



Dr. Shyam S. Agarwal

(5th July 1941 – 2nd December 2013)

Dr. Shyam Swarup Agarwal after superannuation from SGPGI (2001), moved to Tata Memorial Center, Mumbai for activation of the newly established Advanced Center for Treatment, Research and Education in Cancer (ACTREC) during 2002. He was the former director of ACTREC and was the pioneer of medical genetics and clinical immunology education in India. He was an Indian geneticist, immunologist and is known for his researches in the fields of genetics and molecular biology, he was an Emeritus Professor of the National Academy of Medical Sciences, and an elected fellow of all the three major Indian science academies, namely, the Indian Academy of Sciences, National Academy of Sciences, India, and the Indian National Science Academy. The Council of Scientific and Industrial Research, the apex agency of the Government of India for scientific research, awarded him the Shanti Swarup Bhatnagar Prize for Science and Technology, one of the highest Indian science awards for his contributions to Medical Sciences in 1986.

Dr. SS Agarwal got his BSc (1958) from Caning College, Lucknow University, Lucknow. He obtained MBBS (Hons) in 1963, and MD (Hons) in Medicine in 1966. He was recipient of Hewitt Gold Medal for standing first in MBBS and Chancellor's Gold Medal (1963) for being the best student. In 1967, he proceeded for Post-Doctoral Fellowship of International Agency for Research on Cancer, Lyon with Nobel laureate Baruch S Blumberg at Fox Chase Cancer Center, Philadelphia, USA. He specialized there in the area of Genetics and Immunology. He discovered the role of DNA polymerase in initiation of DNA synthesis in resting human lymphocytes upon stimulation with Phytohemagglutinin. He also carried out studies on fidelity of DNA polymerases during DNA repair and alloalbumins in North American Indians.

Academic and Research Achievements: Professor Agarwal worked as Lecturer (1970-86) in Medicine at the King George Medical College, Lucknow. One of his major contributions during this period was clinical trial of Gugulipid, a product developed by CDRI, Lucknow as hypolipidemic agent, which led to its marketing in the country. Simultaneously, he set up a Genetics Unit in the Department and led several multi-centric ICMR Task Force projects in the field of medical genetics, including study of genetic effects of MIC gas leak in Bhopal and delineation of Handigodu disease. His investigations identified it to be a unique type of autosomal dominant spondylo-epiphyseal dysplasia, which is recognized in the International Classification on skeletal dysplasias as a separate entity. During this period, he also made significant contributions to sero-epidemiology of malaria and discovered the immunomodulating property of Panax ginseng. In 1986, he moved to the newly established Sanjay Gandhi Post-Graduate Institute of Medical Sciences (SGPGI), Lucknow to establish the Departments of Medical Genetics and

Clinical Immunology. He played a critical role in getting these clinical disciplines established and recognized by the Medical Council of India. He was working at Vivekananda Polyclinic and Institute of Medical Sciences at Lucknow. He was also the INSA Senior Scientist working at CDRI and Emeritus Professor of the National Academy of Medical Sciences, New-Delhi.

Other Contributions: Professor Agarwal served as the first Dean and subsequently the Director of SGPGI. He was actively associated with ICMR, DST, DBT and CSIR in peer review and direction of research in the areas: Medical Genetics, Clinical Research, Stem Cell Biology and Medical Ethics. He had also served as Council Member of INSA (2000-02) and National Academy of Medical Sciences.

Awards and Honours: Professor Agarwal had been conferred the prestigious SS Bhatnagar Prize in Medical Sciences (1986). He was also recipient of Ranbaxy Award for Clinical Research, and Vigyan Ratna Award of the UP Government for excellence in science. He delivered several prestigious national orations, including Glaxo Oration and Gen. Amir Chand Oration of the National Academy of Medical Sciences, New Delhi; Jawaharlal Birth Centenary Lecture (2003) and TS Trimurti Memorial Lecture (2005) of the Indian National Science Academy; BC Guha Memorial Lecture of the Indian Science Congress Association; JB Chatterjee Memorial Oration; JB Parekh Memorial Oration of the Indian Society of Hematology and Blood Transfusion; and many others. He was Fellow of the Indian Academy of Sciences, Bangalore; National Academy of Sciences (India), Allahabad; and National Academy of Medical Sciences, New Delhi. He was also Founder Fellow of the Indian College of Physicians, Mumbai.