

DELORES HEISSERER CHAMBERS

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Education

Ph.D. - Sensory Analysis (Foods and Nutrition) - 1994, Kansas State University

M. S. - Foods and Nutrition - 1992, Kansas State University

B.S. - Marketing Management and Computer Science - 1982, Additional course work in dietetics and nursing 1987-90, Southeast Missouri State University

Other training:

Techniques of Healthy Eating Boot Camp Short Course, Culinary Institute of America, 2008

Excellence in teaching and learning: Teachers as learners, K-State's Forth Annual Teaching Renewal Retreat, Kansas State University, 2007

Flavors of the Mediterranean, Culinary enhancement workshop hosted by K-State's Department of Hotel, Restaurant, Institution Management, and Dietetics, 2007

Study tour, American Dietetic Associations Food & Culinary Practice Group. France, 2005; Italy, 2007

Excellence in Teaching and Learning: Always in Style, K-State's Third Annual Teaching Renewal Retreat, Kansas State University, 2006

Workshop, Celebrating the Diversity of the American Plate, American Dietetic Associations Food & Culinary Practice Group, St. Louis, 2005

Sensory Evaluation in the Wine Industry, ASTM Committee Sensory Division, 2004

The Character of Our Commitments, 7th Annual K-State Leadership Seminar, 2003

The Oriental and The Landmark Culinary Schools, Bangkok Thailand, 2003

"Boot Camp", Culinary Institute of America, 2003

Graphic Thinking and Group Facilitation, Grove Consultants, 1998

Focus Group Moderation, The RIVA Institute, 1996

Related Experience

Kansas State University, The Sensory Analysis Center, Co-Director 1995-present, and **Human Nutrition**, Instructor 1995-1999, Research Asst. Professor, 1999-2002, Assistant Professor, 2002-present

Revamped and teach "Science of Foods", a lecture/laboratory course that is the primary foods course for human nutrition and dietetics students. Developed distance course for HN 413 Science of Foods. Teach Sensory Descriptive Analysis and developed the online version of that course. Co-Direct a Research and Teaching Center for product testing and evaluation that includes both descriptive sensory studies and consumer evaluation of products. Supervise professionals, students, and panelists who conduct evaluation of foods, beverages, and other products such as over-the-counter pharmaceuticals for corporate and other business clients, trade associations, and government and university projects. Provide non-traditional educational experiences for students and professionals, guest lecture in classes, and team taught "Sensory Evaluation of Foods" one semester.

The Kellogg Co., Section Manager, Product Evaluation Services, 1994-1995

Managed a group of professional staff and technicians primarily responsible for conducting sensory studies including descriptive, discrimination, and consumer research. Staff also responsible for chemical shelf-life studies and physical measures (e.g., moisture content). Established guidelines for consumer research guidance testing, re-focused descriptive panel training, and initiated screening and orientation for discrimination panels. Worked with product developers and marketing research to evaluate new and reformulated products. Developed training course and associated materials for applied sensory evaluation and consumer testing workshop for employees.

Moskowitz Jacobs, Inc., Project Manager, 1993-1994

Coordinated consumer projects with field services, designed market research studies including questionnaire design, analysis, and data interpretation. Directed staff responsible for various phases of product testing. Assisted with statistical designs for product optimization and category appraisal. Planned and conducted statistical design workshop. Represented company at trade shows.

Consultant, 1992-94, 1998-1999

Conducted studies relating sensory data to physical and chemical data. Gave presentations to middle and upper management on results of projects. Wrote handbook for conducting statistical analysis of sensory data on the SAS computer software. Gave internal corporate workshops.

Coors, Inc., Sensory Evaluation Department, Graduate Intern, 1992

Established on-going descriptive training program using attribute references. Conducted sensory panels and product aging study. Screened and tested a large group of employee panelists. Gave presentations to R&D staff and management.

Kansas State University, The Sensory Analysis Center, Graduate Research Assistant, 1990-1992, 1994.

Coordinated a 2-year international quality control program for a major corporation, including panel training, experimental design, product acquisition and preparation, data analysis, and report writing. Supervised staff for projects and wrote project and management summaries. Planned and conducted studies on products such as cheese, salt and salt containing foods, frankfurters, and pizza. Assisted with consumer market research studies including quantitative and focus group projects. Taught laboratory section of beginning food science class including planning and organizing laboratory experiences for 20 students.

Awards

Graduate Student Project Competition, advisees won 1st place International Sensory Project Design Competition, Sensory Spectrum, New Providence, NJ (won 2005, 2006, 2007)
Graduate Research Paper Competition, 2nd International Conference on Functional Foods in Jeju Island, Korea. 2004, Supervised research for the 1st place winning paper (J. Lee) "Milk aftertaste: Relating descriptive analysis data to acceptability of milk to teenaged girls"
National "Graduate Paper Competition in Sensory Analysis", Institute of Food Technologists
1993, Finalist
2001, Supervised research for the 1st place winning paper (A-M.A. Allison)
National "Food Science Graduate Research Paper Competition" 1992 - 2nd place and Certificate for Research Excellence - Institute of Food Technologists and Procter and Gamble
Nina Browning Graduate Study Fellowship 1990-1991

Professional Activities

United States Liaison committee to the International Standards Organization (ISO) Committee on Sensory and Consumer Research Standards, Chair, 2003-current
U.S. Representative (1 of 5) to International Organization For Standardization Technical Committee biannual meetings, Almagro, Spain, 1996; Copenhagen, Denmark, 1998; Chipping Camden, England, 2000; Berlin, Germany, 2002; Budapest, Hungary, 2004 (Chief of Delegation); Washington D.C., USA, 2005 (Chair, Organizing Committee and Chief of Delegation); Buenos Aires, Argentina, 2007 (Chief of Delegation), Beijing, China, 2008
Institute of Food Technologists, Sensory Evaluation Division Strategic Planning Committee member and Program, Committee member, 2002-2004
American Society for Testing and Materials, Chair, Task Group on Proficiency (Accreditation), 1998-2002
Phi Tau Sigma Food Science honorary, K-State Section Secretary, 1998-1999

Publications

Chambers, D.H., Esteve, E., and Retiveau, A. Effect of milk pasteurization of flavor properties of seven commercially available French cheese types. *J. Sensory Studies*. In Press.
Thompson, K.R., Chambers, D.H., and Chambers, E. IV. Sensory characteristics of ice cream produced in the United States and Italy. *J. Sensory Studies*. In press.
Suwonsichon, S., Chambers, E. IV., Chambers, D.H., and Milliken, G.A. Effects of oral rinsing on the perception of residual cooling and burn in highly mentholated toothpaste. *J. Sensory Studies*. In press.
Oupadissakoon, G., Chambers, D.H., and Chambers, E.IV. Comparison of the sensory properties of UHT milk from different countries. *J. Sensory Studies*. In press.
Chambers, D.H. and Munoz, A.M. Focus-group evaluation of nutrition education displays by Hispanic adults who live in the USA. *Health Education*. In press.
Chambers, D.H., Lee, J., and Chambers, E. IV. 2008. Descriptive sensory analysis of samples of green tea from around the world. *Proceeding: Third International Conference on Tea Culture and Science*. University of Shizuoka Press, Japan. MI-P-104 pp. 1-2.
Chambers, E. IV., Lee, J., Chambers, D.H., Chum, S., and Oupadissakoon, C. 2008. Consumer acceptability of green tea in three countries. *Proceeding: Third International Conference on Tea Culture and Science*. University of Shizuoka Press, Japan. MI-P-103 pp. 1-2.

- Lee, J., Chambers, D.H., Adhikari, K., and Yoon, Y. 2008. Flavor and Volatile compound changes of green tea when infused multiple times. Proceeding: Third International Conference on Tea Culture and Science. University of Shizuoka Press, Japan. Pr-P-116. pp. 1-2.
- Talavera, M. and Chambers, D.H., 2008. Simplified lexicon to describe flavor characteristics of western European cheeses. *J Sensory Studies*. 23: 468-484
- Allison, A-M.A., Chambers, E. IV., and Chambers, D.H. 2007. Repeated testing and rinsing regimens for toothpastes with various cooling and burn intensities: Impact on discrimination and repeatability. *J. Sensory Studies*. 22:695-712.
- Lee, J. and Chambers, D.H. 2007. A lexicon for flavor descriptive analysis of green tea. *J. Sensory Studies*. 22: 256-272.
- Kosa, K.M., Cates, S.C., Karns, S.A. Godwin, S.L., and Chambers, D.H. 2007. Consumer home refrigeration practices: Results of a web-based survey. *J. Food Protection*. 70: 1640-1649.
- Cates, S.C., Kosa, K.M., Karns, S., Godwin, S.L., and Chambers, D.H. 2007. Consumer storage practices for refrigerated ready-to-eat foods: Results of a web-enabled survey. *Food Protection Trends*. 27: 530-543.
- Kosa, K.M., Cates, S.C., Karns, S., Godwin, S.L., and Chambers, D.H. 2007. Consumer knowledge and use of open dates: Results of a web-based survey. *J. Food Protection*. 70: 1213-1219.
- Godwin, S.L., Chen, F., Chambers, E. IV, Coppings, R., and Chambers, D.H. 2007. A comprehensive evaluation of temperatures within home refrigerators. *Food Protection Trends*. 27: 168-173.
- Retiveau, A., Chambers, D.H., and Esteve, E. 2005. Developing a lexicon for the flavor description of French cheeses. *Food Quality and Preference*. 16: 517-527.
- Allison, A.M. and Chambers, D.H. 2005. Effects of residual toothpaste flavor on flavor profiles of common foods and beverages. *J. Sensory Studies*. 20: 167-186.
- Francis, L.L., Chambers, D.H., Kong, S.H., Milliken, G.A., Jeon, I.J., and Schmidt, K.A. 2005. Serving temperature effects on milk flavor, milk aftertaste, and volatile compound quantification in nonfat and whole milk. *J. Food Science*. 70: S413-418.
- Chun, S., Chambers, E. IV, and Chambers, D. H. 2005. Perception of pork patties with shiitake (*Lentinus Edode P.*) mushroom powder and sodium tripolyphosphate as measured by Korean and United States consumers. *J. Sensory Studies*. 20: 156-166.
- Dowell, K.J., Chambers, E. IV, Milliken, G.A., and Chambers, D.H. 2005. Predicting interstimulus intervals between samples for capsaicin-containing salsa with a range of heat levels. *J. Sensory Studies*. 20: 187-199.
- Chambers, D.H., Allison, A-M.A., and Chambers, E. IV. 2004. Training effects on performance of descriptive panelists. *J. Sensory Studies*. 19: 486-499.
- Chambers, D.H., Higgins, M.M., Roeger, C., and Allison, A-M.A. 2004. Nutrition education displays for young adults and older adults. *Health Education*. 104: 45-54.
- Vara-Ubol, S., Chambers, E. IV, and Chambers, D.H. 2004. Sensory characteristics of chemical compounds potentially associated with beany aroma in foods. *J. Sensory Studies*. 19: 15-26.
- Lotong, V., Chambers, E. IV, and Chambers, D.H. 2003. Categorization of commercial orange juices based on flavor characteristics. *J. Food Science*. 68: 722-725.
- Lotong, V., Chambers D.H., Dus C., Chambers E. IV, and Civille G.V. 2002. Matching results of two independent highly trained sensory panels using different descriptive analysis methods. *J. Sensory Studies*. 17: 429-444.
- Stahlman, L. B., Garcia, J. M., Chambers, E., Smit, A. B., Hoag, L., and Chambers, D.H. 2001. Perceptual ratings for pureed and molded peaches for individuals with and without impaired swallowing. *Dysphagia*, 16, 254-262.

- Allison, A.A., Chambers, E. IV, Civille, G.V., Milliken, G., and Chambers, D.H. 2001. Effects of fat on temporal cooling by menthol in lozenges. *J. Food Science*. 66: 1219-1224.
- Lotong, V., Chambers, E. IV, and Chambers, D.H. 2000. Determination of the sensory attributes of wheat sourdough bread. *J. Sensory Studies*. 15: 309-326.
- Otremba, M., Dikeman, M.E., Milliken, G.A., Stroda, S.L., Chambers E. IV., and Chambers D.H. 2000. Interrelationships between a descriptive texture profile sensory panel and descriptive attribute sensory panel evaluations of Longissimus and Semitendinosus muscles. *Meat Science*. 54: 325-332.
- Allison, A-M.A., Chambers, E. IV, Milliken, G., and Chambers, D.H. 1999. Effects of interstimulus rinsing and time on measurements of capsaicin heat in tomato salsa. *J. Sensory Studies*. 14: 401-414.
- Chambers, E. IV and Chambers, D.H. 1999. Evaluating the flavor of meat. In *Proceedings of the 52nd Reciprocal Meat Conference*, American Meat Science Association, Kansas City, MO, pp 75-77.
- Chambers, D. H., Chambers E. IV, Seitz, L.M., Sauer, D.B., Robinson, K., and Allison, A-M.A. 1998. Sensory characteristics of chemical compounds potentially associated with smoky aroma in foods. *Food Flavors*, 9: 187-194.
- Chambers, D.H., Chambers E. IV, and Bowers, J.R. 1996. Consumer acceptance of commercially available frankfurters. *J. Sensory Studies*, 11: 85-101.
- Levis, P.A, Chambers, E. IV, Chambers, D.H., and Hollingsworth, M.G. 1996. Consumer use of package directions for familiar and unfamiliar products. In. Gelinas, A.D. (Ed.) *A Sensory techniques used in conducting packaging research with consumers*, STP 1316, ASTM, West Conshohocken, PA pp 16-24.
- Heisserer (Chambers), D.M. and Chambers E. IV. 1993. Determination of the sensory flavor attributes of aged natural cheese. *J. Sensory Studies*. 8: 121-132.

Published International Standards

- ISO 13300 -1, Sensory Analysis – General guidance for the staff of a sensory evaluation laboratory – Part 1: Staff responsibilities, Chambers, D.H.
- ISO 13300 -2, Sensory Analysis – General guidance for the staff of a sensory evaluation laboratory – Part 2: Recruitment and training of panel leaders, Chambers, D.H., 2006.

Refereed Publications in Proceedings

- Lee, J., Chambers, D.H., & Chambers, E. IV. 2007. Green tea flavor description: A focus on differences in green and brown flavor notes. In "Proceedings: New Trends in Sensory Evaluation of Food and Non-Food Products" ed. Valentin, D., Nguyen, D.H., and Pelletier, L.Vietnam Natl. Univ. Publishing House, HoChiMinh City. pp. 75-84.
- Chambers, D.H., Chambers, E. IV, and Johnson, D.E. 2005. Flavor description and classification of selected natural cheeses. *Proceedings of the 5th International conference on Culinary Arts and Sciences*. 5: 641-654.
- Francis, L.L., Lee, J., Chambers, D.H., Jeon, I.J., Simmons, S.R., and Schmidt, K.A. 2004. Quantification of volatile flavor compounds in off-flavor and commercial reduced-fat milk samples. *Proceedings of Dairy Days*. 2004. pgs. 3-9.
- Francis, L.L., Kong, S.H., Chambers, D.H., Jeon, I.J., Simmons, S.R., and Schmidt, K.A. 2004. Serving temperature effects on milk flavor, milk aftertaste, and volatile-compound quantification in nonfat and whole milk. *Proceedings of Dairy Days*. 2004. pgs. 16-21.

Presentations in U.S.

- “Adjusting texture scale references for Asian markets”, Society of Sensory Professionals Inaugural Conference, Cincinnati, OH, 2008.
- “Response time: Does it add information to acceptance?”, Society of Sensory Professionals Inaugural Conference, Cincinnati, OH, 2008.
- “Describing flavor using fewer and simpler terms: An example with cheese”, Society of Sensory Professionals Inaugural Conference, Cincinnati, OH, 2008.
- “A comparison of basic taste modalities, using a descriptive analysis technique, for varying levels of sodium and KSC in two model soup systems”, Society of Sensory Professionals Inaugural Conference, Cincinnati, OH, 2008.
- “Relationship between descriptive attributes and flavor volatiles of Thai rice”,
- “Flavor changes of green tea during 2 years of storage”, Society of Sensory Professionals Inaugural Conference, Cincinnati, OH, 2008.
- “A comparison of green tea preference maps for consumers in three countries”, Institute of Food Technologists Annual Meeting, New Orleans, LA, 2008.
- “Flavor characteristics of artisan goat cheese from the United States”. Institute of Food Technologists Annual Meeting, New Orleans, LA, 2008.
- “Comparisons of flavor volatiles of raw and cooked Thai rice of different varieties”. 235th ACS national Meeting, New Orleans, LA, 2008
- “Simplified lexicon to describe flavor characteristics of western European cheeses”, 7th Pangborn Sensory Science Symposium, Minneapolis, MN, 2007.
- “Flavor changes of green tea when brewed multiple times”, 7th Pangborn Sensory Science Symposium, Minneapolis, MN, 2007.
- “Flavor changes of green tea when brewed differently”, 7th Pangborn Sensory Science Symposium, Minneapolis, MN, 2007.
- “Consumer language selection for flavors associated with Potassium Chloride (KCL) in model soup systems”, 7th Pangborn Sensory Science Symposium, Minneapolis, MN, 2007.
- “Saltiness and sensory properties of mashed potatoes containing sea, kosher, or table salts”, Institute of Food Technologists Annual Meeting, Chicago, IL, 2007.
- “Comparison of Sensory Properties of UHT Milk from Different Countries”, Institute of Food Technologists Annual Meeting, Chicago, IL, 2007.
- “Flavor characteristics of commercial fresh and dried mushrooms”, Institute of Food Technologists Annual Meeting, Orlando, FL, 2006.
- “Pregnant Women’s and Seniors’ Storage Practices for Refrigerated Ready-to-Eat Foods: Results of a Web-Enabled Panel Survey”, Reaching At-Risk Audiences and Today’s Other Food Safety Challenges, Denver, CO, 2006.
- “Storage practices for smoked seafood: Results from a web-based survey”, Association of Research Directors, 14th Biennial Research Symposium, Atlanta, GA, 2006.
- “Consumers food safety and home refrigeration practices: results of a web-based survey” American Dietetic Association Annual Meeting, Honolulu, HI, 2006.
- “Characterization and comparison of typical ice creams available in Italy and the United States”, Institute of Technologist Annual Meeting, New Orleans, 2005.
- “Consumer attitudes and factors influencing meat use”, Institute of Technologies Annual Meeting, New Orleans, 2005.
- “Quantification of volatile flavor compounds in fresh and different off-flavor low fat milks”, ADSA ASAS PSA Annual Meeting, St. Louis, 2004.
- “Serving temperature effects on milk flavor, milk aftertaste, and volatile compound

- quantification in nonfat and whole milk”, ADSA ASAS PSA Annual Meeting, St. Louis 2004.
- “Effect of shiitake (*Lentinus edodes* P.) mushroom powder and sodium tripolyphosphate on texture and flavor of pork patties”, Institute of Food Technologists Annual Meeting, Las Vegas. 2004.
- “Descriptive sensory characteristics of beef jerky prepared by different methods”, Institute of Food Technologists Annual Meeting, Las Vegas, 2004.
- “Sensory characteristics of chemical compounds potentially associated with “beany” flavor in foods”, Institute of Food Technologists Annual Meeting, Chicago, 2003.
- “Effects of repeated product consumption: Measuring the potential for introducing an unfamiliar flavor into a market”, Institute of Food Technologists Annual Meeting, Chicago, 2003.
- “Development and evaluation of wheat protein beverage”, Institute of Food Technologists Annual Meeting, Chicago, 2003.
- “Adapting a lexicon for the flavor description of French cheeses: A useful tool for cheese categorization, classification and promotion”, Institute of Food Technologists Annual Meeting, Chicago, 2003
- “Comparing Korean and U.S. consumers perceptions of pork with added phosphate and mushroom”, 5th International Sensory Sciences Symposium, Boston, Massachusetts, 2003.
- “Categorization of commercial orange juice based on sensory flavor characteristics”, Institute of Food Technologists Annual Meeting, Anaheim, California, 2002.
- “Sensory characteristics of commercial and “fresh” soymilks”, Institute of Food Technologists Annual Meeting, Anaheim, California, 2002.
- “Milk pasteurization affects flavor properties of commercial French cheeses”, Institute of Food Technologists Annual Meeting, Anaheim, California, 2002.
- “Residual toothpaste flavor and its effect on flavor profiles of common foods and beverages”, Institute of Food Technologists, New Orleans 2001 (Winner Sensory Evaluation Graduate Student Research Competition).
- “Using sensory analysis to develop more successful pizza for children”, SSE Inc., Marshall, MN, 2001.
- “Developing guidelines for creating and modifying nutrition education displays for low income families”, Society for Nutrition Education Annual Meeting, Charleston, SC, 2000
- “Issues in accreditation and certification for sensory analysis”, ASTM seminar, Toronto, Canada, 2000.
- “Sensory testing for product success”, SSE Inc. Research Seminar, Marshall, MN, 2000
- “The importance and use of descriptive sensory analysis in quality assessment”, PacifiChem, Honolulu, 2000.
- “Increased training of descriptive panelists improves performance”, Institute of Food Technologists Annual Meeting, Chicago, IL, 1999.
- “Evaluating the Flavor of Meat”, American Meat Science Association 52nd Annual Reciprocal Meat Conference, Stillwater, OK, 1999.
- “Sensory characterization of smokiness in foods”, Institute of Foods Technologists, Atlanta, GA, 1998.
- “Effects of time and interstimulus rinsing on perception of capsaicin heat in tomato salsa”, Institute of Foods Technologists, Atlanta, GA, 1998.
- “Effect of product presence on trade-off analysis of concepts: A case study with frankfurters”, International Food Technologist Annual Meeting, Orlando, FL, 1997.

- “Sensory analysis fundamentals: Procedures and uses”, US Department of Commerce Seminar for Standards Representatives from Russia and the Newly Independent States, Manhattan, KS, 1996.
- “How to use sensory analysis in your business”, Kansas Food Processors Workshop, Manhattan, KS, 1996.
- "Sensory analysis: Procedures and protocols", Kellogg's Latin America Research and Development Conference, Anaheim, CA, 1995.
- "Saltiness of foods containing selected sodium salts of varying anion size", Institute of Food Technologists Annual Meeting, Chicago, IL, 1993.
- "Determination of the sensory attributes of cheese flavor and classification of cheese based on flavor", Institute of Foods Technologists Annual Meeting, New Orleans, LA, 1992.

Presentations outside the U.S.

- “Perceptual sensory mapping of green teas from various countries”, 14th World Congress of Food Science and Technology, Shanghai, China, 2008.
- “A lexicon for flavor descriptive analysis of green tea”, Summer Program In Sensory Evaluation, HoChiMinh-City, Vietnam, 2007.
- “Knowledge and practice of in-home food safety by consumers”, 10th European Nutrition Conference. Paris, France, 2007.
- “Testing products from around the world”, 1st Thailand Sensory Network Symposium, Bangkok, Thailand, 2006.
- “Cheese production and use”, Suncheon National University Research Seminar, Suncheon, South Korea, 2006.
- “Flavor description and classification of cheese from around the world”, Agriculture Workshop, Suncheon National University, Suncheon, South Korea, 2006.
- “Consumer knowledge and use of dates on product packaging: Results of a web-based survey”, International Association for Food Protection Conference, 53rd Annual Meeting, Calgary, Alberta, Canada, 2006.
- “An in-home investigation of the conditions under which refrigerated foods are stored”, International Association for Food Protection Conference, 53rd Annual Meeting, Calgary, Alberta, Canada, 2006.
- “Consumer storage practices for refrigerated ready-to-eat foods: Results of a web-based survey of pregnant women”, International Association for Food Protection Conference, 53rd Annual Meeting, Calgary, Alberta, Canada, 2006.
- “Application of sensory analysis for small businesses”, Suncheon National University, Small Business Seminar, Suncheon, South Korea, 2005.
- “Application of sensory analysis”, Suncheon National University, Department of Plant Sciences, Suncheon, South Korea, 2005.
- “Flavor description and classification of selected natural cheeses”, International Conference on Culinary Arts and Sciences, Warsaw, Poland, 2005.
- “U.S. consumer acceptance of different qualities of green tea from Japan, Korea, and China”, AmorePacific Corporation, Management Seminar, Seoul, South Korea. 2005.
- “Descriptive analysis of green teas from Japan, Korea, and China”, AmorePacific Corporation, Management Seminar, Seoul, South Korea. 2005.
- “An overview of sensory analysis in the evaluation of green teas”, Suncheon National University, Department of Plant Sciences, Suncheon, South Korea. 2005.
- “Sensory perception and evaluation”, Suncheon National University, Suncheon, South Korea,

- 2004.
- “Milk aftertaste: Relating descriptive analysis data to acceptability of milk to teenaged girls”, 2nd International Conference on Functional Foods, Jeju Island, South Korea. 2004.
- “Characterization Italian ice creams”, A Sense of Identity, European Conference on Sensory Science of Food and Beverage, Florence, Italy, 2004.
- “Validation of a diary record for chocolate snack consumption”, Fifth International Conference on Dietary Assessment Methods. Chiang Rai, Thailand, 2003.
- “Guidelines for creating nutrition education displays for low income populations”, International Conference on Poverty, Food, & Health in Welfare, Lisbon, Portugal, 2003.
- “A questionnaire for evaluation of nutrition education programs for low-income young children”, International Conference on Poverty, Food, & Health in Welfare. Lisbon, Portugal, 2003.
- “Consumer screening and selection”, Consumer Testing Workshop, Kasetsart University, Industrial Development and Food Institute, Bangkok, Thailand, 2003.
- “Product selection, preparation, and testing controls”, Consumer Testing Workshop, Kasetsart University, Industrial Development and Food Institute, Bangkok, Thailand, 2003.
- “Developing nutrition education displays: Similarities and differences between young and older adult populations”, Xth International Food Choice Conference, Wageningen, Netherlands, 2002.
- “Use of non-vitamin, non-mineral supplements and “medicinal” foods in the United States”, Xth International Food Choice Conference, Wageningen, Netherlands, 2002.
- “Measuring the interactions of products and concepts for food service”, International Congress on Culinary Arts and Sciences, Cairo, Egypt, 2001.
- “Comparison of consumers and descriptive sensory panelists for describing the ‘eating experience’ of products”, Third International Congress on Culinary Arts and Sciences, Cairo, Egypt, 2001.
- “Developing nutrition education displays: Similarities and differences between young and older adult populations”, International Congress of Nutrition, Vienna, Austria, 2001.
- “Flavor of common foods and beverages as affected by use of toothpaste.” The 4th Pangborn Sensory Science Symposium, Dijon, France, 2001.
- “Matching results of two independent highly trained sensory panels using different descriptive analysis methods”, The 4th Pangborn Sensory Science Symposium, Dijon, France, 2001.
- “Determination of the sensory attributes of selected commercial and “fresh” soymilks”, The 4th Pangborn Sensory Science Symposium, Dijon, France, 2001.
- “Adapting a lexicon for the flavor description of French cheeses and classification of French cheeses based on flavor”, The 4th Pangborn Sensory Science Symposium, Dijon, France, 2001.
- “Use of sensory analysis in product development”, Chulalongkorn University Research Seminar, Bangkok, Thailand, 2000.
- “Tracking contaminants that cause smoky and musty off-odors in foods”, United Nations Food and Agriculture Organization Food Data Conference, Rome, Italy, 1999.
- “Understanding Consumers: Fat Intake Using Diary Records for Snack Foods”, United Nations Food and Agriculture Organization Food Data Conference, Rome, Italy, 1999.
- “Measuring responses to food products and concepts: What do the interactions tell us?”, The 3rd Pangborn Sensory Science Symposium, Ålesund, Norway, 1998.
- “Development of a record form for tracking intake of snack foods over a period of several weeks”, Third International Conference on Dietary Assessment, Arnhem, Netherlands, 1998.

- “Sensory characteristics of chemical compounds associated with smoky aroma in foods”, 9th International Flavor Conference, Limnos, Greece, 1997.
- "Interactions of products and concepts and their effects on consumer trade-offs", World Congress of Food Science and Technology, Budapest, Hungary, 1995.
- “Consumer use of package directions for familiar and unfamiliar food products", ASTM Symposium on Sensory Applications to Packaging, Montreal, Canada, 1994.

Grants

- “Sensory characteristics of meat jerky and consumer preferences for jerky of health conscious and non-health conscious consumers in two countries”, 2007, \$2,500, Lewis (Frances A.) Research Fund – KSU Foundation.
- “Characterizing consumer handling, storage, and use of product labels and dates to develop risk communication messages for ready-to-eat foods” 2004-2007, \$ 597,890, United States Department of Agriculture (with S. Godwin, R. Morales).
- “Keeping calcium in the diet – Perceptions of milk”, 2002-2004, \$89,958, Kansas Health and Nutrition Fund (with K. Schmidt).
- “Quality of sulfuryl flouride (profume) treated wheat”, 2000-2003, \$120,794, Dow Agrosiences (with S. Bhadrirajy, P. Seib, M. Willyard, D. Eustace, F. Padula).
- “Consumer perceptions of meat and meat products: A longitudinal follow-up”, 2003, \$1,000, College of Human Ecology Internal Research Award (with E. Chambers and S. McGraw).
- “Re-engineering a basic food science course”, 1999-2002, \$18,500. American Dietetics Association (R. Gould, E. Chambers, B. Barrett, D. Canter).
- “Evaluation of wheat protein as a beverage ingredient”, 2001-2002, \$15,000, K-State Research and Extension (with T. Herald, F. Aramouni).
- “Focus group training”, 1999-2000, \$15,025, Kansas Department on Aging (with E. Barrett).
- “Dietary interviews”, 1998, \$5,600, Tennessee State University and United States Department of Agriculture.

Contracts

- “Evaluation of product characteristics”, 1998 – 2007, \$178,240 Peryam & Kroll Research Inc. (with E. Chambers)
- “Sensory information assistance”, 2000-2005, \$7,800, Penford Products Co. (with E. Chambers)
- “Sensory quality evaluation”, 2000-2005, \$20,066, Bush Brothers and Company
- “Sensory analysis assistance”, 2000-2004, \$106,749, SSE Foods Inc. (Schwan’s/Tony’s) (with E. Chambers)
- “Product evaluation”, 2001-2003, \$9,375, Excel Corporation
- “Consumer testing assistance”, 2001-2003, \$11,950, Lipton/Lawry’s.
- “Product evaluation”, 2001–2003, \$10,400, Hormel Foods Corporation
- “Evaluation of meat products”, 2000-2002, \$ 38,197, Farmland Foods Inc.
- “Quality of fresh cut fruit”, 2001, \$49,995, Chiquita Brands, Inc. (with E. Chambers).
- “Evaluation of products”, 2000-2002, \$45,000, Kraft Foods/Oscar Mayer.
- “Visual properties of food”, 1999-2000, \$67,180, SC Johnson Corp. (with E. Chambers).
- “Using discussion groups to match concepts and products”, 1999-2000, \$750, Farmland Industries.
- “Meat cooking time evaluation”, 1998-1999, \$2,000, Farmland Industries.

Family Nutrition Program Subgrants (Funded)

“Developing videos for meat preparation”, 2003–2004, \$65,000 (with K. Walsten).

“Cookin’ with skill”, 2002–2003, \$ 96,000, (with K. Walsten).

“Understanding needs of participants for food preparation information”, 2001–2002, \$109,000,
(E. Chambers and K. Walsten).

“Improving visual information in nutrition education materials”, 1999-2000, \$61,000.

“Nutrition for young, limited resource parents”, 1998-1999, \$76,000.