Lineback summarizes Food Proc. Conf.

GREETINGS FROM THE DEPT. HEAD

We hope that you enjoy the new format for our Newsletter. This change will allow us to expand future issues if publication and mailing costs do not become prohibitive. One feature planned for future Newsletters will contain information and news from our alumni. Please let us hear from you with news of your position and location, and your response to the new format. We do not promise to include all news received, but will do our best.

As you will note in other sections of this Newsletter, faculty changes continue to occur in the department. Norman C. Miller, Jr. retired as Specialist-In-Charge of Extension on July 1. F.B. Thomas has been named Acting Specialist-In-Charge. A national search has been initiated to find a qualified individual to fill this position. If you know of a potential candidate, please let me know and I will see that the individual is contacted with information concerning the position and a request to submit their credentials for evaluation. Dr. Leon Boyd joined the faculty as an Assistant Professor on July 1 on a new research/teaching appointment. Two visiting professors have enriched our department this year. Dr. Rolf Anderson of the Swedish Food Institute is working with Dr. Mark Daeschel for a year. Dr. Cheng-yi Lii, Academia Sinica, Taipei, Taiwan, recently spent three months with Drs. Lineback and Schwartz.

Our teaching and research programs remain strong. Student placement has been good and the demand will apparently continue from all we can ascertain. The Department is scheduled for a comprehensive CSRS review in September, 1987. The review team will be headed by Dr. Richard Garner, CSRS, USDA, Washington, DC, and will have four outstanding academic food scientists as members. This should enable us to receive a thorough, critical review which will assist in strengthening our teaching, research, and extension programs. We are currently discussing means to increase our effectiveness in recruiting outstanding students for our graduate, undergraduate, and agricultural institute programs. Increased enrollment in the latter two is one of our goals.

Three areas to which the department will be directing attention to increase our overall strength include: a) increasing research funding to approximately double its present level (a feat which will be difficult to achieve, but needs to be done); b) more effective integration of research and extension efforts; and c) additional food science course selections at the undergraduate and graduate levels, with particular emphasis on the latter. Accomplishing these objectives will require time and considerable effort, but will enable us to continue to be one of the strongest departments in the country.

This will be one of the tightest years yet experienced by the Department from a budgetary viewpoint. Federal and State reductions to meet mandated goals have resulted in little new money being available to meet inflationary increases. Virtually no money is being made available for equipment purchase and replacement. This will become one of the great problems throughout the Department as our scientific equipment becomes older and need replacement. New equipment is needed. Another major need is in the area of discretionary funds which can be used for bringing guest scholars to campus as seminar speakers, for travel by faculty (particularly new faculty) who need to attend meetings and/or conferences, for printing and mailing the Newsletter, and other similar needs which do not directly relate to one of the specified categories of appropriated money.

If you have questions about any of the above or desire additional information, please contact me. Your ideas and concern are welcome and extremely helpful in planning our future.
On November 25, 1986, F.B. Thomas, Dept. of Food Science, and L.G. Wilson, Dept. of Horticultural Science, NCSU served as co-chairmen of an all-day food processing conference. An interagency planning committee of eight arranged the program. Represented were N.C. State University, N.C. Dept. of Agr., N.C. Dept. of Commerce and the N.C. Agri-Business Council.

J.A. Graham, N.C. Commissioner of Agriculture, welcomed all to the morning session and discussed the complexities of processing perishable commodities and their contribution to N.C. agriculture. D.F. Bateman, Dean, School of Agriculture and Life Sciences, related the needs for university inputs through research and extension in furthering N.C. processing opportunities. A.H. Ward, Director, Business Industry Development Division, Dept. of Commerce, explained the methodologies used in attracting and developing industries. Ford Harding, a consultant, discussed the needs in establishing facilities as seen from a non-agency point of view.

Activities related to the need for capital were explained by J.R. Futrell, Jr., Pres., Planters National Bank. W.M. Green, owner, W.M. Green Co., related his success story commitment and perseverance in developing a snack food into a national market. A.E. Denton, Senior Vice President, Campbell Soup Co., Camden, N.J. related how processors could use more N.C. fruits, vegetables and seafoods. A.A. DeHertogh, Head, Dept. of Hort. Science, led a panel discussion on "Responses, Reflections, Experience and Needs" for food processing.

Participants on the panel were:


A conference highlight was the luncheon address by Governor James G. Martin, who was introduced by F.D. Hart, Vice Chancellor for Research, NCSU. Governor Martin called for exploring the construction of three agricultural parks for processing food in the western Piedmont and in the state's southeast and northeast regions. He stated, "By providing single, integrated operations, we could expand opportunities for production of value-added products, expand profit margins and create new jobs." He also announced the establishment of a task force to map out development of the food processing industry. The task force will be a key element in our efforts to develop new markets and opportunities for North Carolina farmers.

D.R. Lineback, Head, Food Science Dept., wrapped up the conference with a summation of the day's presentations. In closing the conference he quoted a comment by W.M. Green, "that we need to perceive, pursue and persist for a successful food processing industry in North Carolina."
Academic Affairs - (V.A. Jones)

Twenty-six undergraduate and two-year students have been awarded scholarships to continue their education in food science. The 1986-87 undergraduate recipients are: Patricia Butcher, Terry Caviness, Robert Chestnut, Anna Coffin, Oluwafemi, Lisa Hansen, Kim Helmkak, Donna Hennessy, Dale Hunt, Glenda Jones, Stanley Leslie, Beth Martin, Gray Rushin, Rabah Saadi, Marjorie Smith, Sally Smith, and Dean Walkon. Smith. Undergraduate scholarships were provided by the NC Dairy Products Association, Tarheel Supplemyenl's Association, Stouffer Foods, and endowments in the name of Harvey L. and Kathleen Barnes, Benjamin Wesley Kilgore, Nell and Helen Kiser, and J. Frank and Margaret Neely. The previous Newsletter reported that six undergraduates were selected in national competition for IFT scholarships. Since that report, Marjorie Smith has also received an IFT Scholarship.

In the two-year Food Processing, Distribution and Service Curriculum, the scholarship recipients were: Thomas Chason, Linda Davis, Eric Fowler, Johnny Hayes, Lawrence Price, Wayne Reavis, Darrell Smith, Jane Sorrell and Elaina Wheeler. The scholarships were funded by Phillip Morris, N.C. Dairy Products Association, the N.C. Meat Packer's Association (John W. Long Scholarship), the H.E. and Lena Mate Scholarship and Benjamin Wesley Kilgore Scholarship endowments.

Since May, 1986, nineteen students have received degrees from the Food Science Department. Those receiving B.S. degrees include: Chris Morris (New Jersey), Kim Helmkak (New York, N.C.), Donna Hennessy (Pennsylvania), Glenda Jones (Monroe, N.C.), Gail Kletch (Virginia), Gray Rushin (Michigan), Dean Walston (Maryland), Anna Wilson (Durham, N.C.) and Rene Wise (Rocky Mount, N.C.). The M.S. degree was awarded to Larry Macintosh (Virginia), Peter Muriano (Connecticut), Raul Pinedo (Venezuela), Deborah Saliba (Wisconsin), and Vickie Virdorth (Tennessee); and Ph.D. degrees were awarded to Larry Steenson (Minnesota), Jamil Nazer (Saudi Arabia), and Arturo Salazar (Venezuela). Two students, Steve Bannentine (Wilson, N.C.) and Steve Martin (Apex) have received A.A. degrees.

Department Honors

C.T. Young was named a Fellow of the American Peanut Research and Education Society. The presentation was made by G.J. Kriz. Agric. Dir., Agri. Res. Serv. E.A. Foegeding was given the "Best Paper Award" by the International Wheat Gluten Assoc. at the Assoc. of Cereal Chemists meeting in Toronto, Canada. D.R. Lineback was selected one of 15, from over 300 nominations, to participate in Purdue University's 1986 "Old Masters" program. T.R. Klaenhammer was presented a "Certificate of Distinguished Scholarly Achievement" in NCSU's first annual honors convocation. Todd was an invited participant at the International Circle of Dairy Research Leaders meeting in the Netherlands in Sept.

Department Activities

A proposal was submitted to the Nat. Dairy Promotion and Research Board for consideration of our dept. as a "Center for Innovative, Thermal, and Chemical Processing of Dairy Foods". T.R. Klaenhammer and H.E. Swaisgood are serving as co-directors. The outcome of this national competition will be known in the spring of '87.

L.C. Boyd, newest faculty member in the dept., has submitted his project proposal to SALS. His experiment station project is entitled "Assessment of lipid oxidation in fish following processing and storage." G.L. Catignani and S.J. Schwartz received a $5,000 Biomedical Research Support Grant. R.E. Carawan gave invitaitonal papers to Amer. Dairy Sci. Assoc. in Calif., and to Amer. Inst. of Chem. Engineers in Boston. M.A. Daeschel spent three weeks in N.Y. participating in an advanced bacterial genetics course. P.M. Foegeding was an invited speaker at XIV International Micro Congress in Manchester England and in Sept. H.M. Hassan gave an invitational paper at M.I.T., Bethesda, Md. T.R. Klaenhammer gave invitaitonal papers to Amer. Dairy Sci. Assoc. in Davis Calif.; Soc. of Ind. Micro in San Francisco, Calif.; Amer. Chem. Soc. in Anaheim, Calif., and Symposium on Ag. and Ind. Microbial Genetics in Virginia.
Beach, Va. D.R. Lineback conducted four classes at Purdue Univ. as part of "Old Masters" program; served as member of CSRS review team at Univ. of Ark. in Sept. and was course director and instructor, AACC shortcourse in Chicago in Dec. B.W. Sheldon gave an invitational paper at the Southern Legislative Conf. in Fort Worth in July; received $5,000 funding from Degussa Corp. to conduct preliminary studies on efficacy of hydrogen peroxide as a disinfectant in poultry hatcheries. H.E. Swaisgood gave invitational seminars for Triton Biosciences, San Francisco and Amer. Chem. Soc.; was named coordinator of the NCSU Biotechnology Program. F.R. Tarver, Jr. served as a volunteer executive in Tabarka, Tunisia in July and Aug. F.B. Thomas is serving as the acting Specialist-In-Charge for Food Science Extension; gave invitational paper to Interstate Seafood Seminar in Ocean City, Md.

James L. Oblinger has been named Associate Dean and Director of Academic Affairs to replace E.W. Glazener who has served North Carolina State University for more than 40 years. Dr. Oblinger is a food scientist (Ph.D.) and (M.S.), Iowa State) and microbiologist (B.S., DePauw) by training. Most of his career was spent at the University of Florida in Food Science. For the past two years, he has served as Associate Dean for Academic Affairs at the University of Missouri-Columbia. Although his office and responsibilities will keep Dr. Oblinger’s major focus on the broader area of Agriculture and Life Science, the Food Science Department is pleased to welcome him as a tenured member of our faculty.

Over 80 food industry personnel attended the Aseptic Processing and Packaging Conference Nov. 10-14, 1986. The conference was divided into two portions; a "Better Process Control School" for certification, and a "Symposium on Application and Advances in Aseptic Technology".

In addition to Food Science faculty, others on the program included persons from the Nat. Food Proc. Assoc. and F.D.A., as well as selected university and industry authorities from outside North Carolina.
On November 16-18, 1986, under the leadership of K.R. Swartzel, a planning conference was held to investigate the creation of a cooperative industry/university research center for aseptic processing and packaging studies. The Department of Food Science at NCSU took responsibility for organizing and formalizing the planning conference and the initial plans for the proposed center. Industry/university cooperative research centers provide a mechanism by which the resources and expertise of universities are aligned to meet fundamental research needs of participating industrial firms. They are supported by both the university and industrial sponsors. Both play a substantial role in policy formulation and monitoring of activities of the center.

Sixty representatives from forty-seven organizations attended the planning conference. It is envisioned that support for the center will come from North Carolina State University, Virginia Polytechnic Institute and State University, The National Science Foundation and member companies.

Participating industry members are expected to receive the following benefits:

* The advantage of increasing the effectiveness of a company’s research investments by combining federal, state, university and industrial resources into a joint, high yield, low cost research program.

* The pursuit of a broader range of projects, even ones with higher risk, than is often possible within a single sponsor organization.

* The opportunity to work closely with CAPPs graduate students and postdoctorial fellows, which will facilitate the identification and recruitment of these individuals to their staff.

* The opportunity to participate directly in CAPPs research as visiting scientists.

* Sponsor personnel will have timely access to research as visiting scientists.

* Aid in reducing the time required for new technology to be put into practice.

* The opportunity to propose research projects related to sponsor interest.

* Royalty-free license to all patents derived from center research.

The planning conference demonstrated a high demand for the center with the outlook being very promising for actual creation in late spring 1987. Three courses of action are currently underway: (1) obtain letters of intent from ten or more companies, (2) obtain a five year NSF grant for initial partial support, and (3) obtain university approval for organizing the center.

NEW DEPARTMENT PUBLICATIONS

There are three new department publications that you may wish to obtain. They are listed as follows:

1) "Department of Food Science" - This brochure describes our undergraduate, and graduate teaching programs as well as summarizing departmental research and extension activities. Photographs illustrate department programs. Photographs and backgrounds of departmental faculty are given.

2) "Graduate Studies in Food Science" - This brochure describes graduate study opportunities in Food Science. Graduate faculty research interests are described, as well as a listing of representative publications for each faculty member.

3) "Food Science Graduates - 1986-87", -Forty-five students receiving, BS, MS, Ph.D. or A.A. degrees are listed. Pertinent details are provided with respect to training, experience, activities, career interests and availability of each graduate.