John Frederick Fulkerson, 1922–1991

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John Frederick Fulkerson lost his battle against cancer on 1 May 1991. He passed away at his home in Silver Spring, Maryland, with his family at his bedside. He will be deeply missed throughout the realm of biological science. John was characterized as a frontiersman in science—a leading spokesperson for innovation when conventional methods seemed to be faltering. As one of his peers said, "This man is constructively catalytic at the leading edge of science." That is, he could speak on even terms with the great names in science, regardless of the discipline.

Dr. Fulkerson was born in Los Angeles, California, on 20 February 1922. He served in the Army in Europe during World War II, and in 1949 he graduated from what now is Case Western Reserve University in Cleveland, Ohio. He received his master's and doctoral degrees in plant pathology from North Carolina State University. From 1956 to 1960 he was employed as plant pathologist in the Agricultural Research Service, U.S. Department of Agriculture (USDA), Beltsville, Maryland. He served as principal plant pathologist, Cooperative State Research Service, USDA, Washington, DC, from 1960 to 1983. In 1983 he was promoted to principal scientist, a position that he held until his retirement in 1988. From 1988 to the time of his death, he was consultant to the administrator, Cooperative State Research Service.

Dr. Fulkerson's scientific contributions were primarily in the area of national program planning and development. Significant among these were his efforts to safely develop new technologies for application to production agriculture. He organized the National Association of State Universities and Land Grant Colleges' Committee on Biotechnology, and he served for a number of years as the USDA's representative to the National Institutes of Health Recombinant DNA Advisory Committee. He also provided the USDA with early leadership in the development of its biosafety guidelines.

One of Dr. Fulkerson's finest contributions to the administration of federal-state science programs is his "network of excellence" concept. This concept basically offers a means of escaping the constraints of organizational roles and procedures when they might impede the progress of science, while fostering the opportunity for knowledgeable inputs from a group of scientists networked without regard to their bases of operation or station. The "network of excellence" was found to stimulate interdisciplinary effort. His approach attracted a cadre of science leaders to work with him on the recombinant DNA scientific and societal issues, the biochemical basis of plant resistance to diseases and pests, crop loss assessment, acid rain monitoring and research, and integrated pest management, among others.

When the Southern corn leaf blight epidemic broke out in 1970, Dr. Fulkerson focused on the central aspects of the problem so that effective solutions to the threat could be developed quickly. Scientists from state agricultural experiment stations, federal laboratories, and the seed corn industry enthusiastically joined forces across disciplinary lines, inspired by John Fulkerson's leadership. Such experiences nurtured his broad view of national needs and his knowledge of science, making him a valuable advisor to the research community. During his career, he chaired 135 review panels of agricultural research at land grant universities and contributed significantly to the clarification and planning of future direction.

John Fulkerson's special awards and honors are many and varied. He was elected Fellow, American Association for the Advancement of Science in 1964, and the following year he received the National Institute of Public Affairs Career Education Award. In 1965 he accepted the USDA's Outstanding Performance Award and was elected Fellow, National Institute of Public Affairs, in 1966. He won another USDA Outstanding Performance Award in 1970 and the Department's Certificate of Merit in 1971. John received the USDA's prestigious Superior Service Award in 1973. He was elected Fellow of the American Phytopathological Society in 1975. In 1979, he was elected Fellow, New York Academy of Sciences. In 1983, the University of Minnesota gave John a singular honor in the E. C. Stakman Award. At the 75th Annual Meeting of the American Phytopathological Society, he was recognized with the Diamond Jubilee Special Award. In 1986, the Society of Nematologists presented John with a Meritorious Service Award, a special award given then for the first time and not repeated since. On the occasion of his retirement in 1988, John delivered the inaugural presentation for the lecture series "Science in the Public Service" as part of the USDA centennial celebration of the Hatch Act, which began the state agricultural experiment station system. His credits for organizing or chairing federal or nonfederal science committees, review panels, workshops, and symposia are many. Likewise, his affiliations with professional science societies are an exhaustive list.

Dr. Fulkerson's survivors include his wife Rena and son John, Jr., of Silver Spring, Maryland; his daughter Mary Lambert of Middleburg, Florida; sisters Mary Moorehouse of Akron, Ohio, and Betty Hollingsworth of Mentor, Ohio; and granddaughters Kristina and Jessica Lambert of Middleburg, Florida.