Fellows

Eleven members of the American Phytopathological Society were elected Fellows of the Society at the 1985 Annual Meeting in Reno, Nevada. Election as a Fellow of the Society is a reflection of the high esteem in which a member is held by his colleagues. The award is given in recognition of outstanding contributions in extension, research, teaching, or other activity related to the science of plant pathology, to the profession, or to the Society.

Richard D. Berger

Richard D. Berger was born on January 15, 1934 near Allentown, Pennsylvania. He received a B.S. degree at Kutztown State College in 1955 and a Ph.D. degree in plant pathology at the University of Wisconsin in 1962.

Dr. Berger’s experience in plant pathology began at his family farm in Pennsylvania, where he attempted to control late blight of potatoes with Bordeaux mixture. He conducted research on rice blast during his U.S. Army tenure at the Biological Laboratories in Fort Detrick, MD. His knowledge of plant pathology was enhanced when he worked as an extension plant pathologist at The Pennsylvania State University and as a plant pathologist at the University of Florida Research and Education Center in Belle Glade.

While at Belle Glade, he developed disease-forecasting systems for early blight of celery caused by Cercospora apii and for northern leaf blight of corn caused by Helminthosporium turcicum. These systems are currently being used by growers and crop consultants. He also developed systems to predict the amount of disease at harvest for corn blight and bean rust based on average epidemic rates. He was a pioneer in the use of epidemic rates to compare disease resistance among cultivars. He was the first to discover benomyl resistance in C. apii and he quantified epidemic rates of disease caused by benomyl-resistant and susceptible populations of the fungus. He has a long-standing interest in taxonomy of Cercospora spp. and is considered an authority on speciation in the genus. Since moving to the main campus of the University of Florida, Dr. Berger has become involved in plant disease modeling and quantitative epidemiology. His contributions in these areas include improved disease assessments by partitioning to crop canopy, the design of interpolative disease-rating scales, the use of epidemic simulators to predict disease threat and to evaluate treatment parameters, and the interpretation of disease-progression curves and disease gradients. He has also developed alternative transformations to improve the analysis of disease-progression curves and disease gradients, conceived and expanded the concept of rates of isopathic movement as a comparative epidemiological parameter, and produced new epidemiological models that integrated host growth with disease variables.

Dr. Berger is a highly respected professor who teaches a graduate course in epidemiology, and his service to plant pathology has been extensive. He received the Campbell Award in 1974 from APS and the Research Award of the Florida Fruit and Vegetable Association in 1972. He has received numerous invitations to speak at symposia and to write review articles. He has received an invitation to work with J. C. Zadoks in Wageningen, The Netherlands, and to develop a simulation model for epidemics of coffee rust in Brazil. Dr. Berger has been an associate editor and senior editor of Phytopathology, and he was on the Editorial Committee of the Annual Review of Phytopathology for five years. He has been a member and chairman of the Epidemiology Committee for APS. For the past three years, Dr. Berger has served as senior and assigning editor for Plant Disease.

Richard J. Campana

Richard J. Campana was born on December 5, 1918 in Everett, MA. He received a B.S. degree in forestry at the University of Idaho in 1943, and served in the U.S. Army during World War II. Following the war he received M.F. and Ph.D. degrees at Yale University in 1947 and 1952, respectively. At Yale University he studied under John Shaw Boyce, world-renowned forest pathologist. Before and during his college training he worked in laboratories at the Harvard Medical School, Harvard Forest, and the U.S. Forest Division of Forest Pathology. During the time between his graduate degrees he was an instructor of forestry and assistant professor of botany at Pennsylvania State University and North Carolina State University, respectively.

From 1952 to 1958 he served as assistant and associate plant pathologist at The Illinois Natural History Survey, and in 1958 he became professor of botany and forest pathology and head of the Department of Botany and Plant Pathology at the University of Maine. He retired from this position in December of 1984. During his time in Maine, Dr. Campana served as guest botanist at Brookhaven National Laboratory, visiting professor at the SUNY College of Environmental Sciences and Forestry, special consultant for the California Department of Food and Agriculture, visiting scholar at the University of California at Berkeley, and an invited lecturer in Europe.

Dr. Campana is the author, editor, or coauthor of more than 180 publications resulting from his teaching and research activities, including “Dutch Elm Perspectives After 60 Years” and the “Compendium of Elm Diseases,” published by APS. He has presented papers, lectures, and seminars to audiences ranging from working arboriculturists to university-sponsored symposia. He is considered to be one of the outstanding and most learned tree pathologists in the United States, and is internationally recognized and respected as a scientist and educator.

Dr. Campana has been active for more than 30 years in the International Society of Arboriculture, serving as first president as chairman of several committees, editor of Phytopathology News, and president and elected councillor of the APS Northeastern Division. He has been an unofficial APS liaison with the Canadian Phytopathological Society, and an appointed liaison between APS and the International Society of Arboriculture, Phytopathological Society, and an appointed liaison between APS and the International Society of Arboriculture.

In the United States, Dr. Campana’s name is associated with Dutch elm disease, to which he has dedicated more than 30 years of study and observation. He has made his most important contributions toward understanding movement of the spores of the pathogen in the host, host anatomy and histopathology, radical surgical techniques and chemotherapy using systemic fungicides, the efficacy of sanitation procedures, and bacterial wetwood of elm as a separate pathology closely associated with systemic injection to control Dutch elm disease.
Robert E. Davis was born on January 27, 1939, in Brooklyn, New York. He received a B.S. degree in botany at the University of Rhode Island, and a Ph.D. degree at Cornell University in 1967. From 1966 to 1967 he served as a postdoctoral research associate at the USDA-ARS Plant Virology Laboratory in Beltsville, MD, and since 1967 he has been a research plant pathologist at the same laboratory. Dr. Davis has made innovative research contributions that have changed the direction of plant mollicute research. Dr. Davis and co-workers characterized the in vivo spectrum of an antibiotic susceptibility of the aster yellows agent in both plant and insect hosts, based on the concept of spectrum of antibiotic sensitivity as an approach to determining the nature of unknown disease-causing agents. In this and related work they hypothesized that organisms resembling rickettsiads may induce disease in plants. Dr. Davis and co-workers have discovered in plants and insect vectors infected with corn stunt disease a motile, helical, wall-free prokaryotic microorganism, and studied the association of this microorganism with the disease. The recognition of this microorganism, a new group of pathogens previously unknown among organisms of any type, was the first discovery of a helical prokaryote in plants. Dr. Davis also demonstrated that the helical agent in corn stunt disease is motile and he coined the term “Spiroplasma” for helical wall-free prokaryotes. This contribution was the first report of motility in a helical wall-free prokaryote. Motility has since been recognized and described by Dr. Davis and others.

Dr. Davis' work has led to important advances in the knowledge of plant diseases. He has been invited to present invited papers at universities and international meetings and organizations in several countries. He has served on various subcommittees of the Bacteriology Committee of APS and organization committees of several international meetings on prokaryotes. He has also served as associate editor of PHYTOPATHOLOGY.

Joseph W. Eckert was born on March 27, 1931 in St. Louis, Missouri. He received a B.S. degree in subtropical horticulture at the University of California at Los Angeles in 1952, an M.S. degree in pomology at Rutgers University in 1953, and a Ph.D. degree in plant pathology at the University of California, Davis, in 1957. Dr. Eckert joined the Department of Plant Pathology at the University of California, Riverside in 1957 and was promoted to professor in 1970. In this capacity, he developed an outstanding research and teaching program in postharvest pathology of subtropical fruits.

Dr. Eckert's research has emphasized postharvest diseases caused by Penicillium, Geotrichum, Alternaria, and Phytophthora. He and his associates achieved considerable success in the early 1960s investigating aliphatic amines for fungicidal activity against decay organisms of citrus fruit. More recently, Eckert and his co-workers developed derivatives (amines) of SBA that decompose in a humid environment to liberate SBA. They also determined the structural requirements for fungicidal activity of aliphatic amines and the biochemical mechanisms of action against sensitive fungi. These investigations were among the first to recognize the significance of optical isomerism and active transport to antifungal activity.

During the late 1960s, Eckert and his associates concentrated on the best use of the benimidazoles fungicides as postharvest treatments. They found that surface treatment of the fruit with benomyl or thiabendazole suppressed sporulation of Penicillium spp. on citrus fruits, an effect that had previously been attributed only to volatile fungicides such as bifural. Benimidazole fungicides have now replaced the bifural fungicide in many circumstances. The effectiveness of the benimidazoles in suppressing sporulation was shown to depend upon penetration of the waxy fruit surface by the fungicide and this property depended on the stability of the fungicide in the formulation. The conditions of formulation leading to greatest stability were described. An investigation of structure and fungicidal activity of benomyl and related compounds revealed the portions of the molecule that were critical for antifungal activity.

Dr. Eckert was a Fulbright Research Scholar and a Senior Fellow in the Agricultural University, Wageningen, The Netherlands, from 1974 to 1975. His leadership and expertise in postharvest pathology has been widely recognized. Dr. Eckert has presented invitational papers at national and international congresses, conferences, symposia, and colloquia, and has conferred with postharvest pathologists around the world. Because he recognized the close relationship that should exist between postharvest pathology and postharvest physiology, he has frequently participated in Gordon Conferences and other meetings related to postharvest physiology. Dr. Eckert has authored and coauthored several book chapters and reviews on postharvest diseases. He has recently been appointed to a committee of the National Research Institute's Board on Agriculture, which was formed to study the management of pesticide-resistant pest populations and to organize an interdisciplinary symposium on this subject.

Dr. Eckert's contributions to his profession include membership in the APS Chemical Control Committee and Postharvest and Mycotoxonomy Committee. He has also served as associate editor of PHYTOPATHOLOGY. He presently chairs the International Society of Plant Pathology Committee on Postharvest Pathology and is a member of that Society's Committee on Chemical Control.

Donald C. Erwin was born on November 24, 1920, in Concord, Nebraska. After serving in the U.S. Army from 1942 to 1946, he received a B.S. degree in agronomy and an M.S. degree in plant pathology at the University of Nebraska, Lincoln, in 1949 and 1950, respectively. He received a Ph.D. degree in plant pathology at the University of California, Davis, in 1953. He was appointed junior plant pathologist at the Department of Plant Pathology at the University of California, Riverside, in 1953, and advanced to assistant plant pathologist in 1954, to associate professor in 1960, and to professor in 1966. In 1959, Dr. Erwin received a John Guggenheim Fellowship in support of a study leave with Dr. H. Katznelson at the Canadian Department of Agriculture, Department of Microbiology at Ottawa, Canada.

Dr. Erwin is an authority on diseases of field crops. He is especially knowledgeable of alfalfa and cotton, the genus Phytophthora and the diseases it incites, the control of Phytophthora root rot of alfalfa by resistance and Verticillium wilt of cotton by means of systemic fungicides, growth regulators, and resistant cultivars. With the assistance of S. Bartnicki and P. H. Tsao, he recently edited "Phytophthora: Its Biology, Taxonomy, Ecology, and Pathology," published by APS. He is coauthoring with O. K. Ribeiro a book entitled, "The Diagnosis and Control of Phytophthora Diseases."

Dr. Erwin has made many important discoveries during his...
career. He was the first to establish that root rot disease of alfalfa was caused by *Phytophthora drechsleri* and later proved that a worldwide root disease of alfalfa was caused by *P. megasperma* f. sp. *medicagoe*. He found that the cultivar Lahontan was naturally resistant and that many other cultivars of alfalfa contained a low population of resistant individuals. Dr. Erwin and his co-workers developed four cultivars or germ plasm lines of alfalfa with resistance to *Phytophthora* that have been of great benefit to the industry. Dr. Erwin was the first to demonstrate that injury and death of alfalfa following flood irrigation of alfalfa during the summer in the Imperial Valley of California was due to the interaction between the time of flooding and soil and water temperature. This discovery led to the development of cultural practices that prolonged the life of alfalfa plantings in the Imperial Valley.

Dr. Erwin has made teaching a major commitment in his career. He is a capable and thorough instructor and graduate advisor, and has been involved in teaching principles of plant pathology and the diagnosis of plant diseases and their control.

Dr. Erwin was chairman of the Department of Plant Pathology from 1977 to 1980, chairman of the National Cotton Disease Council from 1973 to 1974, member of the National Academy Science Committee on Pesticide Use in Cotton from 1975 to 1976, and member of the National Cotton Pesticide Assessment Committee from 1979 to 1980. He chaired the organizing committee that developed the first annual symposium on *Phytophthora* held at Riverside, CA, in 1981, and has served on the APS New Fungicide and Nematicide Data Committee and the Standardization of Common Names Committee.

Richard I. Hamilton

Richard I. Hamilton was born on December 14, 1930 in Montreal, Quebec, Canada. He received a B.S. degree at Montana State University in 1953, and M.S. and Ph.D. degrees at the University of Nebraska in 1956 and 1960, respectively. In 1960 he returned to Montana State and joined the Department of Botany and Bacteriology, where he began his investigation on cereal and fruit tree viruses. In 1967, he joined the Department of Plant Pathology at Macdonald College of McGill University at Ste. Anne de Bellevue in Quebec as the first plant virologist in the University. In 1972 he joined the Virus Chemistry and Physiology Section of the Vancouver Research Station of Agriculture Canada. His research has focused on the transmission of viruses by seed and pollen and the interaction of unrelated viruses and virus strains in mixed infections.

During his career, Dr. Hamilton has attempted to develop practical applications of the results emanating from basic research. His research on low molecular weight viral antigens has led to the development of gel diffusion methods based on detergent-induced degradation of virus particles. These tests have been widely used for detection of barley stripe mosaic virus in barley embryos and for detection of other elongated viruses in tissue extracts. He has done research on serological methods for detecting pea seedborne mosaic virus in pea seed. He observed the contamination of the pollen exine by plant viruses and suggested that contaminated pollen may play a role in the plant-to-plant spread of some plant viruses. Joint research on mixed virus infections by Dr. Hamilton and graduate students led to the first demonstration of in vivo genomic masking between unrelated plant viruses. In further research with co-workers, Dr. Hamilton has made important advances in the understanding of the enzymology of viral RNA replication, the properties of viruses in seeds, the genetics of nepoviruses, and the interaction of satellite viral RNAs with genomic RNAs.

Dr. Hamilton has authored and coauthored several review papers and participated in international symposia. He has served as associate editor and senior editor of *Phytopathology*, and as chairman and member of the Virology Committee and the Seed Pathology Committee of APS, respectively. He is chairman of the Plant Virus Subcommittee of the International Committee on Taxonomy of Viruses and has served on the Program Committee of the International Congress of Virology. He is an active member of the International Working Group on Legume Viruses. He has been a member of the Organizing Committee of the Annual Review of *Phytopathology* and an associate editor of *Canadian Journal of Plant Pathology*. He is currently president of the Canadian Phytopathological Society. He is interested in working with graduate students and virologists from developing countries, and he assists in teaching graduate courses at the University of Columbia.

Jürgen Kranz

Jürgen Kranz was born in Augustenfelde, Germany. He received B.S. and Ph.D. degrees from Bonn University in 1953 and 1957, respectively. In 1972, Dr. Kranz became head of the Plant Pathology and Applied Entomology Section of the Institute for Tropical Diseases of the University of Giessen. He was dean of agriculture and professor of tropical plant pathology at the Justus Liebig University in Giessen, Germany, and presently serves as chairman of the Deutsche Phytomedizinische Gesellschaft.

Dr. Kranz is recognized professionally for scientific accomplishments in tropical plant pathology and in epidemiological studies of plant diseases. He has conducted basic and applied field research at Giessen and in the tropics of Africa and Asia. Latter studies have included his work with the FAO's Plant Protection Section in Cyrenaica, Libya in 1959, and research on Sigatoka disease of bananas and other fruit diseases in Guinea, West Africa from 1961 to 1965 under the sponsorship of the German Technical Aid Agency. During the following years he organized and directed epidemiological field research on coffee berry disease and coffee leaf rust in Kenya and Ethiopia, and he has led an extensive research program on diseases of cassava and maize in Togo since 1974. Since 1967, he has served as consultant for a number of agencies, e.g., FAO, GTZ, EEC, in more than 15 tropical countries. He also conducted workshops on prognosis and warning in crop protection in the Philippines in 1978 and 1980, in the Dominican Republic in 1981, and in Thailand in 1982. At the FAO headquarters in Rome, he was instrumental in establishing a data bank for crop protection activities in the world.

Dr. Kranz has published more than 110 research papers. He has authored several chapters in plant pathology books, as well as several books of his own. "Epidemics of Plant Diseases: Mathematical Analysis and Modeling," published by Springer in 1972, has been translated into Russian and Chinese. "Diseases, Pests, and Weeds in Tropical Crops," written jointly with H. Schmutterer and W. Koch, was published by Paul Parey in 1977 in English, German, French, and Spanish editions. In 1980 PUDOC published "Comparative Epidemiology," co-authored by Dr. Kranz and J. Palti. Dr. Kranz is a president of the International Society of Plant Pathology and a member of their Special Projects Committee. He was a member of the FAO-UNEP Panel on Integrated Pest Control, and is an honorary Fellow of the National Academy of Sciences, India. He serves as associate editor of *Phytopathologia Mediterranea* and of the Zeitschrift für Pflanzenkrankheiten, and as advisory board member of *Plant Pathology*, London, and *L'Agronomie*, Paris.
Harry H. Murakishi

Harry H. Murakishi was born on October 21, 1917, in San Francisco, CA. He received a B.S. degree in plant science at the University of California at Davis and Berkeley in 1940 and M.S. and Ph.D. degrees in plant pathology at North Carolina State University and the University of Minnesota, respectively, in 1945 and 1948. He was assistant plant pathologist from 1948 to 1952 and associate plant pathologist and chairman from 1952 to 1955 in the Department of Plant Pathology at the University of Hawaii. In 1955, he moved to Michigan State University, and became a full professor in 1963. During a sabbatical leave in 1955–1956, he worked with Herb Gold at Berkeley, and in 1976, he spent a sabbatical leave working with Itaru Takebe at the Institute for Virus Research at Chiba in Japan.

Dr. Murakishi demonstrated that cell cultures of tomato and tobacco could be inoculated in vitro with tobacco mosaic virus and that the cells sustained virus replication. With the tomato cell-TMV system, he observed that virus infection resulted in cell death but that not all cells died. More recently, Dr. Murakishi and coworkers have achieved near-synchrony of virus infection by means of low temperature pre-incubation treatment of callus, enabling the callus system to be more useful in biochemical studies of the virus replication cycle. Dr. Murakishi and his associates observed that cultured cells retain and express the phenotype of the intact plant. Dr. Murakishi has recently turned his attention to protoplast isolation, infection, and culture, with the intention of combining these techniques with his own to further the application of plant tissue culture in plant pathology and plant breeding. Dr. Murakishi’s work on the potential for introducing foreign genetic information into cultured plant cells and protoplasts predates most attempts. His tobacco and tomato cell-TMV systems were the first reliable means by which cultured cells could be consistently and routinely inoculated and infected with TMV or TMV-RNA. This demonstrated that large macro-molecules could be introduced into cultured cells and that, once inside, these molecules are biologically active.

Dr. Murakishi has published extensively in major journals and has received many invitations to discuss his research in seminars both in this country and abroad. He was awarded a John Simon Guggenheim Fellowship in 1955. His research efforts have influenced the study of plant pathology, and he has guided and trained many graduate students while teaching at Michigan State University. He has served for three years on the APS Virology Committee, and was honored by APS in 1980 with the Ruth Allen Award for his pioneering development of plant cells and tissue culture systems in plant pathology.

Paul E. Nelson

Paul E. Nelson was born on May 26, 1927 in Franklin Township, Wisconsin. He studied for two years at Fullerton Junior College, then received B.S. and Ph.D. degrees at the University of California, Berkeley, in 1951 and 1955, respectively. In 1955 he joined the faculty at Cornell University, and in 1965 he joined the Department of Plant Pathology at The Pennsylvania State University as professor. In 1970, working with T. A. Toussoun, he formed the Fusarium Research Center at Pennsylvania State and since then, has served as its director. He also serves as adjunct professor of plant pathology at Cornell University.

Dr. Nelson’s research interests have been the biology and taxonomy of the genus Fusarium, and diseases of ornamental plants and pathological anatomy. He produced a comprehensive revision of the taxonomy of Fusarium to establish a single international system, and he established a reference collection of more than 12,000 isolates of Fusarium. He has published more than 75 articles on Fusarium. Dr. Nelson has had sabbatical leaves at the University of California, Berkeley; Cornell University; North Carolina State University; and the University of Sydney, Australia. He has taught courses in diseases of floricultural crops, diseases of ornamental plants, plant pathological techniques, pathological plant anatomy, and the taxonomy and biology of Fusarium.

Dr. Nelson’s research has been recognized by the Pennsylvania Flower Growers, The National Institute of Health, The National Science Foundation, the U.S. Department of Agriculture, and the U.S. Food and Drug Administration. He has been very active in professional, departmental, and university affairs, having served as interdepartmental chair, and in many capacities in the graduate school’s Graduate Council. He has served the USDA as a member of department review committees, and has consulted and lectured extensively. He has organized and participated in six workshops on Fusarium. He is a member of the U.S. Federation of Culture Collections and the Mycological Society of America. He has been a member of the APS Mycology Monographs and Review Publications Committee, and the Soil Microbiology and Root Disease Committee. He served as assistant editor and senior editor of Phytopathology from 1970 to 1972. In 1983 he was the recipient, along with T. A. Toussoun, of the Pennsylvania State University Faculty Scholar’s Medal, the highest research honor of the University.

Waldemar E. Sackston

Waldemar E. Sackston was born on January 4, 1918 in Manitoba, Canada. He received a B.S.A. degree at the University of Manitoba in 1938, winning the University Gold Medal. He received a M.Sc. degree at McGill University in 1940 and a Ph.D. degree in 1949 at the University of Minnesota, where he was awarded the Caleb Dorr Fellowship. In 1941 he joined Agriculture Canada as an agricultural assistant, and later became head of the Plant Pathology Laboratory in Winnipeg. In 1960 he became professor of plant pathology and chairman of the Department of Plant Pathology at Macdonald College, McGill University. In 1954, Dr. Sackston spent three months as a special consultant on sunflower diseases in Chile, and from 1956 to 1957, he advised the government of Uruguay on diseases of sunflower. From 1972 to 1977, he was on leave from McGill University to organize the National Research Center for Oilseed Crops at Cordoba, Spain. Dr. Sackston has also worked in the USSR, the United Kingdom, France, and New Zealand.

Dr. Sackston is a pioneer in sunflower disease research and has become an international authority on sunflower diseases. He and co-workers did the early detailed work on physiologic specialization in sunflower rust and the identification of sources of resistance. In 1956 they produced the first rust-resistant sunflower in North America, entitled cultivar Beacon. Dr. Sackston also first described Verticillium wilt of sunflower in North America, and later showed that it was seed transmissible.

Dr. Sackston has authored or coauthored 80 research papers and more than 100 other publications dealing largely with diseases of sunflowers. From 1960 to 1961, he served as president of the Canadian Phytopathological Society, and from 1978 to 1980, president of the International Sunflower Association. He has also been president of the Quebec Society for the Protection of Plants, and has served on numerous society committees. In 1967, Dr.
Sackston was awarded the Canada Centennial Medal. In 1982, he received the V.S. Postovoi Award of the International Sunflower Association and was elected a Fellow of the Canadian Phytopathological Society. In 1983, he was awarded the Dr. and Mrs. D. L. Bailey Award of the Canadian Phytopathological Society.

Francis A. Wood

Francis A. Wood was born on November 17, 1932, in Perryville, Missouri. He received a B.S. degree in forestry and an M.S. degree in botany at the University of Missouri in 1955 and 1956, respectively. He served in the U.S. Army Medical Corps at Fort Detrick, MD, from 1957 to 1958. In 1961, he received a Ph.D. degree at the University of Minnesota. Dr. Wood became an assistant professor of plant pathology at The Pennsylvania State University in 1961, where he developed a program of forest pathology. In 1972, he joined the University of Minnesota as head of the Department of Plant Pathology. In this position, he led in the development of new programs, new faculty, and increased grant support. In 1977 Dr. Wood became director for research in the Institute of Food and Agricultural Science of the University of Florida.

While at The Pennsylvania State University, Dr. Wood conducted research on oak wilt, a canker disease of sugar maple, and later, air pollution effects on forest trees. His contributions to the foundations of epidemiological research and a nationally recognized program in air pollution effects remains in evidence at The Pennsylvania State University. His efforts led to the first national Air Pollution Workshop, now planning its 17th annual meeting. He was named assistant director of the Center for Air Environment Studies of The Pennsylvania State University, and he aided in developing various research programs in various departments. During this period, Dr. Wood served as an advisor to numerous graduate students. While at the University of Minnesota, Dr. Wood initiated and encouraged the development of undergraduate programs in plant pathology and the concept of "Doctor of Plant Medicine." The department established a plant health technology program which had up to 70 students enrolled in one year. The "Doctor of Plant Medicine" concept has been given attention by several institutions as a result of his efforts. At the University of Florida, Dr. Wood's leadership has resulted in many effective interdepartmental, statewide, regional, interagency, and industry related programs. A statewide computer network and centers for mass spectrometry and electron microscopy have been added, extramural funding has significantly increased, and the faculty has become heavily involved in long-range planning.

Dr. Wood has been an advocate of the benefits of biotechnology to agricultural research at regional, state, and national levels. He encouraged Southern Agricultural Experiment Station directors to approve an S-179 regional project "Molecular and Cellular Genetics for Crop Improvement," and is now administrative advisor. This project is serving as a model for similar projects being developed in other regions. As chairman of the Biotechnology Committee of the National Association of State Universities and Landgrant Colleges Division of Agriculture, Dr. Wood accepted a three-month assignment in Washington, DC, where he worked with others to gain a large appropriation for competitive funding of biotechnology research. One project he began in western Pennsylvania in 1964 is still ongoing, a tribute to his foresight and thorough planning.

Dr. Wood has served APS as councilor-at-large for three years and as a member of the Organization Committee for the 1978 International Congress of Plant Pathology in Munich, West Germany. In his early contributions to the study of air pollution effects on plants, he was instrumental in ensuring the success of the Pollution Damage to Plants Committee from 1965 to 1969. He is also a member of numerous other societies and national committees.

Ruth Allen Award

The Ruth Allen Memorial Fund was established in 1965 by means of gifts from the estate of Dr. Ruth Allen through the generosity of her heirs: Sam Emsweller, Mabel Nebel, Hally Sax, and Evangeline Yarwood. The award, consisting of a certificate and income from the invested fund, is given for outstanding contributions to the science of plant pathology.

William F. Rochow

William F. Rochow was born in Lancaster, Pennsylvania, on March 12, 1927. He received a B.S. degree at Franklin and Marshall College in 1950, and a Ph.D. degree at Cornell University in 1954. He spent the year of 1955 at the Virus Laboratory at the University of California, Berkeley, on a National Foundation for Infantile Paralysis Fellowship. In 1955, he joined the Cereal Crops Research Branch of the U.S. Department of Agriculture to initiate a study of oat viruses in a cooperative program with the Department of Plant Pathology at Cornell. He was later promoted to professor of plant pathology.

Dr. Rochow's findings have had major influence on the course of research on barley yellow dwarf virus (BYDV), the luteoviruses, and on other persistently transmitted viruses. He is largely responsible for the discovery and description of vector specificity for BYDV. He recognized that some isolates of field-collected BYDV were transmitted only by specific species of aphids. He then identified five vector-specific isolates of BYDV by comparative transmissions of virus by four aphid species. These isolates are now recognized worldwide by plant pathologists and breeders as major types for BYDV strains. The discovery of vector specificity enabled Dr. Rochow to identify the occurrence of dependent virus transmission from mixed infections, using different BYDV isolates. He further identified that transcapsidation could dramatically influence epidemiology of BYDV. The demonstration of dependent transmission suggests how a virus might infect a new host species and eventually evolve to become an identifiable virus. Additional work led to the hypothesis that vector specificity is based on aphid membrane recognition of virus capsid proteins. These studies have triggered similar projects to study persistently transmitted viruses in other locations.

Dr. Rochow has been at the forefront in adapting new technology for the study of BYDV biology and epidemiology. He helped develop and utilize bioassay techniques based on feeding aphids on purified virus through membranes and based on