

Awards of Distinction

Through its Award of Distinction, The American Phytopathological Society formally recognizes exceptional productivity in research, inspiring leadership, and effective application of plant pathology for the benefit of humanity. This rarely bestowed honor has been presented eight times previously in the history of the Society.

R. James Cook



R. James Cook was born in Moorehead, MN. He received his B.S. and M.S. degrees from North Dakota State University and a Ph.D. degree in plant pathology from the University of California, Berkeley. He is research plant pathologist and leader in the USDA-ARS Root Disease and Biological Control Research Unit at Washington State University.

He began his career as a NATO Postdoctoral Fellow at the Waite Agricultural Research Institute, Adelaide, and joined the USDA-ARS Regional Cereal Disease Research Laboratory, Pullman, WA. From 1972 to 1984 he supervised the laboratory and in 1984 founded and became research leader of the USDA-ARS Root Disease and Biological Control Research Unit. He is currently serving a 2-year appointment as chief scientist for the USDA's National Research Initiative Competitive Grants Program.

Dr. Cook has devoted his life to plant pathology. He served as an associate and senior editor of *Phytopathology* and chaired the committee that launched *Plant Disease*. Dr. Cook served as president of the APS Pacific Division and as councilor and president of APS. He served as president of the International Society for Plant Pathology and currently serves as immediate past president.

Dr. Cook is recognized for his work on the biology, ecology, and control of soilborne plant pathogens affecting wheat and barley. He and coworkers showed how water affects soilborne pathogens. His work was among the first to show how plant water status can be managed to suppress disease. He is recognized as an expert on *Fusarium*.

During the past 25 years Dr. Cook and coworkers have studied the ecology of *G. graminis* var. *tritici* and control. Dr. Cook is a leading authority on biological control and two of his books provide the scientific framework for current research in biocontrol. His most recent book covers categories of biotic and abiotic constraints to wheat health and management through a holistic approach. Dr. Cook's research unit is highly respected for work on field application of biocontrol agents to control take-all and other root diseases. In 1988–1989 he led a team of ARS, WSU, and Monsanto scientists in a planned release of a genetically engineered biocontrol agent at Washington State.

Dr. Cook has received numerous honors. In 1973–1974, as a Guggenheim Fellow, he worked at the CSIRO Division of Soils, Adelaide, Australia. In 1976 he was given the Arthur S. Flemming Award by the Downtown Jaycees of Washington, DC. He received the USDA Superior Service Award in 1983 and was named Distinguished ARS Scientist of the Year in 1985. In 1987 he gave the 53rd Distinguished Faculty Address at Washington State University and in 1989 received the E. C. Stakman Award. Dr. Cook is a fellow of APS. In 1993 he received the USDA's Distinguished Service Award, was made an honorary member of The British Society for Plant Pathology, and was elected to membership in the National Academy of Sciences. Dr. Cook served as a member of two U.S. delegations to the People's Republic of China. From 1991 to 1993 he served as a U.S. delegate to the Organisation for Economic Co-Operation and Development and chaired the Working Group and Drafting Committee.

Dr. Cook's research focuses on holistic approaches to improving wheat health by combining the best cultural, chemical, and biological methods. He keeps one foot in the furrow regularly

speaking to farm groups and spending many hours walking through wheat fields diagnosing disease problems for local growers.

Luis Sequeira



Luis Sequeira was born in San José, Costa Rica. He entered Harvard University where he completed his B.A. (cum laude), M.A., and Ph.D. degrees in biology. His Ph.D. thesis was on "Studies on *Omphalia flavida*, the agent of the American leaf spot disease of coffee." This was the first demonstration that auxin inactivation by a plant pathogen could lead to premature leaf drop.

From 1953 to 1960 he served as plant pathologist for the United Fruit Company at the Coto Research Station, Costa Rica. During this period, Dr. Sequeira was introduced to *Pseudomonas solanacearum*, which became the focus of his research. He designed experiments that led to the development of controls for bacterial wilt disease of bananas. He also recognized that the continued use of oil sprays for control of the Sigatoka disease of bananas would lead to marked declines in yields. He joined the faculty of the Department of Plant Pathology, University of Wisconsin-Madison, in 1961 where he pursued his professional career until his retirement in 1993.

Luis Sequeira's career has been distinguished by outstanding contributions in research, teaching, and professional service. His studies enhanced understanding of interactions between bacterial pathogens and host cells. He was an elegant teacher of plant disease physiology, and his dedication to APS as president and as editor-in-chief for both *Phytopathology* and *Molecular Plant-Microbe Interactions* have been truly exceptional.

Dr. Sequeira is best known for his studies of the disease physiology of *P. solanacearum*. In the mid-1980s, Dr. Sequeira studied the molecular biology of virulence in *P. solanacearum*. From these studies emerged the use of RFLP as a means of reevaluating the taxonomy and evolution of *P. solanacearum*. For many years his laboratory has been a major world center for research and training in bacterial disease physiology.

Research achievements in both applied and basic areas have brought Dr. Sequeira international recognition. At Wisconsin he directed the production of interspecific hybrids of potato from which the first bacterial wilt-resistant cultivar was developed. He also released three cultivars of lettuce resistant to corky root disease.

As president of APS, his initiative, guidance, and wisdom resulted in actions that will have lasting influence on future generations of plant pathologists. He served as the chief scientist, USDA Competitive Grants Office (1987–1988) and had a major influence on the distribution of funds for biotechnology research.

Dr. Sequeira has received many honors: Fellow of APS (1971), member of the National Academy of Sciences, U.S.A. (1980), J. C. Walker Professor of Plant Pathology and Bacteriology (1982), Honorary President, Phytopathological Association of Costa Rica (1991), E. C. Stakman Award (1992), member of the Linnean Society of London (1989), and member of the American Academy of Microbiology (1992).

As an emeritus professor, Dr. Sequeira continues his commitment to agricultural sciences and is serving as director of the Office of International Programs for APS and chair of the Agricultural Science Section of the National Academy of Sciences.