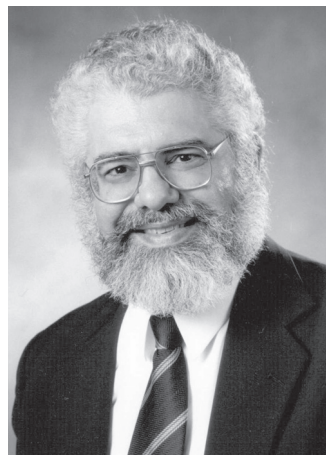


2008 Fellows of the American Dairy Science Association

The 2008 elected fellows were recognized at the Awards Program of the American Dairy Science Association in Indianapolis, Indiana, on July 9, 2008. Election to Fellow is one of the highest honors that the Association bestows. The Fellow 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 professional membership in ADSA for a minimum of 20 years; and must be in good standing with the Association.

David M. Barbano

David Mark Barbano received his BS, MS, and PhD degrees in food science at Cornell University. He has made outstanding contributions to the advancement of



food science and the dairy industry over nearly three decades in his research, extension, and teaching programs. Barbano has been a member of ADSA since 1984. He has served on numerous ADSA committees, as a reviewer for the *Journal of Dairy Science*, a member of the ADSA board of directors, president of ADSA, and chair of the ADSA Foundation board. Over his career, he has made exceptional contributions to the dairy industry and ADSA. He has published 169 research papers and 214 abstracts. Twelve of his graduate students have placed in the top 3 in the ADSA graduate student paper competition over the years.

One focus of Dave Barbano's career has been on cheese manufacturing technology and cheese chemistry and functionality. Barbano and his colleagues have developed computer models that have been used both strategically by cheese manufacturing companies to plan for future business directions and for tactical decision making in the use of ingredients for cheese making as the prices of ingredients and finished products fluctuate in a dynamic market place. Barbano's studies

of cheese yield and milk fortification led to the modification of traditional theoretical cheese yield formulae that were adapted to more effectively predict yields of cheese made from fortified milks and to produce low-fat cheeses. Barbano carried out research to evaluate the impact of the use of fermentation-produced chymosin on the yield and quality of cheeses and determined that fermentation-produced chymosin gave high cheese yields and excellent cheese flavor quality. Today, over 80% of the cheese in the United States is made with fermentation-produced chymosin. When consumer interest in decreasing dietary fat intake increased, Barbano developed a novel method for production of a full-flavored, 50% reduced-fat Cheddar cheese.

Barbano has been a leader in the development of new analytical methods for analysis of dairy products and other foods throughout his career. His current research is focused on the use of Fourier transform infrared (FTIR) approaches to improve the accuracy of milk payment testing and control of dairy product composition during processing. The relationship between raw milk quality and dairy product yield and sensory properties has been another focus of Barbano's research for the last 20 years. Dave has had a long history of research collaboration with animal scientists. His collaboration with colleagues at Cornell University resulted in a landmark study of the impact of bovine somatotropin on efficiency of milk production, nutritional and functional properties of milk, and milk safety. He was instrumental in providing technical information at UDSA Federal Milk Market Hearings in the 1980s and 1990s to change the milk payment system for dairy farmers to include a payment for the protein and somatic cell count content of milk, in addition to the fat content. Clearly, Dave Barbano's professional contributions support his being named an ADSA Fellow.

Louis J. Boyd

Louis J. Boyd was born on March 14, 1928, in Lynn Grove, Kentucky, and was raised on a general farm. He has enjoyed continuous membership in the ADSA since joining as a student member in 1949. From 1951 to 1953, he was a dairy extension specialist in Kentucky, traveling the state working with the 4-H Dairy Program, dairy farmers, county agents, artificial insemination associations, dairy shows, and dairy breed associations. He joined the Department of Dairy Science at the

University of Illinois and earned a PhD degree in 1956. From 1956 to 1962, he was an associate professor of teaching and research in the Dairy Department at the



University of Tennessee. He worked with the dairy cattle research breeding project, taught several dairy courses, and worked extensively with the student Dairy Club.

From 1963 to 1972, Boyd was associate professor and professor in teaching, research, and extension in the Dairy Department at Michigan State University. He was instrumental in the incorporation of science into the 4-H Dairy

Program, taught dairy courses in reproduction and lactation, and worked in research in artificial insemination and reproductive efficiency of dairy cattle. He also conducted extension schools across Michigan on reproductive efficiency of dairy cows.

From 1972 to 1979, Boyd was chair of the Animal Science Division and head of the Department of Animal and Dairy Science at the University of Georgia. He was coordinator of sponsored programs in agriculture at the University of Georgia from 1979 to 1992. He worked to secure grant money to support research and sponsored activities in the College of Agriculture. He was coordinator of international agricultural programs from 1987 to 1992. He led efforts in agriculture to secure a USAID Strengthening Grant, supervised exchanges with Japan, Israel, Brazil, and Germany, and administered cooperative research programs around the world. Since retirement in 1992, Boyd, as professor emeritus, leads the Extension Advisory Council at his university.

Louis Boyd has held many committee assignments, often as chair, in numerous societies. He was a director on the ADSA board. He represented ADSA as a member of the CAST board of directors, including being CAST president in 1984. In 1989, Boyd joined the editorial board of the *Professional Animal Scientist*, becoming associate editor in 1994. He has served ADSA in numerous capacities during the past 5 decades, including being chair of many ADSA committees. These include serving as chair of the ADSA membership committee, the nominating committee for production division, dairy Science administration committee, long-range planning committee, resolutions committee of the production division, ADSA international relations committee, and American Cyanamid Award committee. He was a member of the ADSA centennial planning

and budget committee. In 1992, he was named a life member of ADSA.

Louis J. Boyd has made exceptional contributions to the dairy industry through his distinguished service and leadership in many capacities to the ADSA, CAST, UGA, and animal agriculture worldwide and thus easily merits being named an ADSA Fellow.

Francis C. Gwazdauskas

Francis C. Gwazdauskas is the David R. and Margaret Lincicome Professor of Dairy Science at Virginia Tech. He grew up on a family dairy farm in western



Connecticut. He completed a BS degree at the University of Connecticut and MS and PhD degrees at the University of Florida. After completion of his PhD degree, he became an assistant professor of dairy science at Virginia Tech. Since 1974, Gwazdauskas has served his department at Virginia Tech and ADSA and made significant contributions to the industry through his research and teaching.

Gwazdauskas contributes consistently to the quality of ADSA programs and activities and, in doing so, exemplifies an ADSA Fellow. Throughout his career, Gwazdauskas has served ADSA as an active member and leader of numerous committees including the Pharmacia & Upjohn Physiology Award committee, animal behavior and well-being committee, physiology committee, spouse's program, children's program, and graduate student paper presentation evaluation committee and serving as a session chair at numerous meetings. Gwazdauskas was a member of the *Journal of Dairy Science* editorial board for many years and currently serves as physiology and management section editor.

Gwazdauskas has focused his research program on endocrine regulation of reproductive function, studied basic reproductive physiology of the lactating cow using ovum pickup procedures, attempted to improve fertility by determining the effect of abnormal sperm on embryonic development, and was involved in the production of transgenic animals. He and his students have conducted studies to evaluate oocyte quality following ultrasonic follicular aspiration in dairy cattle on two planes of nutrition and different stages of lactation and in vitro fertilization (IVF) to assess the development of oocytes retrieved from lactating cattle, as well

as conducting IVF with abnormal spermatozoa. They have had success with 1) expression of a Factor VIII construct, a Factor IX-WAP coinjection construct, and a human fibrinogen construct in pigs, 2) lactation of mice producing recombinant IGF-I, and 3) using a sow milking machine. Because of his scientific expertise, he has been asked to review many manuscripts for journals and research grants for USDA, USAID, and NIH.

For his research contributions, Frank Gwazdauskas has received numerous awards, including the Pharmacia & Upjohn Physiology Award from ADSA. As the recipient of the Alumni Research Award, he reached the pinnacle of recognition for faculty at Virginia Tech. The cooperative nature of Gwazdauskas' research is unique, having several long-term collaborators both in the United States and internationally. During more than three decades of teaching and research, Gwazdauskas has enjoyed significant success through the students he has mentored. He has authored or co-authored 155 published manuscripts and 170 abstracts, including 39 research articles in the *Journal of Dairy Science*.

For an outstanding career of quality research of benefit to the dairy industry both nationally and internationally, as well as consistently providing outstanding service to the ADSA, Frank C. Gwazdauskas deserves to be named an ADSA Fellow.

Michael F. Hutjens

Michael F. Hutjens is professor of animal sciences and extension dairy specialist at the University of Illinois in Urbana-Champaign. He is one of the nation's



foremost dairy extension specialists and is internationally recognized for the innovativeness, excellence, and effectiveness of his outreach programs. In addition, he is an outstanding teacher who has had a significant impact on many current and future leaders in the dairy and animal industries. A third contribution is his leadership at the Midwest and national levels serving on numerous committees and

president of each ADSA organization.

Hutjens earned his BS and MS degrees in dairy science and PhD in dairy science and nutritional sciences from the University of Wisconsin. He was extension specialist at the University of Minnesota from 1971 to 1979, before coming to the University of Illinois to his present position. Although he has made significant contributions in research, Hutjens is well known as one of the most effective dairy nutrition educators of university students, dairy producers, feed industry workers, and veterinarians.

At the University of Illinois, Hutjens has been the major instructor of the two core dairy classes for more than 15 years. His ability to engage and motivate students, along with his use of hands-on and experiential laboratories, has resulted in a doubling of enrollment in these classes. He is ranked by his students as an "outstanding instructor" each semester he has taught these courses. He also teaches in the freshman introductory animal sciences course with lectures and dairy laboratories.

Another innovative approach was the development and delivery of the first Internet-based educational efforts leading to a dairy certificate certified by the University of Illinois graduate school. Five dairy classes are offered for credit or audit status to students anywhere in the world. Over 400 students have enrolled in this pioneer approach. The dairy classes are team-taught involving 12 instructors from four universities as well as industry specialists.

Hutjens presents approximately 100 training meetings and seminars annually, and authors about 10 conference proceedings and 20 popular press articles annually. Mike has presented programs in 46 states, 9 Canadian provinces, and 13 foreign countries. His wide popularity as a speaker and author is the result of current information that he delivers in an easily understandable format with a dynamic delivery. He tailors his presentations to his audience, whether that audience is dairy producers, feed industry personnel, veterinarians, students, or his peers. Hutjens has served as president of the American Dairy Science Association in 2004–2005, elected as Midwest ADSA president, and was on the board of directors and the executive board of the Federation of Animal Science Societies during 2004–2006.

The 2008 Fellow Award is a fitting recognition of Michael F. Hutjens for his outstanding international and national extension instruction, teaching of undergraduate students, leadership in ADSA, and the impact that he has on tomorrow's leaders in the industry.