

## Memorial Resolution for Dr. George Weber

Dr. George Weber, one of the founding fathers of cancer research at Indiana University School of Medicine, passed away on June 13<sup>th</sup>, 2011. George retired from the School of Medicine as an Emeritus Distinguished Professor in 2005. He was a devoted husband, father, and grandfather. George is survived by his two daughters, Dolly and Julie and by his son Jeff.

George's long and distinguished career began at Queen's University in Kingston, Ontario, where he was awarded his bachelor's degree in 1950 and his MD in 1952. After post-doctoral training at the University of British Columbia in Vancouver, George joined the Montreal Cancer Institute at Notre Dame Hospital in 1953, first as a research associate and then as the head of Pathological Chemistry. Here in 1954 George published his first peer-reviewed paper, reporting alterations in the activity of a specific enzyme in neoplastic cells. Thus George set out to explore an investigative direction that was to lead him on a life-long journey of discovery and success as he pioneered this new area of cancer research. Among the papers that followed while he was at Montreal was a brief note published in 1958, the year preceding his relocation to Indiana University, with a coauthor, whom he had met and with whom he had worked during a summer stay as a visiting scientist in the Department of Biological Chemistry at Harvard Medical School. This coauthor was Dr. James Ashmore, who was to become the chair of the Department of Pharmacology and Toxicology at Indiana University School of Medicine. In 1959, Dr. Weber came to the School of Medicine as an Associate Professor of Biochemistry and Microbiology. In 1961, he was promoted to Professor of Pharmacology and in 1974 he became Director of the Laboratory of Experimental Oncology.

After coming to Indiana, George's career blossomed in every direction. He continued to explore and expand the Molecular Correlation Concept for which he became famous, an idea that provided a rational paradigm for the interpretation of the enzymology of cancer cells, and he demonstrated the presence of a transformation- and progression-linked, ordered biochemical imbalance in animal and human cancer cells. His idea, that the increased activities of key enzymes should be sensitive targets to drug treatment, has been applied to the therapy of leukemia, where he, with his clinical colleagues, reported promising results in patients with chronic granulocytic leukemia in blast crisis. His clinical treatment of leukemia was confirmed independently at Boston University. In this context, George's research productivity virtually exploded with over 50 peer-reviewed papers published in the decade of 1960-1970 alone, including three first-author publications in *Science* and two in *Proceedings of the National Academy of Science*. At the same time, George excelled in the classroom and was twice selected as the best pre-clinical professor and the recipient of the Golden Apple Award. In 1962 George founded *Advances in Enzyme Regulation*, a long-running and widely-read series that he edited through 43 annual volumes. The yearly symposium that formed the basis for the series attracted some of the greatest minds in science to Indianapolis. These included Sir Hans Krebs, who gave the Special Symposium address at this meeting for 15 years and visited the campus regularly. He and renowned cancer researchers held closed meetings to discuss cutting edge work in the field and George entertained the scientists in his home overlooking the lake at Trader's Point. Sir Hans would ask that the

background music be turned off when the scientific discussion started because he liked to concentrate on one beautiful thing at a time. So George told the story.

The 1970s and 1980s saw George recognized, elevated, and honored by his colleagues here and abroad. After Sir Hans hosted George as a visiting professor to Oxford University in 1969, he was awarded the Alecce Prize for cancer research in Rome in 1971 where he was also elected to the Tiberine Academy. The International Society of Chemists awarded George the G.F. Gallanti Prize for Enzymology (1984) and the John Henry Wilkinson Award (1987). In the next two decades he was elected to honorary or foreign membership in the Hungarian Cancer Society (1977), the Academy of Sciences of the USSR (1981), the Hungarian Academy of Sciences (1986), the Academy of Medical Sciences of the USSR (1988), and the Academy of Medical Sciences of Bologna (1989). During this period George also received numerous honorary doctoral degrees from renowned institutions of higher learning all over the world, including the University of Chieti, Chieti, Italy (1979), Semmelweis Medical University, Budapest, Hungary (1982), University of Leipzig, Leipzig, Germany (1987), and Tokushima University, Tokushima, Japan (1988), and honorary lectureships at Oxford University in England (1969) and at the Universities of Heidelberg, Hamburg, Freiburg, Munich, and Cologne, West Germany (1983). In the US, George was the recipient of the G.H.A. Clowes Award from the American Association for Cancer Research (1982) and an Outstanding Investigator Award from the National Cancer Institute, National Institutes of Health (1986-1993).

Nevertheless, George remained deeply involved in professional activities off campus, including chairing study sections for the national Cancer Institute, functioning in a variety of roles for the International Union Against Cancer, the American Association for Cancer Research, and the American Cancer Society, and editorial work for journals in the cancer field. However, George's greatest scientific contributions emerged from his work at his scientific home at Indiana University. George directed the Laboratory of Experimental Oncology which he founded in 1974, and his rate of scholarly productivity continued to accelerate. Ultimately George produced more than 450 publications, including hundreds of peer-reviewed research articles many of which appeared in the premiere journals in his field, and over 146 books, book chapters and review articles. Over the course of his career, George's research received uninterrupted support from the National Institutes of Health for over 30 years, and his grant support since his arrival here in 1959 totals more than \$15 million. Over the same period, he was successful in securing numerous institutional grants from the American Cancer Society that have provided start-up funds for a host of young investigators at Indiana University, many of whom are now established senior scientists. It would not be a stretch to say that the current preeminence of Indiana University in cancer research and treatment has been built largely on the foundation that Dr. George Weber laid in the course of his stellar career. For all of these reasons, George was named a Distinguished Professor in 1990.

Accolades continued to accrue even late in George's career as the true value of his early contributions to numerous fields of scientific inquiry came to be more fully appreciated. In 2001 Dr. Weber received the prestigious Semmelweis Medal and Diploma from the Semmelweis University in Budapest in recognition of his work on signal transduction. He also received the Medal and Diploma of the Hungarian Gastroenterological Society for his studies on liver cancer in 2002. Dr. Weber served as a visiting

Professor at the University of Bologna, Italy in 2001 and was British Cancer Campaign Professor at Oxford University, Oxford, U.K., in 2000. In 2002, he received the Prestigious External Award Recognition which honors IUPUI faculty members who have received international awards in the preceding year.

George will be remembered as one of the first true lights here in the field of cancer research. The scientific community mourns his passing, but celebrates his achievements.

Joseph A. DiMicco, Ph.D.

Michael R. Vasko Ph.D.

Sherry F. Queener, Ph.D.

Approved by the IUPUI Faculty Council on September 6, 2011.