

2001 Fellows of the American Dairy Science Association

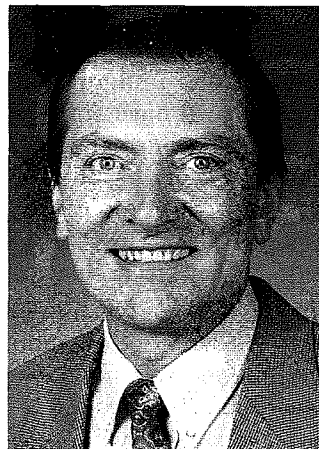


Front: C. E. Polan; Middle (left to right): J. W. Fuquay, H. A. Tucker; Back (left to right): H. D. Norman, R. H. Foote and D. C. Beitz.

The 2001 elected Fellows were recognized at the Awards Program of the American Dairy Science Association. Election to Fellow is one of the highest honors that the Association bestows. The Fellows Award recognizes ADSA Members for their distinguished service to the dairy industry for 20 years or more. Each nominee must have made exceptional contributions to the dairy industry, to a dairy-related discipline, or to ADSA; must have had continuous professional membership in ADSA for a minimum of 20 years; and must be in good standing in the Association.

Donald C. Beitz

Donald C. Beitz was raised on a Guernsey dairy farm in central Illinois. He earned the B.S. degree with a major in agricultural science and a M.S. degree in dairy



science from the University of Illinois. In 1967, he earned the Ph.D. degree with majors in dairy nutrition and biochemistry at Michigan State University. He and his family then moved to Ames, Iowa, where he rose through the academic ranks and was named a Charles F. Curtiss Distinguished Professor in the Departments of Animal Science and of Biochemistry, Biophysics, and Mo-

lecular Biology in 1989 at Iowa State University. Don established an active research program studying the role of dairy and other animal-derived foods on blood cholesterol in model animals and humans, etiology and prevention of milk fever and ketosis, the role of mitochondrial DNA in milk production, and synthesis of milk fat in cows and of depot fat in meat animals. Teaching responsibilities have included a biochemistry class for freshman veterinary students, a biochemistry class for advanced undergraduate and graduate students, agricultural biotechnology colloquium, and honors and animal nutrition seminars. He advises undergraduate majors in agricultural biochemistry and graduate students with majors in animal nutrition, biochemistry, and molecular, cellular, and molecular biology.

Don received the AFIA Nutrition Research Award and American Cyanamid Award from ADSA, Academic Advising Award, Outstanding Teacher, Outstanding Advisor Award, Board of Regents Award, Faculty Award for advising graduate students, and Distinguished Achievement in Agriculture Award of Gamma Sigma Delta from Iowa State University, and Award of Merit from University of Illinois.

Don is a member of AAAS, ASNS, AMSA, ASAS, ASBMB, CNS, and CAST. He joined the ADSA as a graduate student in 1964 and has regularly participated in annual meetings since then. He joined the

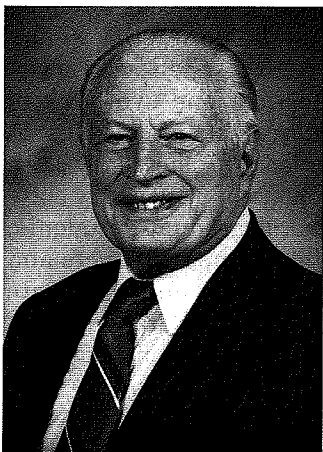
ADSA Foundation in 1992. Within ADSA, he served as chair of Spouse's Program at an annual meeting, selection committee for American Cyanamid Award and International Dairy Production Award, member of Resolutions Committee, judge at undergraduate paper contest four times, member and chair of Research Committee, Council member of Production Division, chair of National Needs for Dairy Committee, member of Steering Committee of FAIR 2002 and of Discover Conferences, and representative to CAST Board of Directors.

In his 33 years in the classroom, he has taught over 7500 students. Beitz's research activities have been collaborative, diverse, and related to practical problems of animal agriculture and human nutrition.

Beitz gains much satisfaction advising undergraduate students with majors in agricultural biochemistry and graduate students with majors in biochemistry, nutritional physiology, and molecular, cellular, and developmental biology. Beitz has had a fulfilling career as a researcher and teacher at Iowa State University. He has organized an Iowa State University Social at the last 16 annual meetings. He and his wife Judy have two children and five grandchildren.

Robert H. Foote

Robert H. Foote is currently Emeritus Professor of Animal Physiology and the Jacob Gould Schurman Professor in the Department of Animal Science, Cornell University. He received his B.S. from the University of Connecticut, Storrs, and his M.S. and Ph.D. from Cornell University, Ithaca, New York, in the fields of animal breeding, physiology, nutrition, and biochemical genetics.



His approximate 500 research papers have provided significant advances, including pioneering research on the development of semen extenders, antibiotics, and

semen processing methods which became standards in the artificial insemination industry. The use of antibiotic combinations of penicillin, streptomycin, and polymyxin allowed elimination of *Vibrio fetus* and other problems costing hundreds of millions dollars to the cattle industry. Pioneer research on the basic process of spermatogenesis in farm animals and in the rabbit lab animal was useful in the evaluating sperm production in males.

He and his graduate student studied development and heritability of the testis size, noting that testicular characteristics were highly predictive of semen quality, fertility, and conception rate in female relatives.

His research on dibromochloropropane (DBCP), a potential toxicant affecting male reproduction was used to evaluate the need in California to eliminate DBCP from ground water. Had a program for elimination proceeded, the costs would have exceeded \$200,000,000. His research was cited as the "classic" work indicating that this endeavor was not necessary.

His research developed the first semidefined medium for rabbit embryo culture in 1970 and the first completely defined macromolecule free culture media for rabbit embryos in 1990.

Overall, he has been awarded approximately 100 competitive grants totaling several million dollars from NIH, USDA, EPA, DOD, Rockefeller Foundation, Lalor Foundation, Cornell Biotechnology, Population Foundation, Kellogg Foundation, and many industrial grants.

His teaching has been significant and he has mentored many undergraduate and graduate students. Over his career, he mentored an annual average of 12 undergraduates plus 1 or 2 honors students, 6 graduate student majors and/or postdocs, oral researchers, and three graduate student minors.

He has made important teaching contributions at the graduate and undergraduate level. In his teaching of Animal Science, Comparative Reproductive Physiology he taught approximately 6000 students during his teaching tenure. He also trained about 190 graduate-teaching assistants associated with this and other courses. His teaching went beyond his research interests and included courses on theriogenology and on nurturing scientific creativity.

He has been recognized nationally and internationally by many for his excellence in teaching and research. Some of these recognitions include a Fulbright Scholarship for study and research in Denmark; Fellow, American Association for the Advancement of Science; Professor of Merit Award, New York State College of Agriculture, Cornell University; NY Farmers' Award for contributions to Northeast agriculture, 1969; National Association of Animal Breeders' Award for research in A.I. and Physiology of Reproduction, 1970; ASAS Animal Physiology and Endocrinology Award; SUNY Chancellor's Teaching Award; Outstanding Andrologist, the highest award by American Society of Andrology; Upjohn Physiology Award, ADSA; Japan Society for the Promotion of Science Award; Superior Service Award, UDSA; L. E. Casida Award for Excellence in Reproductive Physiology; University Honorary Professor, Beijing Agricultural University; Japan Society for

the Promotion of Science Award; and the Hartman Award, the highest award for lifetime research by Society for the Study of Reproduction. Foote is an excellent person to be Fellow of ADSA.

John W. Fuquay

John Fuquay has been involved with and has contributed to the Dairy Science Profession for over 35 years. He has had a strong positive influence on ADSA through



his work with the *Journal of Dairy Science* and other committee activities. He has influenced thousands of students, both directly through his courses and indirectly through the utilization of his textbook by other instructors.

Fuquay is known at Mississippi State University and across the nation as an outstanding teacher. His Physiology of Reproduction class is extremely popular among under-

graduate students. He wrote *Applied Animal Reproduction* in cooperation with Joe Bearden in 1980. Now in its fifth edition, this text has been widely adopted for undergraduate instruction in reproductive physiology in the United States and has been translated into Spanish.

Fuquay is currently serving as editor for the dairy production volumes of a major four-volume reference work *Encyclopedia of Dairy Sciences*, to be published by Academic Press-London in 2002. The primary target audience will be researchers, educators, students, agricultural advisors, and government policy groups throughout the world.

National recognition includes his selection in 1988 as the winner of the Purina Mills, Inc. Teaching Award presented by ADSA.

His research efforts have focused on heat stress in dairy cows, and on the mechanics of synchronizing estrus. Heat stress not only influences reproductive performance, but also reduces milk production. Fuquay has demonstrated the importance of nighttime cooling for maintaining milk production in heat-stressed cows. He has investigated the influence of prepartum heat stress on postpartum milk production. His results indicate that prepartum heat stress has a negative influence on postpartum production. Hence, systems developed to cool dry cows during the summer should improve milk production during the subsequent lactation.

The research of Fuquay has made major contributions toward the application of science to animal management technology. In 1999, Fuquay was awarded the Mississippi State University Faculty Research Scientist Award for the College of Agriculture and Life Sciences, the top research award in the college.

He has influenced the reproductive performance of dairy cows through his heat stress research and estrous synchronization programs.

Fuquay's research has made major contributions toward the application of science to animal management technology. His active research program has led to invitations to speak at numerous conferences throughout the United States and in Thailand, Pakistan, Oman, England, Israel, and Mexico. In addition, he has served as a consultant on animal breeding in Bangladesh and on upgrading cattle research programs in Thailand.

Fuquay has been active in coordinating short courses for farmers, veterinarians, and technicians in Nicaragua. Topics reviewed include the integration of US technology into Nicaraguan agriculture, management of beef and dairy enterprises, and advanced training in applied reproductive physiology practices. These short courses were done annually from 1993 through 1996.

Fuquay has made major contributions to the American Dairy Science Association through his service to the *Journal of Dairy Science*. This includes seven years on the Editorial Board, four years as Editor, and with completion of his current term, six years as Editor-in-Chief.

Howard Duane Norman

Howard Duane Norman is currently a Supervisory Research Geneticist and Research Leader in the Animal Improvement Programs Laboratory, USDA-ARS. He received a B. S. in dairy production from Pennsylvania State University, an M.S. from Pennsylvania State University in dairy breeding, and a Ph.D. from Cornell University in animal breeding.



He has served ADSA in many capacities, making important contributions to several committees, including the Committee on Breeding and Genetics, the J. L. Lush Award Selection Committee, and

the Dairy Cattle Improvement. He has been a representative to the Dairy Recognition and Education Founda-

tion, and the Dairy Remembrance Fund. He has served on the Editorial Board of the *Journal of Dairy Science*.

He has been active in many professional associations in addition to ADSA, including the Agricultural Sciences Alumni Society, the American Guernsey Cattle Club, American Jersey Cattle Association, the Holstein Association, the National Dairy Shrine, and others. In each organization, he has taken on significant association roles.

ADSA, other organizations, and his peers have recognized his outstanding research in animal breeding. The list of individual recognitions is long, but some significant contributions that recognize his excellence include, the Distinguished Service Award for outstanding, unselfish service in advancement of Jersey breed; the Decoration of Order of Merit in Agriculture, Polish Ministry of Agriculture, for making significant contributions to Polish agriculture, the National Association of Animal Breeders' Research Award for contributions in animal reproduction and artificial insemination, and the ADSA J. L. Lush Award in Animal Breeding.

He has been honored for his team leadership by participating or leading significant research and education efforts. Recent recognitions include, the Agricultural Research Service Superior Effort Technology Transfer Award for development, implementation and enhancement of computing and electronic delivery systems that allow more rapid identification of genetically superior dairy animals, the Federal Laboratory Consortium for Technology Transfer Citation for transfer of dairy cattle genetic information to the dairy industry and the Government Technology Leadership Award for enhancing genetic improvement for milk yield by reducing genetic interval.

Norman works with many national and international organizations and hasn't hesitated to help these organizations. Throughout his exceptional career, he has responded to invitations to present workshops and seminars worldwide on breeding and genetics. His travels have taken him on more than one occasion to Japan, India, Pakistan, Venezuela, Poland, Estonia, Latvia, Lithuania, and Korea. He presentations record clearly shows that his expertise is sought after by many organizations nationally and worldwide.

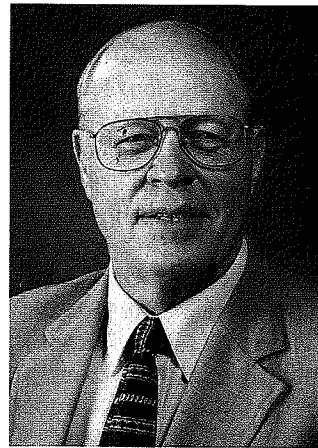
He is a technical expert whose perspective on animal breeding and genetics is needed by many, including National Association of Animal Breeders' Sire Evaluation and International Marketing Committee, the American Guernsey Association's Type Committee, and the National Association of Animal Breeders. While just three associations are mentioned, many others continue to seek his technical knowledge.

His over 230 publications represent significant scientific contributions in understanding problems and opportunities in animal breeding and reproduction.

Clearly, Howard Duane Norman has demonstrated the excellence in his entire research and communications programs. An ADSA model Fellow, indeed.

Carl E. Polan

Carl E. Polan grew up in West Virginia and received a B.S. and M.S. from West Virginia University. In between degrees, he served the U.S. Army and then farm



management for two years for Potomac State College, Keyser, West Virginia. He also served as a dairy agent in cooperative extension. His Ph.D. is from North Carolina State University, which was followed by a postdoctorate in Biochemistry at University of Minnesota; he has been on the Department of Dairy Science faculty of Virginia Polytechnic Institute and State University since 1965.

He has served his university well as a teacher, researcher, and in his service, including his contributions to the Faculty Senate, University Scholarship and Student Aid, Commission on University Support, College representative to the Virginia State Feed Association, Research Policy and Affairs, and Graduate Studies and Affairs.

He has received many significant state and national recognitions, including the Distinguished Service Award from the Virginia Forage and Grassland Council, Southwest Region, the Honors Award from the Southern Branch of the American Dairy Science Association, the American Feed Industry Award for Nutrition Research, from the American Dairy Science Association. He is a Fellow of the American Association for the Advancement of Science.

He has been a leader in ADSA including the Chemical, Drug and Pesticide Committee, the Herd Health Committee, the ADSA *Journal of Dairy Science* Editorial Board, Officer of the Southern Branch, ADSA Officer Production Division Program Chair, overall Program Chair and Board member of ADSA.

He has authored 98 scientific publications and 131 abstracts on ruminant nutrition and biochemistry, most published in the *Journal of Dairy Science*. He has numerous extension-oriented talks and publications

and has received much recognition for his teaching and research.

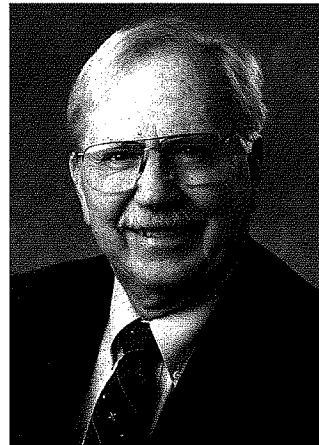
Carl Polan has been an exceptionally outstanding mentor of students, both undergraduates and graduate. Polan was the major professor for many masters of Science and Ph.D. degrees. Many of his graduate students have subsequently taught and/or conducted research or extension at the college or university level. Institutions represented are North Carolina State University, Clemson, West Virginia University, Louisiana State University, Auburn, University of Missouri, University of Illinois, Texas A&M, Virginia Tech, Langston University, and University of Padova, Italy. Other graduate and undergraduate students have worked in the feed or animal pharmaceutical industry, international agriculture, or private consulting.

Polan has served his community, including Scout leadership, where he has received several awards. He certainly has had a most significant and distinguished career that has served our association, the dairy industry, student, and society exceptionally well.

H. Allen Tucker

H. Allen Tucker has contributed extensively to Dairy Science as a researcher, teacher, and mentor. In research, he has enhanced the basic biological understanding and practical management of mammary glands in dairy cattle. Specifically, Tucker has published 355 scientific articles and has been awarded over \$4.5 million for competitive grants. These accomplishments are tangible testimony to the quality of his research program.

As a teacher, Tucker taught Lactation Physiology for several decades. In his class, he always strived to make his course current, comprehensive, and challenging. Former students who completed Tucker's class have



gone to work on dairy farms, within the dairy industry, or pursued graduate study. However, regardless of the student's career interests and motivation, the vast majority regarded Tucker's Lactation Physiology as the best course and Tucker as the best teacher that they had at Michigan State University.

As a mentor, Tucker's major accomplishments and contributions have been his unwavering positive commitment and superb ability to inspire graduate students and other faculty to become independent professionals and critical thinkers. Tucker has educated many people who are currently major contributors to dairy science and who are influential leaders within the dairy industry. It is these people who best signify the distinguished service of Tucker to dairy science and to the dairy industry. The people Tucker influenced would certainly and enthusiastically support this award. Because of his distinguished career at Michigan State University and in dairy science, it is fitting to recognize H. Allen Tucker as a Fellow of the American Dairy Science Association.