## MEMORIAL RESOLUTION

## DAVID MARK GIBSON

David Mark Gibson, 91, of Indianapolis, IN, died January 20, 2015, due to complications from a fall. Born August 7, 1923, in Kokomo, Indiana, David completed the A.B. degree at Wabash College (Indiana), and obtained an M.D. degree from Harvard Medical School (Boston). At Harvard he had the opportunity to work in a laboratory where he fell in love with metabolism and metabolic regulation. After an internship at Northwestern University Hospital (Chicago), David married Margaret (Peggy) Lockhart, R.N. (Saskatchewan) whom he met at Wesley Memorial Hospital in Chicago and with whom he had five children, Carl, Shauna, John, Heather, and Mark.

After completing his internship, David came to a fork in the road; whether to do a residency or go into research. He chose research, completing postdoctoral training, first at the University of Illinois, where he worked with Carl Vestling, and then at the Enzyme Institute at the University of Wisconsin where he worked with David Green and Salih Wakil. At the Enzyme Institute, he established himself in the field of biochemistry by discovering the pathway by which fatty acids are synthesized. In 1958, David joined the newly formed Department of Biochemistry in Indianapolis. At that time, the department had only one member, Don Bowman, and he was the chairman. Dr. Bowman quickly recruited two faculty members who went on to do great things: one was David Gibson, who was destined to replace Dr. Bowman as chair of biochemistry, and the other was Jim Ashmore, who later became chair of pharmacology.

In 1963, David and his first Ph.D. student David Allmann discovered that eating a meal high in carbohydrate greatly increases the synthesis of fat by the liver. The reason, they showed, was that a high carbohydrate meal increases the blood level of insulin which activates genes that encode the enzymes required for fat synthesis by the liver. This has led to the use of low carbohydrate diets for diabetes and obesity.

In 1965, the Department of Biochemistry named David as chairman, a position he held for 23 years. Fourteen faculty members were recruited during his tenure. David created an environment that supported the development of strong independent research programs for faculty. Towards that goal, he established an exceptional support staff and set a tone for the department that made everyone feel special and appreciated.

David was an exceptional teacher, not only of the medical students, but also of graduate students and those of us who followed his lead as teachers and researchers. Although he never practiced medicine, he made every lecture medically relevant. He established a true medical biochemistry course for our students which made thousands of them better doctors for the state of Indiana and the nation. David also trained many graduate students and postdoctoral fellows who have gone on to become faculty members at universities as well as researchers in industry.

In 1978, David reported the discovery of a new protein kinase that regulated cholesterol synthesis. This was during the very early days of protein phosphorylation, a time when the available techniques meant painstaking experimentation and skilled interpretation. The kinase, now known as the AMP kinase, has been implicated in the regulation of nearly every metabolic pathway of the cell. Over 41,000 papers have been published on "Dave's kinase."

David was awarded many grants from the Indiana and American Heart Associations, the American Diabetes Association, the Showalter Foundation, and the NIH. Dr. Gibson was recipient of an American Cancer Society Fellowship, an Established Investigatorship of the American Heart Association and a Career Development Award of the National Institutes of Health. He held visiting appointments at the

University of Padua, Italy; Utrecht University, the Netherlands; and the University of Ankara, Turkey. Dr. Gibson was the recipient of numerous teaching awards from the Indiana University School of Medicine and was named the first recipient of the Showalter Professorship of Biochemistry in 1975. Dr. Gibson's research contributed to the elucidation of the pathways of fatty acid and cholesterol synthesis and their control by endocrine-linked mechanisms. Dr. Gibson was the coauthor of the biochemistry textbook, *Metabolic Regulation in Mammals* (2002), along with many professional research publications.

David Gibson was a humble man who was never ostentatious, whether in his professional or his personal life. A fact not widely known is that David was a committed philanthropist who quietly supported many causes including substantial financial contributions to the department of biochemistry.

Peggy Gibson passed away on April, 9, 1992. In memory of her contributions to the social life of the students and faculty, the department established the Peggy Gibson Award given annually to the graduate student who has published the best paper.

After retiring from IUSM, David married Wilda Lee Preston of Mansfield, Ohio, on July 7, 2001. Lee died on September 3, 2014.

Dr. Gibson will be remembered by all who knew him professionally or socially, first and foremost, as a gentleman, the most honorable of men who exuded enthusiasm, compassion and empathy. Through all the ups and downs of being department chair and running his own laboratory, David never lost his sense of humor, a gentle ironic quip, a twinkle in his eye, and his unforgettable laugh. He will be remembered and greatly missed by his many friends and colleagues.

David once wrote "there is great joy in the continuing attempt to know life, and to sing its song." No one enjoyed it more or sung it better than David Gibson.

David is survived by his brother, John Schuyler Gibson, five children, and nine grandchildren, Carl L. Gibson (Patricia Slater): Anne, Christopher and Eileen Gibson; John L. Gibson; Shauna Marie Gibson: Dr. Katherine (Brandon) Miller, Dr. Joseph (Natalie) Kopp and Heather (Austin) Parrish; Heather (Joseph) Garrison: Samuel and Marina Garrison; Mark C. Gibson (Laura Doolittle): Margaret. David is also survived by Lee's three children, Burton (Prue) Preston; Brad (Betty) Preston; Wendy (Randy) Roper, five step-grandsons, and three step-great grandchildren.

## Committee members:

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