

IN MEMORIAM F. Merlin Bumpus, PhD

NTERNATIONALLY recognized for his achievements in high blood pressure research, F. Merlin Bumpus, PhD, remained active as a scientist, mentor, and avid gardener until his death at age 70, on August 8, 1993.

Born in Rome, Kentucky and reared in Rockport, Indiana, he went to Purdue University and the University of Wisconsin, where he received a doctorate in organic chemistry. In 1949, he was recruited by Irvine H. Page, MD, a pioneer in hypertension research, "to enter a field bound to give an organic chemist the worst kind of fits." In his mem-

oirs, Dr. Page recounted Dr. Bumpus' imprint on science during their long careers at the Cleveland Clinic. Merlin Bumpus served successively as Scientific Director of the Cardiovascular Research program, Chairman of the Research Institute from 1967 to 1984, and member of the Board of Trustees and Board of Governors.

Page, who died in 1991, and Bumpus led a team that determined the amino acid sequence of angiotensin II and ultimately synthesized this key cardiovascular peptide for the first time. Subsequently, he synthesized and developed peptides that inhibit angiotensin II. Together with Drs. Robert Tarazi, Harriet Dustan, Subha Sen and others at the Clinic, he used these tools to investigate the many actions of the renin-angiotensin system and its role in blood pressure homeostasis and in hypertension. These studies provided the basis for



the development and application of now widely used antihypertensive agents, such as the converting enzyme inhibitors.

"Bumpus was a different breed," wrote Dr. Page. "A quiet, hard worker, he had to labor during a period of peptide chemistry that could only be characterized as primitive ... Throughout this exciting period, Bumpus played a kev role."

Merlin Bumpus took great pride in his role as a mentor. He championed his trainees even after many had moved on to become distinguished scientists.

In 1985, Dr. Bumpus became a Senior Scientist of the Research

Institute and, in 1988, a member of the Emeritus Staff. Nevertheless, he continued to work actively, and together with Dr. Ahsan Husain, participated in the discovery and characterization of a novel enzyme, human chymase, which is found only in the human heart and which potently forms angiotensin II. Such seminal discoveries served to maintain the Cleveland Clinic's world-wide reputation in cardiovascular research first established by Page and Bumpus in the 1950s.

Dr. Bumpus' achievements resulted in over 220 publications and many awards and honors, including the prestigious Stouffer Award for Research in Hypertension and the Scientific Achievement Award of the American Heart Association (AHA). He served as Inaugural President of the Inter-American Society of Hypertension; Chairman, AHA Council for High Blood Pressure Research;

founder, Angiotensin Gordon Conferences; Chairman, Gordon Conference on Brain Peptides; President, Northeast Ohio AHA, and as a member of the editorial boards of many leading scientific journals including the *Journal of Biological Chemistry*, Circulation Research, Hypertension, and the American Journal of Physiology.

Ironically, at the time of his death from coronary artery disease, Dr. Bumpus was still active as President of the Coronary Club. A forerunner of what is known today as a support group, the Coronary Club publishes *Heartline*, a nationally distributed newsletter of counsel and advice for heart-attack patients and their families.

Throughout his career and particularly in his later years, Merlin Bumpus was very active in fundraising for the Cleveland Clinic Foundation and for the AHA. These efforts led to the establishment of the Clinic's Irvine H. Page Lecture; Dr. Bumpus was almost singlehandedly responsible for the success and prestige of this annual scientific address.

Dr. Bumpus' career brought him many opportunities for international travel, which he and his family enjoyed immensely. Growing up on a farm, he developed an enduring passion for gardening. His interests included rhododendrons (of which he grew more than 80 varieties), perennials, and orchids.

A quiet, persistent worker and a warm and generous mentor and colleague, he also greatly enjoyed family life. His first wife, Hale, died in 1977. He is survived by his wife, Lynda Elliott Bumpus of Moreland Hills; sons, Peter of Sarasota, Florida, and Roger of Brescia, Italy; daughters, Ashley Carr of Chicago, Illinois, and Summerson Carr of Shizugawa, Japan, and a granddaughter, Erin.

Dr. Bumpus will be greatly missed by his many friends and colleagues here at the Clinic and around the world.

ROBERT M. GRAHAM, MD Chairman, Department of Cardiovascular Biology The Cleveland Clinic Foundation

