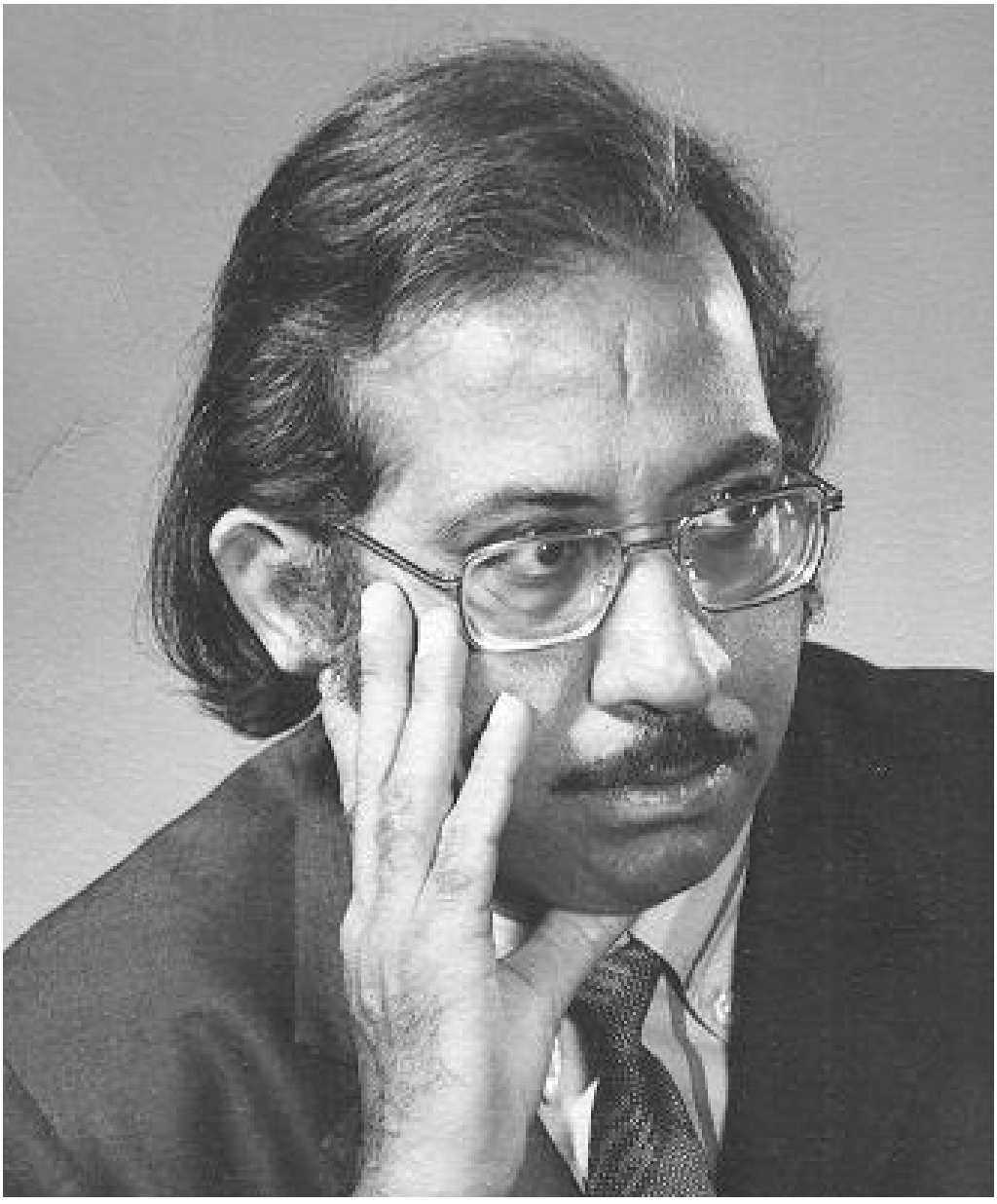
MICHA HAGE-BADR

Saran Narang
1930-2006



When Dr. Saran Narang passed away on December 25, 2007, the National Research Council Canada lost an outstanding scientist. Dr. Narang had a distinguished career of more than 40 years at NRC and despite reaching age 76, Dr. Narang had not retired from his position as Principal Research Officer in the Immunobiology Program at the NRC Institute of Biological Sciences.

Born on September 10, 1930 in Agra, India, Dr. Narang graduated from Punjab University, earned his PhD. in Organic Chemistry from Calcutta University in 1961 and completed his post-doctoral work from the Johns Hopkins University in 1962. He built a solid resumé with his work experience during and after his education. In 1953, he worked as a research assistant at Forest Research Institute in Dehra-Dun, India, and then he joined, in 1956, the Indian Association for the Cultivation of Science in Calcutta, India as a research assistant and was promoted to a Senior Research Fellow in 1959. He joined John Hopkins University in 1962 as a research assistant and in 1963 he worked at the University of Wisconsin as a project associate up until he joined NRC in 1966.

Dr. Narang started his research in the field of synthesis of nucleic acids in the laboratory of H.G. Khorana where he was one of the principle contributors to the work for which Dr. Khorana was awarded the Nobel Prize in 1968. After leaving Khorana's laboratory, and joining NRC, Narang worked independently and developed new methods for the synthesis of polynucleotides. His developments were characterized by a totally fresh approach and his work culminated in the first successful synthesis of a naturally-occurring gene, the lac-operon of *E. coli*, in which the synthetic product had full biological activity.

Dr. Narang joined NRC on September 16, 1966 as an Assistant Research Officer. Shortly after, in July 1967 he became an Associate Research Officer and in July 1973 he was appointed as a Senior Research Officer. He became a Principal Research Officer in 1983. During his career, he published over 200 papers and patents and edited monographs on DNA and RNA synthesis and on protein engineering.

In 1973, Dr. Narang received the Poochebehar Lecturer Award of the Indian Association for the Cultivation of Science. Thanks to his brilliant contributions at the start and during the maturation of recombinant DNA technology, in 1975 he developed a chemical method for synthesizing DNA, a pioneering step in producing synthetic genes.

In 1979 he was elected Fellow of the Royal Society of Canada, received the Ottawa Biological and Biological Society Award, and was elected member to the Johns Hopkins Society of Scholars. In 1982 he succeeded in the world's first total synthesis of the gene for proinsulin, a precursor to human insulin.

Dr. Narang discovered the synthetic primer technology that enabled the development of DNA cloning and later, DNA sequencing. It was his laboratory that first synthesized human pro-insulin, an achievement for which he received the Order of Canada in 1985. He was also the recipient of more awards, the Lifetime Achievement Award by the Ottawa Life Sciences Council in 1999, the Professor P.C. Dutta Memorial Award in 2001, and the Queen Elizabeth II Golden Jubilee Medal in 2002 and he was also given an honorary Doctor of Science degree from

Carleton University. In 2004, he brought to board his vast experience and expertise in the field of Biotechnology and Research by joining the Nicholas Piramal Scientific Advisory Board to work on the Cancer Research Programme.

Dr. Narang expressed optimism and immense enthusiasm for his work at NRC and helped to shape the field of molecular biology. Dr. Narang had also mentored several NRC scientists throughout his career. He collaborated with the best and the brightest in his field but showed equal interest in ideas put forth by junior scientists.

To commemorate the accomplishments and lifetime achievements of Dr. Narang, the NRC Institute for Biological Sciences held a memorial ceremony in his honor on June 1, 2007 unveiling a commemorative plaque as a tribute to his work and accomplishments during his career at NRC in the presence of his family members, friends and colleagues. As a further honor, the Institute launched, in the summer of 2009, the Sarang Narang Annual Student competition with the goal to motivate and support continuing education for aspiring science and engineering students holding a summer studentship in the Institute.

Dr. Narang leaves behind his spouse, Sandhya, his daughter, Monica, and a granddaughter. He will be fondly remembered by all those who knew and admired him at NRC.

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(Author's title given as of the time of writing)