LINEBACK TO LEAVE N.C.S.U.

Dr. David R. Lineback, Head of the NCSU Department of Food Science for the past twelve years, will be resigning in mid-August to take a new position as Dean of the College of Agriculture at the University of Idaho, Moscow. Lineback earned his B.S. in Chemistry from Purdue University, his Ph.D. in Carbohydrate Chemistry from The Ohio State University, taught at Kansas State University and was Food Science Department Head at Pennsylvania State University before coming to NCSU. Under his leadership, the department has grown in both size and quality to become one of the top food science programs in the U.S. Lineback has served on numerous committees, task forces and review teams for the University, the USDA, and other national organizations related to food science, nutrition, carbohydrate chemistry and agriculture. An author or co-author of over 60 publications, he has received several national awards, including the Carl R. Fellers Award from the Phi Tau Sigma Honor Society. Lineback is nearing the end of a year-long term as President of the Institute of Food Technologists. From this post and as department head, he has been an invited speaker on numerous topics and occasions across the U.S. and abroad. These travels and

(Continued on Page 2)

COMMENTS FROM THE DEPARTMENT HEAD

This will be my last opportunity to write this section of the Newsletter. After nearly 13 years in this position, I am leaving to become Dean of College of Agriculture, University of Idaho, where I will also have an appointment as a tenured professor in the Department of Food Science and Toxicology. As you might expect, it is with mixed emotions that this move is made. Of course, I am excited about the new challenges and opportunities. However, there is also reluctance to leave this department with its excellent faculty, staff and students. There are so many things yet to do, dreams and visions not accomplished and, in some cases, not yet even articulated. It has been a great honor and wonderful experience to be a part of the department for these many years.

Let me take just a few moments to give you a status report on the department. While the state budget is tight and salary increases will be minimal, we do not anticipate additional permanent reductions this year. It appears that we may have to delay filling some positions to allow one-time recycling of funds. This will probably become common in the future. There is little indication that budgets will grow or any of our past losses regained, at least in the near future. Budgets will be tight, causing the department to need to carefully plan both the areas and schedule for filling vacant faculty and staff positions. Strategic planning will become a way of life, as it should, to enable the department to use its limited resources in the most effective manner.

There can be no doubt that faculty will increasingly fund their research programs and graduate students from external sources - grants and contracts. These are becoming more and more difficult to obtain also. Much research funding will involve interdepartmental and interdisciplinary funding because problems to be solved transcend departmental and disciplinary boundaries. Thus, our faculty will more frequently work together and with colleagues from other departments in the university and, in some cases, from other universities in preparing research proposals.

Teaching remains the heart of the university. The perception is that major research universities, of which N.C. State is one, have given priority to
research rather than teaching. There is some truth to this. In the years ahead, teaching must be given more attention. We have excellent teaching faculty in the department who also have research appointments. The department will continue to work to create a climate in which excellence in teaching is anticipated and recognized. This is part of the departmental strategic plan, arising from the report of a departmental teaching improvement committee.

The faculty and staff of the department are outstanding. Several faculty have been recognized locally and nationally for their contributions in teaching, research and extension. As one example, the department has three William Neal Reynolds Professors, named for outstanding research programs and accomplishments; no other department in the college has as many. The department is recognized as one of the best in the nation in terms of its programs in undergraduate and graduate teaching, research and extension. The challenge is to maintain and improve that strength and excellence. It is often easier to attain a goal than to maintain it, once it has been reached. Our faculty are capable of maintaining excellence, if all are committed to that. A departmental vision in which all can take ownership, with subsequent “buy in”, is necessary and is being developed through the strategic plan. The plan is in its second year of operation and has just been revised at a faculty retreat.

In summary, the future is bright in spite of current economic conditions and continuing restrictions that will continue in the years ahead. The department is blessed with outstanding faculty, staff and students who can meet the challenges ahead. They will need the help and support of our alumni and industry colleagues, as you have given in the past. It has been a pleasure to be part of this department; that will never change. I thank each of you and each of the faculty, staff and students for the opportunity to learn from them and for their support. My wishes for the department and all concerned with it will continue to be for excellence and success.

-David R. Lineback

(Lineback to Leave- Cont. from Page 1) contacts have brought national and international recognition to the NCSU Food Science Department.

A farewell reception is planned for Dr. and Mrs. Lineback on July 27, 1993, 6 to 8 P.M. at the Page-Walker Hotel in Cary.

NCSU Dean Durwood Bateman met with the Food Science Faculty on June 25 to discuss the continued leadership of the department. The faculty nominated and Dean Bateman appointed Dr. Ken Swartzel, Wm. Neal Reynolds Professor, to serve as Interim Department Head until a permanent replacement for Lineback is selected. The Dean has appointed a committee to conduct a national search for a new Food Science Department Head. The search committee will be chaired by Dr. Thomas Monaco, Department of Horticultural Science, and consists of six faculty members from Food Science and one each from Animal Science and Poultry Science.

FOOD SCIENCE AWARDS BANQUET

The Food Science Club sponsored the Twenty-Seventh Annual Awards Banquet at the Faculty Club in April to honor the recipients and show appreciation to the donors of the nearly $25,000 of scholarship aid that is awarded by the Food Science department to deserving students. These 1992-93 scholarships were awarded to all students in the department with a 3.0 grade point average or better. Recipients from the fourteen undergraduate scholarship funds in the department were: Michael Barnett, Patricia Barrientos, Maria Carpetto, Carolyn Colley, Vanessa Daniels, Diego Darquea, Rachael Doeffer, Angela Douglas, Nicholas Flanigan, Juan Florido, Tiffany Fox, Cheryl Gaither, David Guisbert, Hillary Hunt, Wendy Jackson, Priya Kandar, James Parker, Leigh Plemmons, Angela Poland, Anna Reich, Adela Robertson, Deana Robinson, Craig Sherwin, Shannon Teague, Carol Tompkins, Matt Upton, Simon Williams, Christy Wilson, Thomas Young and Jackie Young. Recognition was given to the ten 1992-93 IFT Scholarship winners, and to Carolyn Roff and Ellene Bowland, graduate students who received the Hershey Foods Scholarship.

Winners of special awards for scholarship and leadership were announced. Diego Darquea and Christy Wilson received the Crouch Achievement Award and the Ambrosia Chocolate Award for the highest grade point averages in the junior and senior classes, respectively. For overall leadership, service and academic performance, the Forbes Leadership Award and the B.M. Newell Award were given to Diego Darquea and Carol Tompkins, respectively. Dr. Pat Curtis, Food Science Club Advisor, presented the awards for the Food Science Club Outstanding Undergraduate and Graduate Members to Christy Wilson and Darrel Taylor, respectively. An enlightening talk on the international aspects of the food industry was presented by Dan Dennison, Vice president for Quality Assurance and Research, Coca-Cola USA. To close the evening, Christy Wilson expressed warm appreciation to all the donors of the scholarships and awards, and explained the importance of the recognition and financial help to the success of undergraduate students in Food Science.

Food Science News is produced in the NCSU Department of Food Science for alumni, friends, faculty, students and others interested in departmental activities. Comments, personal and professional updates from alumni, and address corrections/additions/deletions should be sent to: J. C. Allen, Editor, Food Science News, 236 Schaub Hall, Box 7624, North Carolina State University, Raleigh, NC 27695-7624. PRINTED ON RECYCLED PAPER.
TEACHING HIGHLIGHTS

An issue of current concern at N. C. State University and at other universities around the country is the relative importance of teaching in departments that have substantial research components. Faculty in the Food Science Department have more than half of their effort allocated to research or extension, yet commitment to providing a high quality educational environment is a priority. Efforts have been made this year toward improving teaching, providing resources, and increasing the quality and diversity of our students.

Teaching Task Force

Over the past year, a Teaching Task Force, chaired by Dr. D. D. Hamann, formulated a series of recommendations on creating a climate that encourages high quality teaching. The recommendations focused in the areas of administrative expectations and rewards for good teaching, training and course improvement, proper attitude development, and evaluation.

Most Ph.D. graduates in the sciences receive little formal course work or training in educational theory or practice. The Task Force recommended that both new and established faculty take advantage of opportunities to learn more about effective teaching methods, such as the CALS Teaching Effectiveness Workshops, mentoring between good teachers and new faculty, and peer review and discussions for improvement of existing courses. A teaching effectiveness retreat to review learning theory and its implementation in courses was advised.

The Task Force recommended development of an attitude that stimulates respect for outstanding teaching in the department. This entails recognition of the value of both graduate and undergraduate teaching to the department and profession, and nominating teaching faculty for appropriate awards. Potential teaching ability of prospective new faculty should be emphasized in the hiring process.

It is difficult to improve teaching without effective feedback from students, alumni and other sources. The Task Force recommended improvements to the course evaluation form. Similarly, both the Undergraduate and Graduate Committees have developed extensive plans for assessing and evaluating our teaching programs as part of a University-wide review for re-accreditation. Forthcoming implementation of those plans will call for the cooperation of alumni and their employers.

The assessment plan calls for sending confidential survey forms to companies that employ our former students to determine the kinds of jobs held, comparison of our graduates with those from other universities, relative strengths and weaknesses of the employee, and suggestions to improve our educational program. The survey forms to be sent directly to former students will request more specific information about the quality and usefulness of their educational experiences, coursework, and extracurricular activities at NCSU in relation to their current employment. Please watch for these surveys in your mail and return them so that we may improve our programs.

Computer Literacy

With the help of a $5,000 award from the Academic Programs Office of the College of Agriculture and Life Sciences, the Department of Food Science recently purchased three new computers for use in undergraduate courses. One DOS computer and two Macintosh LCIII microcomputers have been added to the older Macintosh and IBM microcomputers purchased over the last few years. Priority for scheduling use of the new computers is given to undergraduates, particularly for Food Science course work. Use of computers is required in Nutrition and Food Engineering courses, and once familiar with the systems, students choose to use the computers to complete assignments for their other courses. Word processing, graphics, spreadsheet and database management programs are taught in these courses. The new hardware will significantly add to our students' ability to master some of the computer skills needed in the work places they plan to enter.

Minority Scholarships

The Food Science Department has received support from four food companies to help with recruiting and education of minority students in food science. Gerber Products Company and Hershey Foods Corporation have joined Nabisco Food Group in providing funding for our Corporate Scholars Program. The goal of the program is to educate an increased number of minority students for job placement with major food companies that seek to increase the ethnic diversity of their professional workforce. The program will provide $5,000 in scholarship aid for a five semester period to minority students transferring into the Food Science Curricula from community colleges, junior colleges and other four-year programs. The companies will also offer summer internship experiences to their designated Scholars. In addition, McNeil Specialty Products Company has provided financial and in-kind support for recruiting qualified students. The application process is open for students to enroll in the Fall or Spring semester. Interested students or counselors should contact Dr. Peggy Foegeding, Undergraduate Coordinator, (919)515-2951.

Dr. Art Hansen with May graduates
CENTER REPORTS

Center for Aseptic Packaging & Processing Studies (CAPPS)

During our recent Industry Advisory Board (IAB) meeting at the North Carolina Biotechnology Center, several new developments were announced.

Hershey Foods Corporation was welcomed to the IAB as the newest member. Vince Nason, Hershey's representative, is well versed in aseptic technology. He is a graduate of Rutgers and worked at Ocean Spray and Campbell Soup before coming to Hershey.

The IAB voted to expand the CAPPS program by forming a consortium with the University of California-Davis (UC Davis). This consortium will make lab facilities and faculty expertise at UC Davis available for CAPPS research. Dr. Shari R. Shoemaker, who is presently the Director of the California Institute of Food and Agricultural Research (CIFAR), will become Site Director at UC Davis.

CAPPS is also expanding into the international arena. A $100,000 grant has been secured from NSF to establish an educational and research partnership between CAPPS and the Institut Pertanian Bogor (IPB), Indonesia. This program will continue over a two-year period and will involve the exchange of faculty and students, training of students and personnel, and cooperative research projects. The ultimate goal is the creation of an industry-university linkage in Indonesia patterned after the CAPPS program. The formation of a CAPPS-accredited processing control schools is also anticipated.

In May, Drs. Rushing, Schwartz and Swartzel from NCSU and Dr. Barrett from UC Davis conducted a short course on Thermal Processing and Aseptic Technology at IPB. Approximately 70 industry and academic personnel attended this workshop. Representatives from IPB also plan to attend the CAPPS fall IAB meeting scheduled for November 1-3.

Food Processing Environmental Center (FPEC)

The Food Processing Environmental Center (FPEC) planning team, Drs. Roy E. Carawan and Brian W. Sheldon, organized and held two focus group sessions. The National Food Industry Environmental Focus Group and the North Carolina Food Industry Environmental Focus Group were held on NCSU's Centennial Campus on March 22-23 and April 20-21, 1993, respectively. The purpose of these sessions was to engage industry management officials in a discussion about the food industry and the environment.

Representatives of environmental management divisions of major food companies and food-related associations from all over the country participated in the discussion. Several observers also attended, including a representative of the National Science Foundation centers programs. The main topic of the discussion was environmental issues and industry's concerns. Specific concerns identified include: food safety, communication, competitiveness, regulatory compliance, costs and the future of American industry. The general consensus was that the firmly held belief "if it isn't broken, don't fix it" of the past does not apply in today's global market. Becoming environmentally proactive is necessary for remaining competitive. Communication within the company, between companies, and with those outside of industry is vital and needs to be improved upon. The group expressed a wish for a central information management source, such as a nonprofit academic institution, that would maintain a data base, provide education and training for management, educational programs for plant personnel, and facilitate communication with legislators, etc.

The North Carolina Food Industry Environmental Focus Group was patterned after the National session, and the concerns expressed by this group were very similar. Specific concerns were the limited space and costs for waste disposal, packaging waste, the overall costs for meeting environmental regulations for smaller companies, public misconceptions and the need to educate the public and the regulators, the dichotomy among federal, state, and local regulations, wastewater treatment and disposal, and the quality and availability of present and future water supplies. The following management officials attended: Victor Beverage, Plant Manager, Cates Pickles; Robert E. Burrage, General Manager, Cabarrus Creamery Co., Inc.; Jim Daly, Plant Manager, Miller Brewing Company; Charles (Buddy) Gaither, General Manager, Milkco Inc.; Charles H. Harper, Vice President of Operations, GoodMark Foods; Rick Harrell, Environmental Manager, Perdue, Inc.; Deborah Johnson, Public Relations Coordinator, Prestige Farms; Mildred Jones, Vice President, Maola Milk and Ice Cream Co.; Bill Kaser, Plant Manager, Fleischmann's Yeast; Fred Keller, Vice President, Western Steer-Mom & Pops; Kenneth Moser, Vice President, Western Steer Restaurants; and William Sauls, Sr., Vice President Operations, Austin Foods Company; Grant Smith, General Manager, Superbrand.

Southeast Dairy Foods Research Center (SDFRC)

The Operational Advisory Committee of the SDFRC met on June 11 to review project proposals for the next round of funding. Projects had been previously reviewed for technical merit by the Technical Advisory Committee. Several projects were approved for one or two-year periods. Funding is contingent on a final contract between NCSU and the National Dairy Promotion and Research Board, for renewal of the Center. The current estimate of initiation of the new projects is January 1, 1994.
FACULTY ACTIVITIES

Jonathan Allen was appointed as an NCSU representative to the Board of Scientific Directors to the Institute of Nutrition, University of North Carolina. Drs. Allen and Duane Larick were initiated as full members of Sigma Xi. The Scientific Research Society, as were Research Associates Ashwini Kumar and Sevugan Panalippan, at the initiation Banquet in April.

Awards in recognition of service to the University by alumni, faculty and students were presented at the annual Alumni Association Awards luncheon. Dr. Todd Klaenhammer was the recipient of an Alumni Distinguished Professor Award for graduate teaching. Dr. Kenneth Swartzel received and Outstanding Research Award.

The Board of Governors of the University of North Carolina approved a number of promotions in the department, effect July 1. Dr. Jonathan Allen was promoted from Assistant Professor to Associate Professor with tenure. Promoted from Associate Professor to Professor were Drs. E. Allen Foegeding, Peggy Foegeding, Steven Schwartz, Dwayne Pilkington and Don Ward.

Dr. Roy Carawan presented testimony before a committee of the Office of Technology Assessment, United States Congress. The information presented concerned the use of technology to address environmental concerns for agribusiness enterprises. He was a participant, gave two presentations, and served on a panel at the 1993 Spring Dairy Industry Conference in Sacramento, CA; was a featured speaker at the Clean Water Act Compliance Course in Washington, DC; participated in the Food Industry Forum Meeting (an association of trade group environmental professionals) in Washington, DC; and participated in the Engineering Foundation Meeting in San Diego, CA regarding Environmental and Energy Engineering in the Food Industry. He also served on the planning committee and as Program Chairman for the first meeting of the newly formed Carolinas Association of Milk, Food, and Environmental Sanitarians.

Dr. Carawan attended the American Meat Institute’s (AMI) Environmental Committee Meeting in Washington, DC and was invited speaker and session leader at their Environmental Symposium in Denver, CO. He also attended the Synergy Symposium held in Raleigh by CPRL at which Paul Fulton, CEO of Sara Lee Corporation, was the keynote speaker. He helped lead the efforts to develop a Concept paper to submit to the National Science Foundation (NSF). The concept paper was prepared in response to an NSF Program Announcement for the MANAGEMENT OF TECHNOLOGICAL INNOVATION-1993 Focus on Management of Innovation for Environmentally Conscious Manufacturing. Some four NCSU departments were a part of this proposal. The group was asked by NSF to submit a proposal and the 2-3 year potential funding could help provide the funding necessary to help initiate the Food Processing Environmental Center (FPEC).

Dr. Carawan was also recognized for the Pollution Prevention in Food Processing Program with a certificate for “excellence in effort and significant contributions to environmental improvement through Pollution Prevention” by US EPA Administrator—William K. Reilly.

Dr. Peggy Foegeding was invited to give a Shields Lecture at the University of California at Davis on May 12, 1993. Her seminar was entitled “Validation of Process Lethality and the Value of Novel indicator Organisms.” Dr. Foegeding also completed the final phase of the State Agricultural Experiment Station Agricultural Leadership Development Course. The third phase of the course was held in Washington, D.C. June 2 through 4, 1993 and included an introduction to working with legislators and congressional staffs. She has been invited to provide input on the 1995 Farm Bill through a working group on Food Safety formed by the National Association of State Universities and Land Grant Colleges.

Dr. Don Hamann received a $50,000 grant from Nabisco Brands, Inc. for “Determination of Food Material Bulk Properties Utilizing Ultrasonic Propagation”. Drs. Hamann and Lanier helped organize and teach the first of what will be an annual “surimi school” at Oregon State University; Astoria Seafood Lab, with former student (now Asst. Prof.) Dr. Jae Park in March, 1993.

Emeritus Professor Victor Jones was elected to life membership in the American Dairy Science Association at the 1993 Annual meeting in Maryland.

Dr. Tyre Lanier presented research papers at the Pacific Fisheries Technology Conference near Seattle, WA in January, and at the Protein Delivery Symposium at the ACS meeting in Denver. The latter is to be published as a book later this year.

Dr. Jesus Granja Sarria, from Spain, joined the Seafood Group as a Visiting Professor this year. Mr. Heath Dibble, from the Meat Industry Research Institute of New Zealand, will work with Lanier's group for two months beginning late June; Dr. Y. J. Chol will also return for two months to finish work conducted last year.

Dr. Dave Lineback presented an invited seminar on Future Challenges to Food Science and Technology, Dept. of Food Science, Penn State University; participated in CAST Board of Directors meeting as a member of the Executive Committee, Washington; participated in meetings of the FDA Food Advisory Committee; and made two presentations as a member of the NCSU delegation for a symposium in Taipei, Taiwan and Shenyang, China. Dr. Lineback participated as Scientific Advisor to Food, Nutrition and Safety Committee, ILSI-NA. In addition, Lineback acted as Course Director and Lecturer for the AAGC Starch Shortcourse, Chicheley, UK. He was an invited speaker and participant in a meeting on Symbol, Substance, and Science: The Societal Issues of Food Biotechnology, NC Biotech Center.

As IFT President, Dr. Lineback was a speaker at the Magnolia Section, Starkville, MS; the Maryland Section, Baltimore, MD; the Ozark Section, Fayetteville, AR the Intermountain Section, Sun Valley, ID; and the Southern Section, Austin, TX.
Valley, ID; and was the keynote speaker, Intercaribbean Conference on Food Science and Technology, Mexico City. On Feb. 9, he attended an IFT press conference for the release of Research Needs Update in Washington, DC. He spoke at the Dixie Section meeting in Auburn, AL, and was the invited symposium speaker, 250th Anniversary, Faculty of Veterinary Medicine, University of Madrid, Madrid, Spain. Dr. Lineback participated in the Annual Conference of Canadian IFST, Toronto.

Dr. Steven J. Schwartz and Harold H. Schmitz attended the 10th International Symposium on Carotenoids June 20-25 in Trondheim, Norway.

In May, Dr. Swartzel was an invited speaker at the International Symposium on Aseptic processing and Packaging Technology for Prepared Foods at the Food Industry Research and Development Institute (FIRDI) in Hsinchu, Taiwan, ROC. The following papers were presented: Miles, J.J. and K.R. Swartzel: "Continuous flow kinetic data generation for aseptic processes"; Swartzel, K.R. and J.B. Gilles: "The center for aseptic processing and packaging studies - An industry/university cooperative research center"; Swartzel, K.R. and A. Kumar: "The equivalent point method for thermal evaluation-Applications to aseptic processing."

Dr. Brian W. Sheldon was an invited speaker at a symposium sponsored by the NC Extension Service (organized by Dr. Pat Curtis) and NC Poultry Processors on HACCP in Poultry Processing (May 4, 1993). The title of his presentation is "HACCP and Microbiology." He presented a poster at the annual meeting on May 19 of the American Society for Microbiology in Atlanta, GA entitled "Bacterial Effects of Salmine, a New Disinfectant." Sheldon chaired a committee composed of faculty from Animal Science, Animal Science, and Food Science to begin developing a "Poultry and Swine Food Safety Center."

Dr. William M. Walter, Jr., attended the National Sweetpotato Collaborator meeting and the Southern Association of Agricultural Scientists meeting in Tulsa, OK on January 30 through February 3, 1993. He presented a research paper dealing with the textural properties of processed sweet potato products.

Since January, Dr. Donn Ward has taught five HACCP training programs in cooperation with the National Fisheries Institute. Locations for these programs have been Wisconsin, California, Rhode Island, Louisiana, and Florida. The purpose of these programs is to prepare seafood processors to pass the HACCP Certification Exam given by the National Marine Fisheries Service. At the invitation of the Food Processors Institute, Dr. Ward represented IFT at FPI's conference on "Regulatory Initiatives in Food Safety." During the conference, he spoke on HACCP in Foodservice and the Home.

STUDENT, STAFF & ALUMNI NEWS

The Ph.D. dissertation written by Grant MacDonald (92) won 2nd place in the National Technomic Graduate Thesis competition, and won the Keller Award for an outstanding Ph.D. dissertation presented by the NCSU chapter of Sigma XI.

Dr. John Miles, who has served as a project engineer since the beginning of CAPPS, was awarded his Ph.D. degree during the graduation ceremony at NCSU May 8, 1993. John has been serving triple duty as a research technician, assistant with the CAPPS program, and graduate student. The title of his thesis is "Kinetic Data Generation Under Ultra-High Temperature Conditions." On July 8, John left NCSU to devote his attention to MicroThermies. The company was founded, with the help of his brother, to provide product development support and laboratory-scale simulators for continuous thermal process.

Frederico V. Passos received his Ph.D. degree in Food Science (minor, Chemical Engineering) in absentia at the May commencement exercises. Fred's thesis was "Kinetics and Modeling of Cucumber Fermentation" under the supervision of H. P. Fleming. Fred and his wife Flavia, who obtained her Ph.D. degree under Dr. H. E. Swinsgood, have returned to Brazil where Fred is now an Assistant Professor in the Departamento de Tecnologia de Alimentos, Universidade Federal de Vicsa. Both Fred and Flavia became very Americanized, were excellent students, and will be great ambassadors for our department.

Jennifer Quinlan was awarded a Sarber Award, one of five given by the American Society for Microbiology, to support her travel to the ASM meeting. The Sarber Award is given to a graduate student who demonstrates promise for research and contributions in microbiology.

Posters were presented by Jennifer Quinlan and Ginger Wescott at the American Society for Microbiology meeting in Atlanta, Georgia on May 18, 1993. These were titled: "Wescott, G., T. Fairchild, and P. Foegeding: Bacillus cereus T-sport Inactivation: Validation of the equivalent point method and comparison of kinetics in batch versus continuous flow thermal processes; and Quinlan, J.J. and P.M. Foegeding: Monoclonal Antibodies against Bacillus and Clostridium spores."

Harold H. Schmitz's poster, co-authored with R. B. van Bremen and Steven J. Schwartz, "Use of Novel Mass Spectrometry and High-Performance Liquid Chromatography-Mass Spectrometry Methods for Carotenoid Identification" was awarded First Prize among all posters submitted by students at the Tenth Triangle Chromatography Symposium held on May 27. The award included a check for $400.00.

Mr. Josip Simunovic, a Ph.D. student working with Dr. Swartzel, has been awarded a US Information Agency grant of $10,000. The grant will be administered by the NAFSA Association of International Educators.

Polly Dinsmore, Pechi Lee, Jennifer Quinlan, Susan Saunders, and Harold Schmitz were initiated as Associate Members of Sigma Xi. Two undergraduate students working on research projects in Dr. Allen's lab, Diego Darquea and...
Barbara Elam (biochemistry) received Sigma Xi Grants in aid of undergraduate research. Diego also presented the results from this honors research project at the Sigma Xi undergraduate research Symposium in April, and is one of six finalists from across the U.S. in the Undergraduate Research Paper Competition at the IFT National Meeting in July.

Michelle Braxton, Administrative Assistant for the Southeast Dairy Foods Research Center, completed her B.S. in Mathematics at the NCSU May Commencement exercise.

Pei-Liang Zhang, a Ph.D. student in Dr. Allen’s lab, was inducted into Gamma Sigma Delta, the Honor Society of Agriculture, at the Society’s annual banquet in April.

Djuana Davis (BS 1989) has taken a position with a health and beauty aids company in the Triangle. Leigh Plemmons (BS Dec. 1992) has begun a quality control position with a dairy in Atlanta, GA. Steve Kercher (BS Dec. 1992) accepted a position with Fast Food Merchandiser as a Supervisor, Chicken Processing, in Rocky Mount, NC shortly after graduation.

Karen Motsinger Young (MS - Microbiology, 1990, with P. Foegeding) has moved from Becton Dickenson to Sphinx Pharmaceuticals in Durham.

Mark Beaumont (Ph.D. 1992 with Hosni Hassan) left his post doc at Duke to take permanent employment in May 1993 with Nestle Westraco in St. Joseph, Missouri. One of his first assignments with Westraco will take him to France and Switzerland for brief visits. Angela Hayes (BS 1992) has taken a job with the North Carolina Department of Agriculture in Raleigh. A poster from her undergraduate research project was presented at the July IFT meeting:

- Hayes, A. D. Darick, B. Turner, and P. Foegeding: Control of spoilage microflora and Bacillus cereus spores in sous vide processed chicken breast.

May 1993 Graduates: B.S. graduates in May 1993 included Kelly Ann Blagg (Albemarle, NC), Maria Elaine Carpetto (Durham, NC), Vanessa Lynn Daniels (Castalia, NC), Angela Robin Douglas (Blanch, NC), Bruce Gordon Elliott (Cary, NC), David Ervin Gilsbert (Stateville, NC), Alfredo Luis Maruri (Lubana, Cuba), Carol Moya Tompkins (Springfield, VA), and Christy Wilson (Clint, NC). Vanessa Daniels graduated cum laude; Carol Tompkins and Christy Wilson graduated summa cum laude.

Carol Tompkins graduated as a valedictorian of the NCSU Class of 1993 with a perfect 4.0 GPA.

Kelly has taken a temporary job with U.S. Geological Survey in the Triangle. Maria (who also got married on graduation day) will work for the U.S. Geological Survey in Tampa, Florida. Vanessa is working locally in quality control for Goodmark Foods. Angela has taken a position at Webb Technical Group in Raleigh. Alfredo is continuing his employment at Harris Teeter and was recently promoted to manager of the meat department at the Cameron Village Store. Carol has begun a Ph.D. in Food Science at the University of Illinois. Christy will work in analytical chemistry at Southern Testing Labs near Clinton.

Scholarships: Institute of Food Technologists Scholarships are highly competitive national scholarships. We feel fortunate to have many outstanding students who are competitive for these scholarships which are awarded based upon academic excellence, extracurricular activities, and leadership. Recipients of Institute of Food Technologists Undergraduate Scholarships for 1993-94 are as follows:

- FRESHMAN: Carla Marie Shock
- JUNIOR/SENIOR: Cheryl Gaither, Diego Darquea, Wendy Jackson, James Parker, Hillary Hunt, Anna Reich, Craig Sherwin

Additionally, Diego Darquea has been awarded a nationally competitive National Dairy Promotion and Research Board scholarship for the 93-94 year and also was selected as the annual Alumni Association International Undergraduate scholarship recipient.

FOOD SCIENCE CLUB INFO

The IFT annual meeting has come and gone, and the fall semester is fast approaching. Now is a great time to say “thank you” to last year’s Food Science Club officers and heartily greet the new officers. This year’s officers are an enthusiastic and motivated group of individuals with big goals for the upcoming year. We look forward to working with you towards the achievement of those goals.

Contrary to popular belief, the Food Science Club is not idle during the summer months. Summer activities for the club include: two intermural softball teams (which play two times a week), assisting at the University Display during the IFT annual meeting, assisting at the student booth at the IFT annual meeting, the 3rd Annual Bulls Bash baseball game scheduled for 8/9/93, and a Fall Kickoff planned for late August.

I would like to take this opportunity to congratulate all of our IFT annual meeting competition winners. Diego Darquea took 2nd place in the Undergraduate Research Paper Competition. Alison Adams, who will start in Dr. Allen Foegeding’s lab in August, took 3rd place in the same competition. Carolyn Roff won the Dairy Technology Division Graduate Student Paper Competition, and Eileen Bowland received honorable mention in the same competition. Julie Northcutt was given honorable mention in the Graduate Research Paper Competition. Congratulations to all!

Finally, I would like to congratulate the NCSU Food Science Club members on their extraordinarily involvement in the IFT student association. NCSU is the single most involved university in IFTSA with students holding 8 of the 32 officer positions for the 1993-94 year. Congratulations! Let’s stay active and involved this year!

- Rebecca Guzy
Food Science Club President