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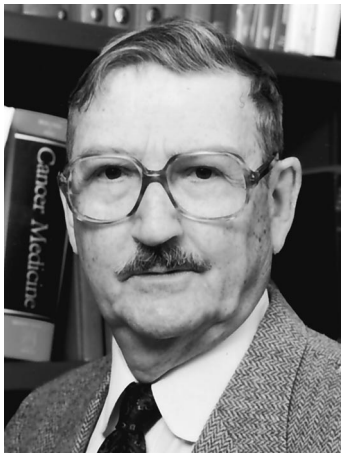
Obituary

In Memoriam: Professor Emeritus Van Rensselaer Potter II (1911–2001)



Van Rensselaer Potter II

Van Rensselaer Potter II, age 90, died September 6, 2001, after a brief illness. Dr. Potter was a biochemist who devoted his scientific career to cancer research and pioneered efforts to develop the field of Bioethics, which he named. He was a Professor of Oncology at the McArdle Laboratory for Cancer Research at the University of Wisconsin-Madison for more than 50 years, where he rose to Professor Emeritus status.

Dr. Potter was born on August 27, 1911, in northeast South Dakota, on the edge of the Coteau de Prairie. Dr. Potter received his B.S. degree from South Dakota State College in Brookings with high honors in 1933, majoring in chemistry and biology. He came to the University of Wisconsin-Madison in 1935, after having received a Wisconsin Alumni Research Foundation Fellowship in the Department of Biochemistry while working with Professor Conrad Elvehjem. During that year, he married Vivian Christensen. He received his Ph.D. in Biochemistry there in 1938. He was able to secure a National Research Council Postdoctoral Fellowship and went to Stockholm, Sweden, to work with Professor Hans von Euler at the Biokemiska Institutet. Before he could begin a second year of postdoctoral studies in England, World War II erupted, and he returned to the United States to the University of Chicago, where he studied for several months with Professor Thorfin Hogness. Dr. Potter contacted Professor Elvehjem in Madison and interviewed for a position in the McArdle Laboratory for Cancer Research, which was then being developed with Dr. Harold Rusch as Director. In 1940 Dr. Potter was appointed to the faculty of the University of Wisconsin-Madison as the only staff member, along with Dr. Rusch, who also worked at McArdle. Dr. Potter advanced to Full Professor in 1947.

The term, "Bioethics" was coined by Dr. Potter in 1970 as a bridge between science and humanity in the service of worldwide human health in a protective environment. This concept is not to be equated with the narrow area of ethical issues related to new advances in biomedical research. He first described his broader view in his book *Bioethics: Bridge to the Future*. Dr. Potter felt that all of our human choices not only have consequences that are short term on the ecosystem and all life systems and societies, but also have long-term consequences for the future, some of which are predictable, others not. His bioethics, further elucidated in his second book, *Global Bioethics*, was a philosophy integrating a realistic scientific view of the world that could be applied to religious/philosophical systems, such as the values derived from these traditional sources consistent with the scientific view of the human and human nature.

In the words of Professor James Trosko of Michigan State University, a Fellow who studied with Dr. Potter, "The joys of science as a creative human activity were as tidal waves that shaped his (Potter's) view of science." Dr. Potter devised the first mechanism to produce, repeatedly and on a large scale, cell isolates and cell-free homogenates for the study of cellular metabolic processes, a device that is still in use today, known worldwide as the Potter-Elvehjem homogenizer. He was among the earliest biochemists in this country to apply this science to an understanding of the neoplastic process. His concept of "Oncogeny is blocked Ontogeny" arose from numerous comparisons of the enzymology of transplantable liver neoplasms derived from chemically induced primary hepatic neoplasms. Although no two neoplasms were exactly alike, the patterns seen resembled those of fetal or immature liver, never progressing to the adult pattern. His experiments on the inhibition of metabolic pathways aided in the development of combination chemotherapy, which is today a mainstay for the clinical treatment of many neoplasms.

He helped to define the metabolism and function of a cell's genetic material as it relates to cancer. As a result of his work, scientists and clinicians now have a far greater understanding of the processes that transform normal cells to malignant cells. As scientific knowledge pointed to carcinogenesis as a multistage process exhibiting phenotypic diversity, he led the field in attempting to separate significant genetic and enzymatic alterations from extraneous ones not concerned with carcinogenesis, resulting in his "Minimal Deviation Hypothesis."

But his greatest contribution to the scientific community is the more than 90 postdoctoral fellows and graduate students whom he trained and inspired, many of whom became prominent in various scientific fields; three of them also presided over the American Society for Cell Biology (ASCB): Alex B. Novikoff (1963), Philip Siekevitz (1967), and Nobel Laureate Günter Blobel (1990).

Dr. Potter's extraordinary achievements included being elected to membership in the National Academy of Sciences, the National Academy of the Arts and Sciences, and as President of the American Society for Cell Biology and of the American Association for Cancer Research. Van viewed science not as a "job" but as an ethical, passionate, and creative experience. Furthermore, he could not separate the scientist from the scientific process or the scientist from the social context of the scientific enterprise. This philosophy, motivated by his concept of "humility with responsibility," led him into the final phase of his productive career.

Van was a devoted husband to his wife, Vivian, a loving father to his children, Karin, John, and Toby, and to his six grandchildren. He was an inspiring teacher/scholar to his students, and a creative scientist to his peers.

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