

## IN MEMORIAM

## GOPAL (MANI) SUBRAMANIAN, PHD



Gopal (Mani) Subramanian,  
PhD, 1937-2000

Professor Gopal Subramanian, or Mani, as everyone knew him, passed away peacefully on February 2, 2000, after a long illness. With his ever-present smile and articulate expression of ideas, Mani will be missed by many of us working in the field of nuclear medicine. Through his work for more than 3 decades as a radiopharmaceutical chemist, Mani made a significant impact on the way nuclear medicine is practiced today.

Born in India in April of 1937, Mani received his BSc in chemistry in 1958 and his BSc in chemical engineering in 1960 from the University of Madras. He came as a student to the Johns Hopkins University in 1962. During the MSE (chemical engineering) degree course at Hopkins, Mani worked on a part-time basis with Drs. John McAfee and Henry Wagner, Jr., and contributed to the preparation and evaluation of  $^{99m}\text{Tc}$ -sulfur colloid and  $^{99m}\text{Tc}$ -MAA. In 1965, he moved with McAfee to the State University of New York (SUNY), Upstate Medical Center, Syracuse, NY. While working as a full-time research assistant in McAfee's laboratory, Mani obtained his PhD, also in chemical engineering, from Syracuse University in 1970. His PhD project, recalls Dr. McAfee, involved the challenging task of devising ways to keep water from freezing during the frigid winter months in upstate New York. After successfully defending his doctoral thesis in 1970, Mani became an assistant professor of radiology at SUNY-Syracuse, where he remained for the rest of his life.

For Mani, the years after 1970 were very productive and creative. In 1972, said Dr. Donald Hnatowich, "Mani dominated the SNM meeting." He dominated many more meetings after that. He was an inventor and co-inventor of 11 U.S. patents, author and co-author of more than 95 full papers published in reputable journals, 10 book chapters, and co-editor of 1 book. In his curriculum vita, Mani listed 14 different radiopharmaceuticals he prepared and evaluated. Perhaps the most long-lasting impact of his work in nuclear medicine is the development of  $^{99m}\text{Tc}$  bone-seeking agents that have

remained in use now for more than a quarter of a century.

Mani received many prestigious awards. The most prominent of these were the Paul Aebersold Award of the SNM (1982), the Vikram Sarabhai Oration Award of the Society of Nuclear Medicine India (1974), the Acomen Medal of Nuclear Medicine, Southern France (1986), and the Lifetime Achievement Award of the Indo-American Society of Nuclear Medicine (1997).

Mani participated in numerous activities of the SNM, which he joined in 1971. He served as a member of the editorial board (1972-1975) and as associate editor of *JNM* (1975-1981). He was the president of the Radiopharmaceutical Science Council (1991-1992), a member of the Board of Trustees (1973-1977, 1979-1984), and several times was a member of the Scientific Program Committee for annual meetings. He was the founding president of the Indo-American Society of Nuclear Medicine (1983-1985) and a founding member of the American Board of Sciences in Nuclear Medicine (1976-1982). He served as a consultant to the International Atomic Energy Agency beginning in 1976 and was a valued member of numerous editorial boards.

One begins life with what one gets, and lives life with what one gives. Mani was born in India with a less-than-silver spoon in his mouth. He began his education at a primary school that held its classes under a banyan tree. He went on to live a rich life by giving lots of love to his family and many years of useful radiopharmaceuticals and services to the profession he enjoyed. No doubt Mani's life of 63 years was short, but long enough to live well and benefit countless people.

Mani is survived by his wife Kalyani Subramanian, PhD, whom he married in August 1966, and by their three wonderful daughters.

—Mathew L. Thakur, PhD  
Thomas Jefferson University  
Philadelphia, PA

—John G. McAfee, MD  
National Institutes of Health  
Bethesda, MD