FACULTY EXECUTIVE COMMITTEE, INDUSTRY ADVISORY COUNCIL FORM NEW PROGRAMS FOR ADVISING, ADMINISTERING DEPARTMENT

At a recent departmental faculty meeting, Department Head David Lineback announced that he would soon appoint a Research Coordinator. The responsibility of this person will be to help facilitate the flow of grant proposals and collect data on research activities in the department to document the efforts and success of obtaining outside support. Along with the teaching coordinator and the extension specialist-in-charge, the research coordinator will form an Executive Committee to serve the department in an advisory capacity and fill in as Acting Department Head in the absence of the Department Head.

In a related development, the first meeting of the Food Science Department’s Industry Advisory Council (IAC) was held on October 31-November 1. The seventeen members of the IAC are leaders from North Carolina food processing companies, national corporations in the food industry, regulatory agencies, and commodity groups. Some of the functions of the newly-formed IAC are to help the department increase the effectiveness of its interactions with industry, identify food processing needs, acquaint members of the food industry with the results of departmental programs, and to help strengthen research, teaching and extension activities. The first meeting was primarily a presentation of the programs and activities of the department to the IAC. An overview of the curricula and teaching programs at the undergraduate and graduate levels was presented by Victor Jones, teaching coordinator, and Lynn Turner, coordinator for the two-year Ag Institute program. Brief summaries of the research programs by faculty in the microbiology, chemistry, processing and engineering, and nutrition areas were presented by Peggy Foegeding, Allen Foegeding, Brian Sheldon and George Catignani, respectively. Don Ward presented the extension programs from the department and Ken Swartzel discussed the role of the research centers in support of departmental

(Continued on page 3)

COMMENTS FROM THE DEPARTMENT HEAD

I hope that your 1992 is off to a good start and that the year will be healthy, happy, successful and prosperous for each of you. If 1992 bears any resemblance to 1991, it is bound to be an exciting, challenging year.

The economy continues to be a major concern. While further budget reductions have not been mandated to the university or college, the department will have to give up additional appropriated funds over the next two years to enable the college to have more flexibility. The good news is that departmental faculty continue to successfully obtain grant and contract funds to support research. The Center for Aseptic Processing and Packaging Studies (CAPPS) and the Southeast Dairy Foods Research Center (SDFRC) continue to make major contributions to the research programs of the department. The bad news is that the department will lose one faculty member and a support staff position. Dr. Hassan and his technician are transferring to the department of Biochemistry and the faculty position in this department will be collapsed. Dr. Hassan will retain an appointment as an Associate Member of the Food Science Department Faculty.

In October, the Southeast Dairy Foods Research Center underwent a thorough review by the National Dairy Promotion and Research Board (NDPRB). [See article on page 2.] The findings of the review team will be used by the NDPRB as the basis for a recommendation concerning the future of the SDFRC. We are waiting to hear the results of the review and the recommendation of the NDPRB.

The first meeting of the Industry Advisory Council (IAC) for the Department was held on October 31, 1991. The Council was introduced to the programs of the department and given a tour of our facilities. Ideas from the council, including minority recruitment, the need for more undergraduate students, increased visibility for the department and its programs, and the possibility of working with high school science teachers to better inform them about food science, were discussed. With assistance from members of the IAC, we will be developing plans to address some of these areas.

- David Lineback
CENTERS

CAPPs News

The Center for Aseptic Processing and Packaging Studies (CAPPs) announced the membership of Tetra Pak on October 1, 1991. This brings the industrial sponsors to eleven.

During the fall meeting of the Industrial Advisory Board (IAB) voted to fund the following four proposals:

"Operation Characteristics of the Bead Thermistor Probe in Solid Foods and Liquids" by Dr. Ken Diehl, VP/SU

"Determination of Fluid-to-Particle Heat Transfer in Aseptic Systems," and "Modeling the Ohmic Heating of Liquid-Particle Mixtures" by Dr. Sudhir Sastry, The Ohio State University

"Development of New Techniques for Thermal Process Evaluation--With and Without Particulates" by Dr. Ken Swartzel

To date, twenty-seven projects have been funded through CAPPs, with fourteen already at the completion stage. Many of these projects are beginning to aid the aseptic industry and one patent has been granted. Twenty-four faculty, two visiting scientists, seven post docs, nineteen graduate students, seven undergraduates and ten technicians have been involved in this research.

CAPPs personnel have been active this fall in presenting papers at professional meetings. Dr. Steve Schwartz traveled to Toronto, Canada to make a presentation concerning aseptic technology at the 8th World Congress of Food Science and Technology. John Miles presented two papers this fall one at the 1991 Pharmaceutical and Cosmetics Engineering World Congress in Philadelphia and the other at the Meeting of R&D Associates for Military Food and Packaging Systems, Inc. Dr. Peggy Foged also presented a paper on the "Past successes and new challenges for CAPPs" at the Food Development and Marketing USA meeting at the Meadowlands Convention Center.

Dairy Center Review

The Southeast Dairy Foods Research Center (SDFRC) progress and programs over the first 3 years was studied and reviewed by an outside panel of 12 experts from various fields, led by Dr. Carolyn Berdanier of the University of Georgia. The two-day meeting consisted of research summaries by each of the principal investigators with Dairy Center projects, a tour of Schaub Hall facilities for dairy research and meetings between the review team and various committees or groups involved with the functions and operation of the SDFRC. Eleven Dairy Center projects were conducted during the first three years in the areas of immobilized cells and enzymes, genetic technologies with lactic acid bacteria, detection and control of microorganisms, processing effects on milk components and functionality, supercritical processing, and thermal processing and design. Seven additional two-year projects in these areas began in July. Presentations made clear that the presence of the Dairy Center in the Food Science Departments of NCSU and Mississippi State University has strengthened and refocused many research programs toward development of technologies and products that will in the long term increase the sale and consumption of milk. The review team will make a report to the National Dairy Promotion and Research Board, who will decide later this year on actions for continued support of the SDFRC.

FOOD SCIENCE CLUB

Food Science-Alumni Wine and Cheese Social Planned

The Annual Food Science Club Wine and Cheese Party will be held on February 15 at Kildaire Farms in Cary. The event this year will honor our alumni. Wine and Cheese Parties in past years have provided an excellent opportunity for social interaction between students, faculty, staff and guests. If you would like to attend, please contact Julie Northcutt at (919)515-2965 before February 12th for more Information.

Fall Activities

The Food Science Club has begun another active year. Over the summer, the Food Science intramural softball team finished second in their league. New and old members were welcomed back to campus by the Fall Kick-Off, a traditional cook-out and games on the Schaub Hall lawn. The first two club meetings of the year were Meet-the-Professors, where the quick business meeting was followed by Food Science faculty introducing themselves and explaining their activities. Club members participated in the Big Sweep Bunch, a statewide project for cleaning up beaches and waterways. (Dr. Carawan is not the only environmentalist in the department.) The Dairy Bar at the State Fair in October was another big success, raising money for club activities throughout the year and for student travel. Officers for the 1991-92 year are:

President: Harold Schmitz
Vice President: Monty Seagroves
Secretary: Jonathan Merkle
Treasurer: Elaine Berry
Activities: Carolyn Roff, Patrick Kocher
Ag. Council Rep.: Diego Darquea
Publicity/Historian: Carol Tompkins
Senior Advisor: Dr. Donn Ward
Junior Advisor: Dr. Pat Curtis
ROY CARAWAN RECEIVES PRESIDENTIAL CITATION

Dr. Roy Carawan, a professor and Extension Specialist in NCSU's Department of Food Science, was recently honored for his work in reducing pollution and water consumption in North Carolina food industries by two major awards of state and national importance. On December 31, Carawan was notified of being chosen to receive the Water Conservationist of the Year Award. This prestigious award is part of the 1991 Governor's Conservation Achievement Awards Program, sponsored by the North Carolina Wildlife Federation and the National Wildlife Federation. The Award presentation will be made at a banquet on February 15.

This award follows closely Carawan's being honored with a special Presidential citation in the new President's Environmental Challenge Awards Program. Nine awards and 23 citations were presented in this program to nationally selected groups "for excellence in developing innovative solutions to the nation's environmental challenges". Carawan was the only individual selected for this honor, placing his Pollution Prevention in Food Processing Program among the ranks of the Virginia Coast Reserve, McDonald's Corporation Waste Reduction Task Force, Project WILD of Boulder, CO, the American Forestry Association and the Wildwood Girl Scouts of Portland, OR. Awardees were addressed by President Bush and honored during ceremonies in the White House and the neighboring Blair House on October 31. Senator Terry Sanford recently wrote a letter of congratulations to the Food Science Department, commending Carawan's efforts for the distinction they bring to the University and the state.

Carawan's "Pollution Prevention Pays" program has been developed during 25 years of training and advising in food industry plants in North Carolina and throughout the U.S. on ways to reduce pollution, conserve ingredients and cut back on water consumption and sewage loads. The program's first emphasis is on training plant managers and employees to recognize pollution sources and then take steps to reduce them. Implementation of new technology, including enlisting cooperating researchers to find new solutions, is the second step to solving food industry pollution problems. Carawan can list numerous examples of the program's success, including companies who have saved hundreds of thousands of dollars per year with small investments in training and procedures that turn potential landfill problems into marketable products.

Carawan has recently received permission from the administration of NCSU and the University of North Carolina System to begin planning for a cooperative research-extension center to promote development and implementation of environmentally responsible technologies for producing safe foods. His view is that this multidisciplinary consortium of researchers and extension specialists is needed if the food industry is to continue to prosper in the 90's.

N.C. AGRICULTURAL HALL OF FAME HONORS JAMES D. KILGORE

The late James D. Kilgore, former president and chairman of the board of Pine State Creamery, joined his father Benjamin W. Kilgore, founder of Pine State, to become the 27th member of the Carolina Agricultural Hall of Fame.

Jim Kilgore was a great supporter of N.C. State University. He was instrumental in founding the N.C. Dairy Foundation, played a major role obtaining funds for Schaub Hall and helped establish the W.C. Clevenger Food Science Library Endowment.

He and his relatives established the B.W. Kilgore Scholarship at N.C. State in food science and he received the university's Watauga Medal for distinguished service.

Kilgore was active in many dairy industry organizations, serving as president of the N.C. Dairy Foundation Inc. and the N.C. Dairy Products Association, secretary of the International Ice Cream Manufacturers and director of the N.C. Guernsey Breeders Association.

(IAC - Continued from page 1)
EXTENSION HIGHLIGHT

Pat Curtis - Food Science Extension Serving the North Carolina Poultry Industry

Dr. Pat Curtis is an Assistant Professor and Extension Specialist in the Department of Food Science. Her primary responsibility is the poultry industry. The following provides some insight into the direction of the poultry extension program and highlights of some projects. The overall goal of the program is to help the industry meet their current needs and tomorrow’s challenges.

North Carolina is the most diversified poultry-producing state in the nation, ranking first in turkeys, fourth in commercial broiler production and eighth in egg production. In fact, poultry is the largest combined agricultural industry in North Carolina, earning $1.5 billion in 1989 and employing over 23,000 people.

North Carolina supplies 20 percent of all the turkeys consumed in the United States. In fact, North Carolina turkey production has increased over 155 percent in the last decade. This is obviously very important to North Carolina. One Extension program which will directly affect the turkey processors is a workshop on nutritional labeling requirements. Proposed regulations on nutritional labeling were published by the U.S. Department of Agriculture (USDA) in late November. A workshop was held in mid-January to help processors understand the proposed regulations and meet deadlines for changing their labels. This workshop is summarized in the following article on this page.

Each working day, approximately 1.9 million North Carolina broilers are marketed. North Carolina’s broiler production has grown 41 percent over the last decade. Unfortunately, the broiler industry has faced a multitude of bad publicity over the past few years. Most recently, the tragic fire at the Imperial Food Products Plant in Hamlet, North Carolina. All members of the North Carolina poultry industry were saddened by this tragedy. At the same time, they were greatly distressed by the extremely unfair way some of the media quickly used this tragedy to paint an inaccurate picture of basic safety conditions of the poultry industry’s plants. In truth, the integrated poultry industry is fully committed to the maintenance of a safe and healthy work place.

Dr. Curtis assisted the North Carolina Poultry Federation in conducting a plant safety survey in North Carolina poultry processing plants. Respondents of this survey reported having safety programs in place for accident prevention, ergonomics, training for chemical handling, fire safety, environmental quality and emergency response. Over eighty percent of the respondents reported their plants had been inspected by OSHA within the last four years. And over ninety percent reported that local fire department inspections had occurred within the last year. Processors are involved and concerned about the health and safety of their employees.

The table eggs produced in North Carolina supply eggs for over 8.3 million people. The egg industry in North Carolina became keenly aware of the egg quality and safety issue this past year when nearby states began changing their egg storage regulations. Extension specialists in both the Department of Food Science and the Department of Poultry Science worked in conjunction with the North Carolina egg industry, The North Carolina Egg Association and the North Carolina Department of Agriculture to conduct a study on egg cooling rates in egg processing plants. The data obtained were used to shape the new regulations for North Carolina. The new regulations affect not only egg processors, but also grocery retailers and food service establishments.

The above discussion gives some idea of the variety of programs with which Dr. Curtis is involved. She continues to schedule programs and applied research to meet the needs of the North Carolina poultry industry.

NUTRITION LABELING WORKSHOP FOR INDUSTRY

North Carolina Food Industry representatives recently met in Raleigh to learn about USDA's and FDA’s proposed nutrition labeling regulations. The Nutrition Labeling and Education Act (NLEA) passed by Congress and signed by the president on November 8, 1990, mandates that new nutrition labeling regulations become effective by May, 1993. The workshop was scheduled to provide the industry with informative and up-to-date information regarding the proposed regulations by the two agencies. Industry representatives were encouraged to interact with speakers and to respond in writing with suggestions and comments to FDA and/or USDA. The deadline for written comments is February 25, 1991. NLEA has provision for a one year extension of implementation of the regulations if necessary. To receive this extension, it is important that industry respond very specifically describing why this extension is necessary and outline how the situation would be improved by extending the deadline for compliance by one year.

Dr. John E. Rushing, an Extension Food Scientist in the Department of Food Science at North Carolina State University, outlined the changes in Food regulations due to the Nutrition Labeling and Education Act. The NLEA makes the most significant changes in food labeling law since the passage of the Federal Food, Drug and Cosmetic Act of 1938. Rushing explained that the NLEA puts some very specific deadlines and responsibilities on FDA.
Dr. John E. Vanderveen with the Division of Nutrition, Office of Nutrition and Food Sciences at the Food and Drug Administration highlighted FDA's proposed regulations. One area where he indicated FDA desired industry comments was labeling of sugars and complex carbohydrates. FDA has proposed to make the declaration of sugars and complex carbohydrates voluntary. The present inclusion of complex carbohydrates and sugars within the mandatory nutrition label may be misleading to consumers because it may suggest that these food components have greater public health significance than has been established by controlled scientific studies. The identification of a specific benefit for complex carbohydrates is confounded by the fact that mixed diets high in complex carbohydrates usually contain significant amounts of cereal grains, fruits, and vegetables. Thus, it is unclear the extent to which complex carbohydrates impart health benefits separate from such factors as the presence of fiber, vitamins, minerals and reduced levels of fat. Another problem is that the terms "complex carbohydrate" and "sugars" have not been clearly or consistently defined.

FDA is proposing to establish the serving sizes that are most appropriate for labeling products. FDA developed reference amounts customarily consumed of 131 different types of food regulated by FDA. Under this proposal, manufacturers will convert the reference amount into serving sizes in common household units.

Cheryl Wade with the Product Assessment Division of the U.S. Department of Agriculture gave the group an overview of USDA's proposed regulations. The Food Safety and Inspection Service (FSIS), a division of USDA, is proposing to amend the Federal meat and poultry products inspection regulations by permitting voluntary nutrition labeling on single-ingredient, raw meat and poultry products. Nutrition labeling for all other meat and poultry products except those used for further processing will be mandatory. The FSIS proposed regulations for meat and poultry will parallel, to the extent possible, FDA's nutrition labeling initiatives.

FSIS encourages the use of data bases for nutrition information about single ingredient products. FSIS plans to adopt the same definitions as FDA for descriptors of meat and poultry products. They have also adopted a subset of FDA's serving size reference list for meat and poultry products.

Dr. Carolyn J. Lackey, North Carolina Cooperative Extension Service, and Dr. Neil B. Webb, Webb Technical Group, Inc., talked with the group about the usefulness of various nutrition labeling formats, and analysis and testing products for nutrition labeling respectively.

Regulations of health claims was discussed by Stephen H. McNamara with Hyman, Phelps and McNamara, a former FDA Legal Council. He concluded that the new FDA proposals appear to eliminate or curtail substantially many health- and disease-related claims that have proliferated in recent years. The need to reduce health claims on food labels after May of 1993 will depend on whether (1) FDA will amend its restrictive proposals to any substantial degree in response to comments, and (2) whether the agency will enforce new regulations aggressively against marketing forces that have come to know and like the use of health claims in promoting food products. McNamara pointed out that the proliferation of health claims in the 1980's resulted from FDA's apparent lack of enforcement of existing regulations.

Dr. David R. Lineback, Head of the Department of Food Science, NCSU and President-elect of IPT, talked about validating health claims. He discussed the four nutrient/disease relationships--calcium and osteoporosis; sodium and hypertension; lipids and cardiovascular disease; and lipids and cancer--and why he felt FDA approved them when others were not approved. He briefly discussed what he felt was necessary from a research standpoint to validate a nutrient/disease relationship.

Dr. Allen Matthys from the National Food Processors' Association gave an industry perspective on the proposed regulations. He urged Industry to submit comments and suggestions to the appropriate agency by the February 25, 1992 deadline. This legislation is expected to affect nearly all members of the food processing industry. Further information about how to comment to FDA and USDA on this program can be obtained from the NCSU Food Science Extension Office.

FACULTY ACTIVITIES

Jonathan Allen attended the American Dairy Association Annual Meeting in Logan, Utah, where he completed a three-year term as Faculty Advisor to the ADSA Student Affiliate Division.

Tom Bell, Professor Emeritus, was recently recognized as a 50-year member of IPT.

Vic Jones has been serving as Chair of the NCSU Council on Undergraduate Education. Vic reports that the council is preparing to make recommendation on General Education Re-
quirements that may mandate changes in curricula in departments throughout the University.

E. Allen Foegeding received a new grant on "Thermal-Preconditioning of Broilers to Improve Meat Quality" from Southeast Poultry and Egg Association ($39,500).

Peggy Foegeding hosted two visitors who presented departmental seminars. Professor Will Waites of University of Nottingham, England, and Dr. Rassel Flowers, a former NCSU FS student (BS) and now President of Stilliker Laboratories. Dr. Foegeding made an invited presentation on control of Listeria moniocytes on a Food Safety Conference jointly sponsored by the Dixie Section of IFT and Clemson University. She was elected to a 3-year term on the IFT Nominations and Elections Committee.

M. E. Gregory reports significant progress on his U.S.D.A. grant on "A Training Program in Sanitation and Food Safety for Child Care Personnel." A 16 minute video and "Training Manual" have been completed with hand-outs for child care providers. A meeting was conducted with six pilot counties and two volunteer counties to initiate the county training child care personnel.

Todd Klaenhammer attended and presented an invited lecture in the EMBO-FEMS-NATO Workshop on "Bacterial Plasmid Encoded Toxins: Bacteriocins, Microcins, and L'antibiotics" on The Island of Bermuda in September.

Dr. N. Arlene Klapes spent July 15 - September 13, 1991 at the United States Army Research, Development and Engineering Center in Natick, Massachusetts as visiting summer research faculty attached to the Food Engineering Directorate. Dr. Klapes was awarded an American Society for Microbiology President's Fellowship to support a brief training visit to the laboratories of the Nosocomial Infections Branch of the Center for Disease Control in Atlanta, GA. During the September 1991 meeting of the CAPPS-Industry Advisory Board, Dr. Klapes was awarded a National Science Foundation Undergraduate Supplement for Research to support an undergraduate research assistant.

In November Don Hamann, Tyre Lanier and graduate student Grant Macdonald (still a staff scientist with the New Zealand Department of Scientific and Industrial Research) organized and largely taught an Industry shortcourse at the Oregon State University Seafood Laboratory (Aurora, OR) on standard methods for assessing surimi quality. This was based on the recently (1991) published "A Manual of Standard Methods for Measuring and Specifying the Properties of Surimi," which was co-authored by Dr. Lanier and written on behalf of the National Fisheries Institute and the Alaska Fisheries Development Foundation. Drs. Hamann and Lanier were awarded a new Sea Grant project entitled "Filled Gel Approach to Fat Replacement /Inhibition of Fish Proteases" ($124,000 1992-93). Dr. Lanier finished writing/editing a book to be published in March, 1992, by Marcel Dekker Inc. entitled "Surimi Technology". Hamann and Macdonald were also contributing authors to this volume.

Dr. Lanier attended the 8th World Congress of Food Science and Technology in Toronto, Canada, Sept. 20 - Oct. 5, and presented a poster.

Professors Herschel Ball, Jr. and Ken Swartzel will be honored at NCSU's 3rd Annual Inventor's Award Luncheon on February 6, 1992. During the past year, Professors Ball and Swartzel have been granted three U.S. patents on their ultrapasteurization work on liquid egg products. This work has been acclaimed as one of the most significant advances in the egg industry in recent years. The success of this work is changing the way eggs are processed throughout the world. In addition to these patents, the inventors had previously been granted three other patents related to egg processing. At the same luncheon, Professor Swartzel and Dr. Ganesh Gunan will be honored for their work on the thermal memory cell which also resulted in a U.S. patent.

Ken Swartzel and CAPPS Research Associate Dr. Ashwini Kumar were awarded a grant from the 1992 Cray Grant program. The award consists of 50 hours of Cray Y-MP Supercomputer processing time, $7,000 in research support and makes Dr. Kumar a Cray Fellow at NCSU for 1992.

Dr. Sevugan Palaniappan joined NCSU as a research associate on October 1, 1991, working with Professors Ball and Swartzel in the Single Sponsor Laboratory (SSL). Dr. Palaniappan will investigate thermophysical and electrical properties of foods. The SSL, which focuses on advancing the knowledge base for extended shelf-life refrigerated food products, has recently had its funding base increased by $220,000 by the sponsor.

David Lineback presented the Plenary Lecture "Bread Staling - A New Look at an Old Problem" in a Symposium at Cereals International '91 meeting in Brisbane, Australia in September. He followed this with a visit to the Department of Food Technology, University of Western Sydney, Hawkesbury, NSW, Australia where he presented a seminar. Lineback served as co-chairman of a Program Advisory Committee for a Food Safety Roundtable in Washington, D.C., sponsored by the Charles Valentine Riley Foundation in November and was Program Director and lecturer for an AACC Starch Shortcourse in Chicago in December. Lineback organized, and the department hosted, a half-day symposium on October 21 on "New Applications of Microorganisms" for a mission from the Japanese R & D Association for New Food Materials led by Dr. Hajime Tamaguchi.

Steve Schwartz presented a talk titled: "Aseptic Processing and Packaging - Issues and Technology" at the 8th World Congress of Food Science and Technology. He spent one month as a visiting scholar at the Inter-University Center of Food and Nutrition at Bogor Agricultural University, Bogor,
Indonesia. Dr. Schwartz initiated a new project on "Provitamin A Carotenoids in Guatemalan Plants" funded by the International Eye Foundation, Bethesda, MD.

Brian Sheldon was an invited speaker at the International Association of Milk, Food and Environmental Sanitarians in Louisville, Kentucky, presenting a "Research Overview of Water Recycling Opportunities for the Poultry Industry." At the 1991 Seafood Environmental Summit, Sept. 29 - Oct. 3, 1991, Raleigh, NC, he spoke on "Process Water Filtration and Treatment for Reuse." Two talks were presented at the annual meeting of the Poultry Science Association at Texas A & M. "Water Use and Wastewater Discharge Patterns In a Duck Processing Plant" and "Effect of Soaking Solution on the Quality of Septically Processed Fowl Meat." Sheldon and Pat Curtis received a new grant on "Effect of Vitamin E on Turkey Performance, Immune System, and Meat Quality." This $47,750 award from BASF Corporation was a cooperative proposal between Poultry Science and Food Science.

Harold Swalsgood was an invited symposium speaker at the 8th World Congress of Food Science & Technology. He presented a talk entitled "Probing structural changes and preparation of protein domains by limited proteolysis." Swalsgood was an invited speaker for the E.A. Day Memorial Lecture Series at Penn State University, Oct. 8, presenting "Domains in protein structure and their release by limited proteolysis."

William M. Walter, Jr. made an invited presentation "Frozen sweet potato products" to Sweet Potato Technology for the 21st Century, an international symposium in Montgomery, AL, on June 2-6 and chaired Southern Regional Project S-214 at Tuskegee University on November 6 & 7.

STUDENT STAFF & ALUMNI NEWS

Food Science Students Hold GSA Offices

The Graduate Student Association is a university-wide organization of approximately 60 departmental representatives for dealing with problems concerning graduate education at NCSU, and providing social and informational activities for graduate students. Food Science graduate students who hold half of the elected offices are: Susan Saunders, Vice President; Pat Kocher, Secretary; and Christine Averdung, Travel Fund Administrator.

Marie K. Walsh has been selected from applicants nationwide to participate in the American Chemical Society, Agric. and Food Chem. Div., Graduate Candidate Symposium to be held at the National Meeting in San Francisco, April 5-10, 1992. Marie will receive a $1000 travel expense award.

Graduate Students Elaine Berry and Tim Fairchild attended the Food Microbiology Research Conference in Chicago November 6-8.

Ms. Kelly A. Stevens completed all requirements toward a Master of Science in Food Science on December 16, 1991 and began employment with Campbell Soup Co. in January, 1992.

Ray Kimsey (M.S. 1960) was awarded with the prestigious Governors's Award of Excellence at a reception in the State Archives and History Building, September 19, 1991. After receiving his degree here, Ray worked in Food Science as a research technician from 1960 to 1984. Ray's work in developing software for the collection and analysis of data was one of the first applications of its kind at NCSU. In 1985, he joined the newly-formed Computer Services with the NC Cooperative Extension Service with the NC Cooperative Extension Service, where he has been recognized as an expert on electronic communications and software development.

ARRIVALS/DEPARTURES:

Dairy Applications Lab Manager Gary Cartwright has moved on to a position as a project manager with International Paper Company. The Recreation Committee and his coworkers held a luncheon in his honor on Gary's last day on the job, January 3. We are sorry to see him go and wish him well in his new job. Karl Hedrick is now Interim Manager of the Dairy Plant.

Molly W. Warren, a graduate student under Dr. Ball, defended her Ph.D. Dissertation on October 16 and received her degree at the December Graduation. Molly presented her work on "Volatile and Sensory Characteristics of Cooked Egg Yolk, White and Different Combinations of Yolk and White" in a Departmental Seminar on October 22. She is now working as Technical Director for National Egg Products, Division of Hudson Foods, Inc., Social Circle, Georgia.

New students in Dr. Klaenhammer's lab are Tomas Martin from the University of Madrid, Spain, who is working on and M.S.; Dr. Dan O'Sullivan, from University College, Cork, Ireland, as a post-doctoral Student; and Sylvain Morneau, a Ph.D. Student for University Laval, Quebec City, who is visiting the lab for 1 year.

Two new Ph.D. students are working in Dr. Allen's lab, Ron Heddeson from Penn State University, and Ok-Jin Park from Ewha Woman's University in Seoul, Korea. Dr. Shanthini Joyanahaj is a new post-doctoral associate from Marquette University in Milwaukee working on a Dairy Center project.

Dr. Shai Barbut is a Visiting Associate Professor working in Dr. Allen Foegeding's lab. Barbut is a member of the faculty at the University of Guelph, Canada, Department of Animal and Poultry Science.

The fall has brought changes to our administrative offices. Phil McGuffy is the new departmental Bookkeeper and Sharon Adams has been hired an Accounting Clerk. Michelle Mason has replaced Becky Stephenson as secretary for the Dairy Foods Research Center. Linda Brockhaus, secretary for third floor faculty, resigned in November. Taking her place is Janet Murdoch who comes to us from WLFL-TV.