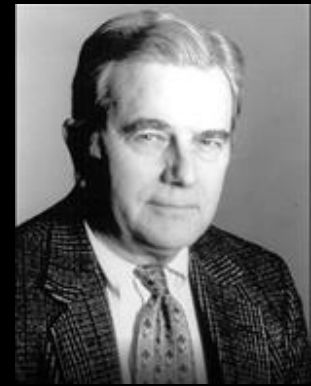


Joel Hardman

Joel Hardman, PhD, an internationally recognized scientist and educator who chaired the Department of Pharmacology at Vanderbilt University School of Medicine from 1975 to 1990, died June 30, 2019 in Hoosick Falls, New York, after a lengthy illness. He was 85.

Dr. Hardman's research helped reveal how hormones and neurotransmitters regulate cellular processes. As chair, he cultivated the Department as a premier place for research and training in Pharmacology nationally. He also was a gifted educator who nurtured the careers of numerous students and young faculty members.



A native of Colbert, Ga., Dr. Hardman earned his bachelor's and master's degrees in Pharmacy from the University of Georgia, and his PhD in Pharmacology from Emory University in 1964. That year Dr. Hardman came to Vanderbilt to do post-doctoral work with Earl Sutherland, MD, who won the Nobel Prize in medicine in 1971 for his discovery of cyclic AMP. In 1967 Dr. Hardman was named assistant professor of Physiology and in 1972 he was promoted to full professor.

His identification of guanylate cyclase as the enzyme responsible for synthesizing cyclic GMP from GTP led to the appreciation that cGMP, like cAMP, can serve as an intracellular second messenger in cellular regulation. Much of the fundamental knowledge of guanylate cyclase and cyclic nucleotide phosphodiesterases, which synthesize and degrade cyclic GMP, respectively, is a result of Dr. Hardman's early research.

Dr. Hardman spent most of 1974 in Europe on a sabbatical in the Department of Physiology at the University of Oxford, and as a visiting professor at the Free University of Brussels. Shortly after he returned, he was asked to succeed Allan D. Bass, MD, as chairman of Pharmacology. For much of the 1990s Dr. Hardman served with Lee Limbird as co-editor-in-chief of the standard reference work in pharmacology, Goodman and Gilman's *The Pharmacological Basis of Therapeutics*. He also served as editor of the journal *Molecular Pharmacology*, and as president of the American Society for Pharmacology and Therapeutics (ASPET) in 1993-1994. "The fact that *two* of his very few trainees, (the late) David Garbers, PhD, and Joseph Beavo, PhD, were elected to the National Academy of Sciences affirms Joel's insistence on focusing on important problems with critical inquiry," Limbird said. In 1991 Dr. Hardman was appointed associate vice-chancellor for Health Affairs at Vanderbilt.

"The department gained its outstanding reputation under Dr. Hardman's leadership," added Ege Kavalali, PhD, professor and acting chair of the Department of Pharmacology and the William Stokes Professor of Experimental Therapeutics. "We have a strong sense of responsibility to preserve and foster his legacy."

He strongly supported the creation of the Interdisciplinary Graduate Program for students in their first year of graduate training in biomedical sciences in 1992, said Roger Chalkley, DPhil, senior associate dean for Biomedical Research Education and Training. Also in 1992 the Joel G. Hardman Student-Invited Pharmacology Forum was established to recognize Dr. Hardman's sustained interest in training young scientists. The annual forum covers topics ranging from gene therapy to "America's opioid epidemic."

In honor of Dr. Hardman, donations may be given in support of the Joel G. Hardman Student-Invited Pharmacology Forum. Checks may be made out to Vanderbilt University with the words "Hardman Forum" in the memo line, and sent to the Vanderbilt University Department of Pharmacology, 476 Robinson Research Building, Nashville, Tennessee 37232-6600.