MERITORIOUS SERVICE AWARD

The Food Science Club presented its 1986 Meritorious Service Award to Virgil L. Stadler, vice president of Stadler Country Hams, Inc., Elon College, North Carolina.

The story of Stadler Hams began in 1956, when Virgil Stadler returned home from the National School of Meat Cutting in Toledo, Ohio to work in the grocery store operated by his parents. Along with selling fresh pork, the Stadlers added country hams, which they cured in a converted garage. By 1958, the demand for Stadler hams was so great that the family constructed a 24 x 66-foot building with an 8,000-ham capacity just for curing hams. In 1960, the Stadlers installed an environmentally controlled system in their ham house. This was the first commercial application in the United States of this new technology, which had been developed by North Carolina State University. Other innovations in processing and marketing country ham have followed over the years. Today, Stadler has the capacity to process 900,000 hams.

Throughout the growth of this 36-year-old industry, Virgil Stadler has worked hand-in-hand with the research and extension staffs of the Department of Food Science. "I'm so indebted to N.C. State University that I don't mind paying my state taxes at all," he has said on many occasions. "The school has vast amounts of knowledge that the average small business can tap," he adds.

New Research Funding

New project funding received in 1986 includes: H.B. Hall from S.E. Poultry and Egg Assoc. ($23,100); R.E. Carawan from N.C. Board of Science and Technology for pollution prevention ($22,500); and N.C. Ag Found. for microcomputer study ($3,000); J.M. Haneman from Nat. Sc. Found. ($135,000); and Biotechnology Center ($23,000); T.C. Larter from N.C. Ludlow ($18,000); and Gulf and South Atlantic Fisheries Development Found. ($20,000); H.B. Swanepoel from Dairy Research Found. ($13,000) and USDA, Beltsville, ($20,000); E.J. Swarts from N.C. H. ($3,000); B.W. Sheldon from N.C. Ag Found. ($14,000). Joint projects to fund demonstration programs in pollution control through the N.C. Dept. of Natural Resources and Community Development include: B.M. Sheldon and R.E. Carawan ($28,500); D.H. Pilking and R.E. Carawan ($5,000); J.B. Rushing and R.E. Carawan ($5,000); and D.E. Green, F.B. Thomas and R.E. Carawan ($5,000). W.R. Welter, Jr., Food Science - USDA, has a new project entitled, "Biotechnical basis of storage stability and textural properties of processed products made from stored horticultural crops".

ACADEMIC AFFAIRS (T. A. Jones)

Six undergraduates and one graduate student have been named recipients of IPT Scholarships/Fellowships for 1986-87. Seniors selected for this honor in national competition were Patricia Butcher (South Africa), Anna Coffin (Durham, NC), Lisa Hansen,
(Carr, WI), Dale Hunt (High Point, NC) and Sally Smith (Lexington, NC). Abolig Sandi (Jordan), a junior, and Donald Bignone (St. Albans, WV), a MS candidate working with J.H. Klassenhümer, were the other winners. Eighty-two fellowship winners included two graduates of NCSU. Susan Stancil Sumner (BS, 1982) is pursuing a Ph.D. at Univ. Wisconsin & Anne Tielman (BS, 1986) will commence her MS program at Univ. Minnesota this fall.

Moving the Food Science Club Awards Banquet to the spring semester was a big success. Top honors went to Anne Tielman (B. M. Nowell Award, Outstanding Graduate and Outstanding Club Member); Sally Smith (Forbes Leadership Award); Sara McCleary (Anheuser Chocolate Top Scholar Award); Patricia Butcher (Crachol Scholastic Achievement Award); and Lisa Hansen (Crouch Scholastic Achievement Award).

Officers elected to lead the Food Science Club in 1986-87 include: Sally Smith, President; Patricia Butcher, Vice President; Whitney Oberg (Dresher, MN) Secretary; Penny Ayato (Roseville, CA), Treasurer; Judy Dudzik (Minneapolis, MN) and Steve Leonard (Barnaby, CT), Activities Co-chairpersons; and Kim Hargrove (Williamsburg, VA) and Don Higgins, publicity/historian/newsletter. S.J. Schwartz and D.K. Larkin will serve as club advisors.

Two club members have been elected to positions in the IFT Student Association. Sally Smith will be the Southeast Representative and Wes Bing (Indianapolis, IN), National Secretary for 1986-87.

Thirty students were awarded degrees by the Foods Science Department in 1985-86 (13 BS, 6 MG, 3 Ph.D. and 8 AA degrees). Graduates in May were: BS -- Bonnie Biever (Franklin, MA), Michael Jackson (Durham, NC), Sara McCleary (Durham, NC), Ruth Noe (Cary, NC), Teresa Phillips (Princeton Jct., NJ), Bernat Sole (Monaco, NC), Les Shearer (Woonsocket, NC), Lynne Strasser (State College, PA), Anne Tielman (Riner, VA), and Gurmish Wietz (Lincoln, NE); MS -- Frank Edwards (Wilmingtong, NC) and David Fish (Raleigh, NC); AA -- Lisa Beavers (West Creek, NC), Marcian Goodman (Greenboro, NC), Kathy Hill Harwood (Daboboro, NC), Tony Medlin (Wake Forest, NC), Billy Smith (Charlotte, NC), Scott Strickland (Dunn, NC), and Fred Williford (Dunn, NC). Kathy Harwood and Tony Medlin graduated with high honors and Billy Smith with honors.

Rheology and Texture of Protein Gels Program Conducted by Our Dept.

More than 20 industrial and academic professionals met at N.C. State University recently to participate in a short course entitled "Rheology and Texture of Protein Gels." The course was presented by our department in cooperation with the NC Agricultural Extension Service and the NCSU Division of Lifelong Education.

Represented companies included General Foods, Hormel and Central Soys Inc. Academic institutions with personnel in attendance included Université Laval in Quebec, the University of Georgia Marine Extension Service, and the Marine Institute in Newfoundland.
"Sheology and Texture of Protein Gels" was designed to give professionals involved in research on structured protein foods a better understanding of new techniques to evaluate the structure-forming ability of individual food components and combinations. Theoretical as well as practical laboratory analysis applications were presented for a multitude of food products.

The course was initiated by D.D. Hanum, H.B. Ball, Jr., E.A. Pocock, and T.C. Lanier. Overall course direction was provided by E.L. Carmean.

D.D. Hanum believes that the course was beneficial to all those who attended. "We focused on food quality - understanding it and how to attain it," he says. "And that's what everyone is interested in. For example, we covered physical measurements which are important to textural quality."

Information about future "Sheology and Texture of Protein Gels" short courses may be obtained by contacting D.D. Hanum (919-737-2959).

Food Science Department Spearheads Drive for CAPP

The planning stage for the new Center for Aseptic Processing and Packaging Studies is in full swing. North Carolina State University, the National Science Foundation, and Virginia Polytechnic Institute and State University are making major commitments to this project, both with faculty time and financial support. Emphasis of the Center is directed to stimulating industrial interest in basic research that will lead to long-term collaboration between the university and industry in aseptic processing and packaging studies.

The major research programs and projects presently proposed for the Center include:

Integrity Control
- Measurement of thermal treatment
- Process evaluation

Product Properties
- Chemical changes and reactions responsible for color, flavor and nutritional alterations
- Thermal and viscometric properties of fluid biomaterials

Surface Characteristics and Interactions
- Adherence of bacterial spores to product contact surfaces
- Chemical effect on spore adherence
- Fluid component interactions with contact surfaces

Non-traditional Processing
- Incorporation of irradiation
- Incorporation of biocides

Although personnel and facilities from several departments at NCSU and VPI & SU will be involved, the Food Science Department at NCSU will provide the management and research leadership for the Center. Seven Program Managers are housed in this department. Each is supported by the state of North Carolina with modern well-equipped laboratories, full-time technicians and graduate students.

Also at NCSU, two Program Managers each are housed with equipped laboratories in the Departments of Biological and Agricultural Engineering and Chemical Engineering. At VPI & SU two Program Managers with laboratories are housed in the Department of Food Science and Technology, while one is in the Department of Agricultural Engineering.

A Planning Conference has been scheduled for Raleigh for November 16-18. This meeting will bring together university researchers, industry leaders and National Science Foundation representatives in an effort to finalize plans for the Center. As soon after the Planning Conference as possible, the first year's budget will be adopted with projects selected. The planning stage is being financed by a planning grant from the National Science Foundation. E.R. Swartzel is the principal investigator of this grant and acts as the contact person of the Planning Conference (737-2959).
David P. Green, Food Science Extension specialist at Seafood Lab in Morehead City began work Jan. 1. Green earned his B.S. in 1976 from Davidson College, his M.S. from East Carolina University and is working on a Ph.D. in Food Science at NC State. Green fills the position left vacant by Sam D. Thomas.

Leon C. Boyd, joined our dept. on July 1 as Asst. Prof. He received his B.S. in biology and his M.S. in 1971 from NC State. He received his Ph.D. in 1984 in Nutritional Science from Univ. of Maryland. He served as a food and drug officer, NCDA from 1973-76 and as Asst. Prof., NC A & T in 1976 and 1983-86.

Department Honors

The National Association of State Departments of Agriculture, at its convention in Baltimore, awarded our department its 1986 NASDA - KOR Nabisco, Inc. Award for Excellence in Agricultural Technology Instruction for the Southern region at a banquet on June 21. The award includes a $7,000 stipend. H.P. Fleming received the U.S.D.A. Superior Service Award for pioneering research on vegetable fermentation. Secretary of Agriculture Richard Lyn made the presentation to Dr. Fleming in Washington, D.C. on June 4. H.E. Swagwod is the recipient of the Mich. St. Univ. Department of Food Science and Human Nutrition Distinguished Alumni Award in Food Science for 1986. The presentation was made at Dr. Swagwod's seminar at Mich. St. Univ. on June 5. Dr. Swagwod conducted a two-week course entitled "Topics in Modern Biology" at Univ. of Puerto Rico, in February. T.K. Klasenhammer received the N.C.D.A. Sigma Xi Research Award for 1986. Dr. Klasenhammer was one of three "State" faculty recognized for outstanding research programs. Dr. Klasenhammer gave an invited seminar on his research at the NASD faculty meeting in May.

Other Department Activities

The second John L. Rochelle Memorial Lecture was held on March 21. The presentation was made by H.J. Senn, Prof., Food Science and Technology, Univ. Calif., Davis. His subject was "The Aspects of Yeast Biology." Associated with this lecture was the installation of the 1986-87 officers for Phi Tau Sigma. J.K. Rushing is serving as the new president of Phi Tau Sigma. B.B. Carseen was recently elected chairman of the Carolina-VA Section of IFT. Dr. Tropical N. E., Norwegian Food Research Instit., is completing a one year sabbatical with M.A. Rushing. Dr. S. A. Anderson, of the Swedish Food Inst., begins a one-year sabbatical in July in the USDA Food Fermentation Laboratory. C.T. Young, returns to his peanut research program in July, after a four month sabbatical at Univ. Calif., Davis.

Recently promoted to Assoc. Prof., with tenure, were D.H. Pilkington, Meats Extension, and B.W. Sheldon, Poultry Products Research. Retirements, as of July 1, include N. C. Miller, Jr., Spec.-in-Charge, Extension, and Billie T. Tabbell, Accountant Technician.

Durward P. Estes is the new Dean, S.A.S. He was previously Assoc. Dean, and Dir. N.C. Agri. Res. Sec. R. H. Wood, Assoc. Dir. Found. and Dev., and for many years associated with the Dairy Foundation, died on June 18, as a result of complications following heart by-pass surgery.