Graduation in Schaub Hall

DEPT. HEAD: May 14 again brought the annual pageantry of graduation. On a cloudy Saturday morning, faculty and graduating students in full academic dress filed into Reynolds Coliseum before the thousands of parents and friends gathered to observe the occasion. This was the first graduation exercise involving our new Chancellor, Dr. Bruce Poulin. At the graduation ceremony, degrees were conferred in mass to the graduates of each school presented by the dean of that school. Only Ph.D. candidates received their diplomas individually. The recession brought the new graduates out of the coliseum into the brilliant sunshine and warmth of a North Carolina spring Saturday.

Graduation was personalized for each new graduate by awarding diplomas in the individual departments. Thus, graduates, parents, and faculty gathered in Schaub Hall for these activities followed by refreshments. We look forward to this occasion, for it makes personal the graduation of each student with the faculty involved in their college career and acknowledges the vital role of the family in such an endeavor.

This year 29 students graduated from the department: 18 B.S., 7 M.S. and 4 Ph.D. of the 12 graduates receiving B.S. degrees in the May graduation, three are going on for further education (two in food science and one in dental school). Five students are still in the process of looking for jobs.

Job openings were tight again this year. While there appeared to be a slight increase in opportunities compared to a year ago, many of the openings were more specific in the qualifications desired, thus limiting those eligible. Many sources are identifying the remainder of the 1980's as a time of surplus of college graduates relative to job opportunities. We are not sure this will be true for food science. What do you think? We would like to learn some of your thoughts about this so we can more effectively work with students.

We graduated an extremely bright group of seniors. Eight of 12 finished with a GPA above 3.0 compared with three of eight a year ago. This fall we will have seven seniors with a GPA above 3.0 compared with 15 last fall. In 1982 we had four juniors with a GPA above 3.0 and this year only one. This year is better for both sophomores and freshmen with five having GPA's above 3.0. Last year we had none.

Our undergraduate students are fortunate to have the support of a fine scholarship program made possible through gifts to the department. In the past two years our scholarship program was significantly expanded through large gifts from the estates of John A. Nash, Margaret B. Neely and Harvey L. and Kathleen R. Barnes. We are deeply appreciative of this support and for its significance in assisting students to complete their undergraduate education.

This spring we initiated a Departmental Annual Report. This publication summarizes teaching, research, and extension activities within the department. If it is useful to those who receive it, we plan to continue the effort. If you have not received a copy and want one, please write to me and I'll see that one is sent to you. We would greatly appreciate learning of your reaction to this endeavor and this first report. Send me any comments you have and we'll use them in evaluating this effort and whether it should be continued.
For anyone wishing a copy of either the total long range plan for extension or a copy of the Food Science Extension Long Range Plan, please contact us.

In May, Food Science Extension conducted ten "Food Handling Workshops" at IBM at the Research Triangle Park and trained over one hundred food service personnel in sanitation and safety.

Phi Tau Sigma: In April, Phi Tau Sigma, the Honor Society for Food Science initiated several new members. They were: (Undergrads) - Georgy Alderman, Diane Barty, Suzanne Cano, Karen Cranefill Ann Kuhl, Karen Hoffman, Phillip Bakes, Craig Smith, Susan Stangel, Stephen Tracey; (Grad. students) - Susan Breyfoot, Jane Burgarella, Jose Montejo-Gaitan, Mickey Partish, Susan Read, Tim Young; (Faculty) - Peggy Poegeding, Steve Schwartz, Allen Poegeding.

New Research Funds Received:
The Department of Food Science has received $98,000 from the N.C. Attorney General to support nutrition-related research. The funds represent North Carolina's share of a $31,000,000 antitrust settlement involving alleged nationwide fixing of wholesale prices before 1973 in school lunch programs. The federal judge hearing the case required each state to submit a plan for the use of the portion of the settlement divided among state governments based on the population at the time of the alleged price-fixing. The Department of Food Science was requested to develop a proposal for use of such funds involving research whose results would be beneficial to children.

The funds will be used to support two research projects. The first, to be directed by Mrs. Shirley Urey, will involve the development of nutrition information directed to day care centers. The extent of nutrition information and training available to personnel in those centers is limited. Printed materials will be developed for use by day care center operators in planning and preparing nutritionally-sound meals for the children. Nutrition workshops will be given at locations throughout North Carolina, arranged so that they will be available to day care center personnel across the state.

The second project, directed by Dr. George Cattagni, will develop an effective method for measurement of beta-carotene (vitamin A) in sweet potatoes. This procedure will be expanded to analysis of beta-carotene in a number of food sources, such as sweet potato products. A sensitive, rapid analytical method is needed for this important vitamin.

These funds will serve as seed money for the two projects. About two-thirds of the funds will be used in the project for day care centers. This project will be incorporated into the department's extension program and will be continued with existing personnel and funds.

The citizens of North Carolina, particularly children, should significantly benefit from the use of the funds for these two research projects.

Seafood Research and Advisory Service: The seafood program in the department has had sizeable support from the Sea Grant College Program of NOAA, U.S. Department of Commerce for a number of years. This support continues and two research projects were funded for two years each beginning January 1, 1983. One titled "Thermal Gelation Mechanisms and Textural Properties of Engineered Seafood Products" is directed by D.D. Ranieri and T.C. Lohier and E.B. Thomas. The
Faculty Activities: H.R. Ball, Jr. completed a one year term as chairman of the curriculum committee, AMS. R.E. Carawan received the Cary Citizen of the Year award for 1983, presented by the Cary Chamber of Commerce. Roy gave an invited paper at IPT in New Orleans at the session "Managing Food Eng. to Meet Regulatory Concerns". E.R. Foegeding presented invited papers at "Pickles For Packets" in Fia., and Kraft Packets in WI. B.R. Hannon spent a two month study leave at the Canadian Defense Res. Estab. in Alberta, Canada developing new techniques for his research program. E.A. Foegeding received a new grant from the Nat. Pork Prod. Coun. to work on loutfat frankfurters. D.P. Foegeding presented an invited paper on bacterial spoilage in food systems at IPT in New Orleans. J.R. Keaton received a new grant from the Inter. Wheat Gluten Assoc. to work on binders for frankfurters. T.R. Klaenhammer gave an invited paper to Amer. Soc. Micro (ASM) in New Orleans on "Advances in Hunter Culture Bio-Technology". He also has accepted an invitation from ASM as a participant on the "Foundation for Microbiology Lectures" panel for 1983-84. Todd received a research fellowship from Johnson's Wax for work in plasmid genetics of lactobacilli. T.C. Lanier received a new grant from "Gulf & South Atlantic Fisheries Foundation" to develop food ingredients from menhaden. D.H. Pilkington served as an official country ham judge at the Tri-State Meat Proc. and Country Ham Carnes in Greenville, N.C. R.E. Seeligood gave invited seminars on sulphydril oxidation at A.D.S.A. in WI. and Kraft Foods in Ili. Harold will be spending Sept. thru Nov. at NIH in Md., doing research on the use of specific antibodies for recognition of protein structure. S.J. Schwartz co-chaired a session at IPT in New Orleans concerning color and pigments. L.G. Turner is the first dept. member to receive a national award. He was selected a teaching fellow of the "Nat. Assoc. of Coll. & Teachers of Ag." The award was presented in June in Manhattan, Kan. F.R. Tarver, Jr. was elected a Fellow of the Institute of Food Technologists and was honored at the annual meeting in New Orleans in June. Fred has also been appointed to the F.A. and by-laws commit. for IPT. R.E. Seeligood gave an invited paper (co-authored by R.E. Carawan) to the South Atlantic Seafood Conf. in Wilmington. W.D. Walter received the Certificate of Merit from the U.S. Dept. Ag., Ag. Res. Ser. for outstanding productivity in his research program. S.H. Ury received the extension award for the "most productive educational program". E.B. Young received a grant to assemble research data on imported peanuts. Clyde has given invited papers to the "Southwest Peanut Quality Improvement Comm." in Dallas and to IPT (VA-NC). New faculty with associate membership in the dept. are: E.B. Brackett and N.E. Topete (Foods & Nutrition Ext.), R.H. Horton (Biochem.) and N.E. Partee (Bio & Ag. Eng.).

Extension (N.C. Miller, Jr.): "The North Carolina Agricultural Extension Service (of which the Food Science Extension group is a part) is in the process of developing a new long range plan. This is the fifth in a series of long range plans dating back to 1961. While long range plans are not meant to be "set in concrete", they have provided a series of goals both for the extension service as a whole and for each person as an individual. They have been worthwhile as 'roadmaps' in giving overall direction.

The new long range plan will emphasize program areas in which several specialists will be involved, and at the same time all commodity areas will continue to be serviced as they have been in the past. For instance, a new program area will be related to food regulations and food safety. Dr. Max Gregory will be the general contact person for this facet of our program. He will keep all other specialists, the industry, and other interested parties informed of current events in the overall category of food regulations and food safety. He will institute newsletters, "Timely Tips", conferences, seminars, workshops, etc. in this area. He will keep himself current on all phases of regulations and safety as it applies to the food industry in general. The individual commodity specialists will continue to work with their commodity groups in collaboration with Dr. Gregory. Individual specialists will be called upon to work with Dr. Gregory in planning and conducting conferences, workshops, seminars and other programs. They will also be regular contributors to such things as newsletters, releases, etc. It is felt that this programmatic approach to problem areas will be more effective.

Other program areas are: water, waste and energy, Dr. Roy Carawan, leader; raw product quality and quantity, Dr. Norman Miller, leader; quality assurance, Dr. Fred Tarver, leader; improved efficiency and technology, Dr. Dwain Pilkington, leader; food sanitation, Dr. John Bushing, leader; consumer affairs, Dr. Frank Thomas, leader; quality food preparation, Mrs. Shirley Ury, leader; and 4-H and youth affairs, Dr. Lynn Turner, leader. The commodity areas will continue to be serviced by Dr. Tarver, poultry; Dr. Pilkington, red meats; Dr. Bushing, dairy products and refrigerated foods; Dr. Frank Thomas and Mr. Sam Thomas, seafoods; Mr. Miller, fruits and vegetables; and Mrs. Ury, day care centers.
advisory services program directed by F.B. Thomas also received continued funding and will be helping the seafood industry with their planning and problems. An encouraging development is that Ribon Products International, Inc. has decided to locate a 3-4 million dollar seafood product processing plant in the Raleigh area. The plant will produce restructured products from surimi. They state that one reason for selecting Raleigh was the technical support available from North Carolina State University.

New Research Equipment: Alfa-Laval of Lund, Sweden has recently made a new steritherm processing system of fluid foods available to the thermal research program at N.C.S.U. on a leased-loan agreement. With the new equipment, the internationally recognized thermal research program in the dept. will take on new dimensions. Specific programs to benefit include system modeling for quality assurance; L to R - Bizik, Swartzel, Jones; and research on fouling and cleaning of process heat exchangers.

Academic Affairs (V.A. Jones): "Enrollment levels in all programs held steady in 1989. Seventy-two students were pursuing a B.S. degree, 47 graduate degrees and 22 an associate degree. U.S. students comprised 88, 64 and 100% of the food science majors in the B.S., graduate and two-year programs, respectively. Black enrollment represented 14, 3 and 36%, respectively, of the U.S. students. The percentage of female students in the three programs were 72, 36 and 45%, respectively. In the baccalaureate program, 24 students received scholarships. Six of these were in national competition. Ann Fulp, Ruth Price, Phil Rakes, and Susan Stancil were awarded IPT scholarships. Karen Cranfill and Phil Rakes received NPFMA and ADRA scholarships. IPT graduate fellowships were awarded to Mary Ellen Sanders and Cathy Wright. Susan Barefoot won aRalston-Purina Fellowship. A cooperative transfer program has been established with Catawba Valley Technical College in Hickory, NC. Students would spend three quarters at C.V.T.C. and transfer to N.C. State to take the remaining courses required for an associate degree in food science."

S.A.L.S.: The School of Ag. and Life Sci. at N.C.S.U. has presented its 10th annual Distinguished Alumnae Award to G. Brantley DeLoache of Durham.

The selection was made through a vote of the school faculty.

In announcing the award, Dean J.R. Legates said, "Brantley has devoted his life to agriculture and to those associated with this vital profession."

DeLoache is senior V.P. and assis. gen. mgr. of PO, Inc., but he is best known for his leadership with Cant. Carolina Farmers Exchange, Inc. in Durham.