# DESMOND R. H. GOURLEY (1922-2012) PHARMACOLOGY EDUCATION PIONEER

Des Gourley passed away on December 4, 2012 shortly after his 90th birthday. In addition to his contributions on the evolving concept of drug receptors, specifically insulin receptors in skeletal muscle, he was among the first to advocate supplementing classical pharmacology lecture/laboratory teaching with case-based clinical problem solving. As a well-known raconteur, in his retirement he was in demand to provide humorous human interest stories for regional public radio as well as presentations of his photos of flowers as objects d'art. Des was also an ardent genealogist. Before the days of the internet, he traveled to many family home sites, traced his family back several generations, and published his work in genealogy journals.

Des was born in Thunder Bay, Ontario, Canada and served in the Canadian Officers Training Corps from 1942-1945. After receiving a BS in biochemistry from the University of Toronto, he studied with C.L. Gemmill and was awarded a PhD in pharmacology in 1945 from the University of Toronto. After a brief stint in the Department of Zoology at the University of Toronto, he joined the faculty of the University of Virginia. From 1965-1968 he chaired the Department of Pharmacology at UVA. From 1973 to 1988, he established the Department of Pharmacology at Eastern Virginia Medical School as its founding Professor and Chair.

At UVA he studied the role of insulin in skeletal muscle function and was on the leading edge of research into the biochemical mechanisms of opioid tolerance and dependence. He was well known for his work on the emerging concept of drug receptors including the isolation and characterization of membrane drug receptors. During a sabbatical at the Physiologisches Institut der Universitat, Freiburg, Germany, he compiled a book, Interactions of Drugs with Cells (Charles C. Thomas, pub., 1971). The slim volume is indicative of how little was known about drug receptors at that time. A very important contribution to insulin action field was Des's demonstration that insulin increased $K^+$ uptake into liver, which resulted in establishing liver as an insulin sensitive organ. Others had argued that liver was insulin insensitive since insulin did not increase glucose transport.

A true passion of Des's was teaching. He was in demand as a lecturer and honored with many teaching awards. Des was a pioneer in identifying the emerging use of recreational and dependence producing drugs in the early 70's and designed a lecture course for area schools and educators in Virginia. This resulted in a book entitled, "Educational Perspectives on the Drug Crisis," published by Jarmen Press in 1971. His contributions to the teaching of pharmacology, now known as pharmacotherapeutics, are still evident today. As early as 1966 he encouraged the inclusion of clinical material when teaching pharmacology. In 1983, as a founding member of the Committee on Knowledge Objectives in an Ideal Pharmacology Curriculum, Association for Medical School Pharmacology, he was on the forefront of the movement to establish written knowledge objectives to guide medical students. At EVMS he initiated case-based clinical problem solving as an integral part of the pharmacology curriculum, which was rapidly adopted by other disciplines. He further developed this concept of Patient Oriented Problem Solving (POPS) under the sponsorship of the Upjohn Company for distribution to all medical schools. This concept of case based clinical problem solving in now widely employed in most medical, pharmacy and other allied health programs.

Des was a mentor, before the word was coined, a valued colleague and friend with a smile and cheerful word for all. Des is survived by his wife, Marjorie Curl Gourley, five sons Robyn, Alan, David, Bruce and Donald, their wives, numerous grandchildren and great-grandchildren.

Prepared by Tom Westfall, Joe Lamer, Pat Williams