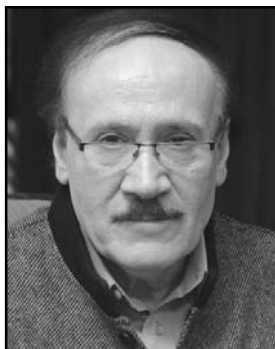


## OBITUARY

### Dr Maharaj Kishan Bhan



(1947-2020)

India and the biomedical science fraternity lost a jewel, Dr Maharaj Kishan Bhan on January 26, 2020, after battling for several months with malignancy at the age of 72 years.

He was born on November 9, 1947 in Srinagar. He completed his MBBS from Armed Forces Medical College, Pune in 1969 and MD (Pediatrics) from Delhi University in 1974. He was a registrar at Safdarjung Hospital (1974-76), senior consultant at Institute of Child Health, Kabul, Afghanistan (1976-78) and Lecturer at Post-graduate Institute of Medical Education and Research, Chandigarh (1978-79) before joining as a faculty in Pediatrics at AIIMS, New Delhi in 1979. At AIIMS, he pursued diarrhea and infectious disease research. His key research contributions with health impact on National and developing country programs include low osmolarity ORS, identification of enteroaggregative *E.coli* and its association with persistent diarrhea, and Zinc as treatment of diarrhea. Under his leadership, India

adopted the Integrated Management of Neonatal and Childhood Illness (IMNCI) strategy.

Amidst all his achievements, the most important was the development of rotavirus vaccine, which is now saving thousands of children from diarrhea, a major cause of death in India and the world. In 1985-86, his team at AIIMS discovered and isolated the neonatal rotavirus strain, 116E, which was further pursued for development of the Indian rotavirus vaccine by Bharat Biotech International. This vaccine was introduced under the Universal Immunization Program in India in April, 2016 and now being used across several other countries. This was a game changer for India to be one the global vaccine research and development scenario.

He served as Secretary, Department of Biotechnology, Government of India, during 2004-12. During his tenure, he transformed the course of Indian biotechnology and biomedical science research and development through establishment of innovation support agencies, clusters and new Institutes. He conceived the Biotechnology Industry Research Assistance Council (BIRAC), which catalyzed academic and industry collaboration for product development and application. Translational Health Science and Technology Institute (THSTI) with centers dedicated to infectious diseases, pediatric biology, vaccines, bio-design and drug development was also one of his key initiatives during his tenure at DBT. He also steered several other programs to help foster innovation and promote the industry. He believed in big ideas and was all for a big expansion of the scientist pool and R&D activity in industry (small, medium, and large) and a smooth flow of ideas, people and knowledge.

He was a recipient of Padma Bhushan in 2013. He received numerous awards for his biomedical research including Shanti Swarup Bhatnagar Award (1990), National Ranbaxy Award (1990), ST Achar Gold Medal of the Indian Academy of Pediatrics (1984), SS Mishra Award of the National Academy of Medical Sciences (1986), Biotech Product and Process Development and Commercialization Award (2003), and Pollins Foundation Research Award (2003). He had been conferred with several fellowships including Fellow, Indian National Science Academy (FNA), Fellow, Academy of Sciences (FASc) and Fellow, Academy of Medical Sciences (FAMS) and Fellow, Third World Academy of Science (TWAS).

Professor Bhan was exceptionally compassionate with full of life and love. Despite being pulled in several directions, everyone wanted his time, and he was very accessible. His imagination was big and global while being rooted in India. He strived for excellence in science and scientific leadership in India. Two generations of biomedical researchers in India were mentored by him. He was a person with heart and mind always wanting to take India to next level of achievements and glory. According to his colleagues, whatever he did, he did with passion. He evolved from a clinician to a researcher pursuing research that changed the clinical practice, and developed new tools to save millions of lives. He shall always remain in minds and hearts of the pediatricians, clinicians, researchers and biotech innovators of India and the world.