
ADSA Director — Dairy Foods Division

Susan Duncan



Susan Duncan received her PhD in Food Science and Technology from The University of Tennessee (UT), Knoxville in 1989. Previously, she earned an MS in Human Nutrition and Foods from Indiana University of Pennsylvania and a BS from The Ohio State University in Food Technology. Dr. Duncan began her professional academic career as an assistant professor in the Virginia Tech (VT) Department of Food Science and Technology (FST), working in the area of value-added dairy foods, in 1990. She rose through the faculty ranks, achieving full professor in 2004.

Having learned about dairy products evaluation from Dr. Genevieve Christen, her graduate mentor at UT, Sue served as the VT Dairy Products Evaluation Coach for 16 years, relinquishing the role only with increasing burden of responsibility in research and teaching. Her teaching responsibilities have included teaching undergraduate courses in dairy products sensory evaluation, principles of sensory evaluation, dairy processing and functional foods for health. She has also taught a meal management and communication course for the nutrition department (2 years). At the graduate level, she teaches an advanced course in sensory evaluation of food, a multidisciplinary grant writing and ethics course, and the water for health interdisciplinary course.

Sue's research program focuses on chemical and sensory quality of foods and beverages with emphasis on dairy foods. Over the past 10 years, she has achieved research funding over \$7.8M and published over 85 research papers. She has contributed to several revisions of the Standard Methods for the Evaluation of Dairy Products as well as to Northeast Dairy Practices Council publications. Her research priorities include modification of milk and dairy products to increase nutritional value through pre- and post-harvest milkfat modification, probiotics, and incorporation of omega-3 lipids. She is actively involved in research associated with materials for improved packaging of food and beverages, with special interest in photochemistry of milk and functional foods.

Her research program is multidisciplinary in nature in order to best incorporate the basic science and engineering expertise needed for improving and developing value-added dairy and functional foods and the packaging materials for these products. Sue is the Director of the Macromolecular Interfaces with Life Sciences (MILES) program at Virginia Tech, a National Science Foundation (NSF) Integrated Graduate Education and Research Training program. This graduate training program brings together over 25 faculty and 35 PhD students from 12 departments across five colleges at Virginia Tech to study the interactions of natural and synthetic macromolecules for applications in biological systems. She also has served as Co-PI on an NSF project that studied the

effect of water chemistry on plumbing materials and sensory quality of water. She is currently a Co-PI in an interdisciplinary graduate training program at Virginia Tech focusing on water for health, with an emphasis on the effects of water chemistry on food quality and sensory characteristics and processing. She has been an invited speaker on food packaging materials protection for maintaining milk quality and the role of sensory evaluation in water quality at several national and international meetings.

Dr. Duncan was recognized by ADSA with the ADSA Foundation Scholar Award in 1998. She has served on numerous ADSA committees including the ADSA Education Committee, ADSA Futures Committee, ADSA Centennial Planning and Budget Committee, and selection committee for various ADSA national awards. She has served as the leadership role in the National Committee on Evaluation of Dairy Products and as chair of that committee. She organized and planned several symposia and served as moderator for dairy product technical sessions. She is active in the Institute of Food Technologists, as well and holds membership in the American Chemical Society.