A new year, new challenges, new opportunities, renewal, redirection, reaffirmation! Sound familiar? We hope so, for these are what make lives and professions interesting and exciting. We wish you a happy new year, complete with these interesting facets of life at its fullest.

It is a time of change here, particularly with our faculty. Drs. Victor A. Jones and Max E. Gregory, both members of the department for over 30 years, retired on December 31, 1992. Dr. Hershel Ball, a faculty member for over 23 years, took early retirement in August. All made outstanding contributions in their areas of responsibility to the department, college and university. To say that they will be missed is a major understatement. We wish them and their wives the best of everything in the years ahead.

Dr. Jones had served as Undergraduate Teaching Coordinator and Graduate Administrator since 1980. Effective January 1, 1993, Dr. Peggy M. Foegeding became Undergraduate Teaching Coordinator and will be responsible for the undergraduate programs of the department. Dr. Duane K. Larick became Graduate Administrator on the same date and is responsible for our graduate student admissions and programs.

Just before the N.C. legislature adjourned last summer, a bill was passed which reverts one-third of the salary from each retirement to the state. If continued, this policy makes it unlikely that we will be able to refill each position vacated by retirement. We have received permission to fill the position created by Dr. Jones' retirement with a food microbiologist. Even though this represents a change from the engineering emphasis of Dr. Jones, we believed it was necessary to do this to maintain the strength of our food microbiology research and teaching area, designated as one of four major areas of emphasis by our faculty. This position is now being advertised nationally. We plan to fill the position created by Dr. Hershel Ball's retirement with a faculty member in engineering. We still have to request and receive permission from the Dean, College of Agriculture, to return this position to our department and to initiate a national search to fill it.

Student enrollment, undergraduate and graduate, continues to improve with emphasis on quality. We have an active recruiting effort to increase the undergraduate enrollment in both the two- and four-year programs. Job opportunities and placements have continued strong in both undergraduate and graduate programs. While virtually everyone has felt the "pinch" of the economic downturn, food industries continue to increase their need for scientifically-trained graduates to the advantage of our students.

The second meeting of our Industry Advisory Council was held in November. This group is still being formed, with additional members added each year. It is already being of importance to our programs with the excellent discussions and suggestions from members of the Council. This year the meeting focused on the recent CSRS comprehensive review, future development of the department, areas to which vacant faculty positions should be directed, and future needs of industry which the department should consider.

Additional efforts will be made this year to increase contacts with our alumni. An alumni reunion is planned for Saturday, March 20 that will include a baseball game in the afternoon and a wine and cheese social that evening. We hope that many of you will be able to attend. Please stop by whenever you are in the area and let us hear from you so that we can include some news about what you are doing in this newsletter.

- David R. Lineback
FOOD SCIENCE DEPARTMENT ESTABLISHES NEW SCHOLARSHIP PROGRAM FOR MINORITY TRANSFER STUDENTS

The Food Science Department has received funding from the Nabisco Food Group to support a scholarship directed toward minority transfer students.

Companies employing food science graduates wish to have a diversity of racial, ethnic, and cultural backgrounds among their employees. However, certain minority groups, such as African-Americans, Hispanics, and Native Americans, are under-represented among students in Food Science programs. As part of the overall goal of increasing undergraduate enrollment, the NCSU Food Science faculty set an objective of increasing the percentage of under-represented minority students in the undergraduate program.

Recruiting students from these groups is difficult because well-qualified high school students with an interest and aptitude for science are sought out by many schools and programs. The students are more likely to enter fields with high visibility, such as engineering or pre-med programs; the problem that Food Science is an unrecognized career choice limits the number of new freshman students.

Because many Food Science majors transfer from other programs when they learn of the career prospects, the committee charged with improving minority recruiting decided to focus on programs where students might be looking for a transfer option to finish a B.S. degree, principally students graduating from technical programs in two-year colleges. To attract well-qualified students into Food Science, a scholarship program supported by food companies has been proposed.

The first scholarship received by the department will support an individual who is to be designated the Nabisco Scholar. The scholarship of $1,000 per semester will cover resident tuition, fees, books, and supplies for five semesters of coursework leading to the B.S. in Food Science. The corporate sponsor, in this case Nabisco, will also provide the Nabisco Scholar with a paid summer internship opportunity between the junior and senior years. The internship is intended to provide work experience that will help students decide what type of position they want to enter after graduation.

A new advising and support program using upper class students is anticipated to help the new transfer students adjust to the department and NCSU.

To be eligible, African-American, Native American, or Hispanic students must have completed four semesters of prerequisite courses at NCSU with a 2.5 GPA in chemistry and math, and at least one additional transferrable science course. Students at other four-year colleges and other programs at NCSU may also apply, but preference may be given to transfer students to help achieve the college and University goal of ethnic and racial diversity. Further details are available from the Department at 515-2952 or from the members of the Minority Recruiting Committee, Dr. Peggy Foegeding, Dr. Jon Allen, Dr. Leon Boyd or Dr. Roger McFeeters.

The committee hopes that other corporations will join Nabisco in sponsoring a named Corporate Scholar for 1993 and beyond. Although we still face the difficulties of informing prospective students about the opportunities in Food Science, the Corporate Scholar program may help get students' attention and show that food companies are committed to helping in the education of potential employees.

- J. C. Allen

V. A. JONES FELLOWSHIP ESTABLISHED

To honor the service of Dr. Victor A. Jones to the Food Science Department for over 30 years and his substantial contribution to food engineering and aseptic technology, the Center for Aseptic Processing and Packaging Studies will sponsor the Victor A. Jones Graduate Fellowship for Aseptic Studies. The award of $2,500 will be made to a qualified graduate student entering the Department of Food Science at NCSU. The award will be presented annually if a qualified candidate exists and will help with recruitment of students into the NCSU graduate food engineering program. Students receiving the award will be chosen by a committee appointed by the Director of the center, and will be encouraged to study some aspect of microbiology, chemistry, or engineering, as related to aseptic research. This fellowship is a fitting tribute to Dr. Jones' dedication to improving the academic programs, careers, and lives of students in Food Science.

HERSHELL R. BALL RETIRES FROM FOOD SCIENCE FACULTY

An outdoor barbecue was held on August 31 at the Youth Center at the N.C. State Fair Grounds to honor the retirement of H.R. Ball, Jr. Hershell came to the department in 1970 after receiving his doctorate from the University of Missouri. During his twenty-three years here, he directed work which led to eight masters and five Ph.D. degrees and taught three different courses related to poultry products and muscle foods.

His name appeared on 32 refereed articles or book chapters and he presented numerous reports at meetings and seminars. He received the Poultry and Egg Institute of America Research Award, which was presented at the annual meeting of the Poultry Science Association in 1981. He co-authored a patent on ultrapasteurized, aseptically packaged whole egg which dramatically improved the shelf life of refrigerated egg products. This patent, a leading revenue generator among NCSU patents, has been successfully defended against infringement. Hershell's leaving the Food Science department does not mean he has left research in poultry products. He has recently established his own firm,
MAX GREGORY RETIRES

Dr. Max Gregory retired on December 31, 1992, after thirty years of service to the citizens of North Carolina. During his tenure, he has served the department’s extension program beginning as a dairy processing specialist before changing responsibilities to the food service area. Dr. Gregory also taught in the department’s two-year program.

During his career, Dr. Gregory’s extension program not only made significant contributions to the citizens of North Carolina, but became a national model for other state extension programs. His creative and innovative education and certification program for Foodservice Managers has made meaningful contributions in the areas of food safety and public health. Dr. Gregory was one of the first to recognize the importance of providing training to foodservice managers. The foodservice industry is the fourth largest in the U.S., comprising more than one-half million establishments that employ some eight million people. The model Dr. Gregory developed is a cooperative effort with the N.C. Division of Environmental Health. The agency serves as the regulatory monitor and certifying authority, while the N.C. Cooperative Extension Service serves as the educational component. The program emphasizes research-based practical information for managing a sanitary establishment and training foodservice workers. Since the program was initiated in October 1983, over 2,200 foodservice managers have been trained and certified.

With the success of the foodservice Managers’ program, Dr. Gregory envisioned expanding the concept to the child care industry. In 1991 he was awarded a grant from USDA to develop a national model for Child Care Sanitation and Food Safety. This program has been successfully developed, tested, and implemented.

Max and his wife Ellen, who recently retired after twenty-eight years as a teacher with the Wake County school system, plan to divide their retirement time between their home in Raleigh and their newly purchased home in Blowing Rock, NC, atop a ski mountain. Ellen has named their new home “Rocky Top.” Now that they are both retired, Max and Ellen will have more time to visit with and enjoy their children (Dr. Randall J. Gregory, dentist with R.J. Reynolds Dental Care program; and Dr. J. Lewis Gregory, pediatrician with Kaiser Permanente) and grandchildren.

RETIEMENT OF VIC JONES

After more than 30 years of service to the Department, Dr. Victor Alan Jones retired on December 31, 1992. Friends, family, colleagues, students and former students from across the country gathered for a farewell dinner in his honor on January 22, 1993, at Ballentine’s Restaurant. Photos and statements of farewell were compiled into a videotape that was shown and presented to Dr. Jones. Friends and colleagues spoke of their experiences, thoughts and memories of knowing and working with Vic over the years. A reception was held in the Food Science Department in December for those in the University to say goodbye and best wishes to Dr. Jones.

During his career, Dr. Jones taught a basic food engineering course to both engineers and food scientists. He also developed and taught courses in food engineering, food packaging, food equipment technology, and was in charge of the food science senior seminar course for 14 years.

Perhaps the best testimony to his dedication to teaching is given by his students. The 1992 Meritorious Service Award plaque, presented by the Food Science Club, reads, “As a teacher, Dr. Jones believes that all students have the right to excellence...[he] always finds time to spend with students answering questions, planning classes, and discussing future careers. We acknowledge and are grateful for his firmly held belief that students are the most important part of a university. His advising has had a major impact on the lives of many students.” This dedication led to his election by students to the Academy of Outstanding Teachers. Dennis Heldman, Ph.D., wrote of Dr. Jones, “There is no doubt that Vic Jones is one of the unique types of individuals with total dedication to quality education of students at the university level.”

Dr. Jones is highly regarded by his peers for the quality of his research and is considered a national authority on continuous flow aseptic processing. As one of many results of his research efforts, NCSU has received processing equipment worth over $2 million, making NCSU’s aseptic plant one of the best equipped plants in the world.

When they aren’t pursuing their love of travel (having visited all 50 states as well as Japan, Canada, Mexico, and Puerto Rico), Vic and Maryetta now have time to enjoy their four children and 13 (thirteen) grandchildren.

Dr. David Lineback (left) presented Dr. Jones with a commemorative plaque at his retirement dinner.
DECEMBER GRADUATES RECEIVE DEGREES

Eleven students were awarded degrees in the December 16 graduation ceremonies held in Reynolds Coliseum and Schaub Hall. In the departmental ceremony in Schaub Hall, Dr. Victor Jones introduced the students and their families and presented diplomas. Christy Wilson assembled a collage of pictures with the students seen in their daily routines for the families and guests to view. Students receiving the Bachelor of Science degree were: Caroline Coffey, Raleigh; Steve Kercher, East Bend; and Leigh Flemmons of Asheville. Receiving the Master of Science were Christine Lavelle, and Bill Stewart. The Doctor of Philosophy degree was awarded to Joseph Akamittah, Mark Beaumont, Suzanne Case, and Sharon Chen, all currently from Raleigh, Grant MacDonald (Nelson, New Zealand), and Festus Nunofo, (Bafut, Cameroon).

FOOD SCIENCE CLUB INITIATES UNDERGRADUATE ACADEMIC ASSISTANCE PROGRAM

Graduate students in the Food Science Club have begun a novel program to provide academic assistance to undergraduates in the department. Graduate student volunteers have offered to assist students who may be having difficulty with or have questions about courses in the Food Science curricula, including biochemistry, statistics, microbiology, and courses offered by this department. General questions regarding use of computers are also included in this program.

Objectives that led to the creation of this program are: relieve some of the teaching burdens on professors and teaching assistants; give graduate students one-on-one teaching experience; motivate graduate students to stay up-to-date on knowledge fundamental to their field of study; develop an outreach to students having academic difficulties, and increase involvement of undergraduates with graduate students and encourage mentoring.

The graduate students involved in the program have selected areas in which they feel competent to assist undergraduates to find answers, get organized and become better independent learners. The undergraduates have the responsibility for doing the work assigned in the class, initiating the relationship with the graduate assistants, and keeping scheduled appointments. Faculty have been asked to bring the program to the attention of students in their classes, particularly those having academic difficulty.

Records are being kept of student contacts so that the coordinators, Susan Saunders and Victor Nwoso can make an evaluation of the program’s effectiveness at the end of the semester.

Because all Food Science courses are taught by full time faculty, the teaching experience in the program offers graduate students will be valuable as they seek careers in either industry or academia. The program may also help to offer the Food Science curriculum to a more diverse group of students with differing academic backgrounds.

U. S. FOOD FERMENTATION LAB ON EVENING NEWS

Reporters from the ABC news program WORLD NEWS TONIGHT with Peter Jennings visited the Food Science Department last fall and interviewed Dr. Henry Fleming, Head of the USDA Food Fermentation Laboratory and NCSU Professor of Food Science. The reporters questioned Dr. Fleming extensively about the need for federal support for research on pickles. If you saw the program, you may remember seeing Dr. Fleming’s picture but you didn’t hear his voice. Because he didn’t give the answers the reporters wanted to hear, the media view that agricultural research is an example of government waste was dubbed onto the sound track. Meanwhile Dr. Fleming has effectively stated the mission, scope and accomplishments of the USDA Food Fermentation Laboratory.

The mission of the laboratory, in Dr. Fleming’s words, is to develop methods for the preservation of vegetables by fermentation or direct acidification that will result in improved processing efficiency, reduced salt and other wastes, improved product quality and assurance of food safety. The research is intended to benefit farmers, processors and consumers of pickled vegetables throughout the U.S.

The laboratory is a cooperative relationship among USDA-ARS, NCSU, and trade associations. Research results are particularly relevant to small processors who do not have the interdisciplinary scientific expertise to develop modern methods needed to comply with increasing regulatory requirements and still remain competitive.

Many research findings of the laboratory have found practical value in commercial and home preservation of pickled vegetables. Pasteurization of pickled vegetables was introduced in the early 1940s as a result of research in the laboratory. This resulted in doubling the consumption of commercially processed cucumbers, and has been of great value to home canners.

More recent contributions include spoilage prevention with food-grade compounds, methods to retain firmness of pickled vegetables at relatively low concentrations of salt, and gas purging, which alone has saved the industry $20 million per year for nearly two decades. Salt usage for commercial brine storage of cucumbers has been reduced by up to one-half as a result of the research, which has resulted in significantly fewer disposal problems.

The laboratory has served as a reservoir of knowledge on the subject of pickling to processors, homemakers, extension workers, and entrepreneurs. Its personnel are frequently consulted by all these groups.

Current efforts to develop more environmentally sensitive methods for bulk fermentation and storage
of produce, and use of novel or genetically modified microorganisms will result in new or improved products or processes. Continuing research is essential for the U.S. agricultural industry to maintain its competitive position among international markets, and for our citizens to be supplied with nutritious and safe food with the lowest relative cost of any country in the world. So don't believe everything you hear on television!

—J. C. Allen

NEW PUBLICITY COORDINATOR

Effective June 1, 1992, Dr. Dwain Pilkington was appointed Publicity Coordinator for the department. The position was established as part of the recently adopted departmental goals with the objective of promoting public awareness of food science. Dr. Pilkington will be developing a plan for ways to obtain information from the department that warrants outside publicity, the sources for publication of these items and a system for keeping track of publicity announcements. Dr. Pilkington will appreciate suggestions and help in collecting items to be publicized and the names and addresses of journals, newsletters, etc., where information about Food Science and the Department can be sent. Also, we are proud of the achievements of our alumni, and will include those events in our publicity effort when brought to the attention of the publicity coordinator. Please send information to Dr. Pilkington or Dr. J. C. Allen, newsletter editor.

New ADSA Officers Have NCSU Connection

Of six candidates nominated to serve on the Board of Directors for the ADSA this year, the three elected have previous or present experience at NCSU. Dr. Bill Sandine, Professor of Microbiology at Oregon State University, was elected Vice President and will take over as president in 1993. Bill received an M.S. degree in dairy bacteriology from NCSU in 1955. Dr. Harold Swaisgood, William Neal Reynolds Professor of Food Science at NCSU, was elected Director from the Dairy Foods Division. The new Director from the Production Division is Dr. Carl Polan, Professor of Dairy Science at Virginia Tech, who earned his Ph.D. in animal nutrition with a chemistry minor from NCSU. The nominees who were not elected had no NCSU credentials.

FACULTY ACTIVITIES

In January, Dr. Roy E. Carawan was presented an award for participating in the North Carolina State University group which received the blue ribbon of the American Society of Agricultural Engineers 1992 Educational Aids Competition.

Dr. Pat Curtis has begun publishing a new newsletter, "NCSU Poultry Research Update." With the retirement of Dr. Hershell Ball, an important link between the Department and the Poultry Industry will be lost. However, Drs. Curtis and Brian Sheldon maintain a primary commodity focus in the poultry area, and many other faculty have poultry-related projects. The aim of Dr. Curtis' newsletter is to keep the industry aware of information about poultry research in the Food Science Department. Call her at 919/515-2956 to be added to the mailing list.

E. Allen Foegeding presented a paper entitled "The Effect of Cations on Rheological Properties of Whey Protein Gels" at the 4th Symposium on Food Proteins - Structure Functionality Relationships in Reinhardshamm, Germany.

Peggy Foegeding gave an invited seminar in the Department of Food Science at the University of Wageningen, The Netherlands, on October 12, 1992 regarding control of L. monocytogenes in food processing. She presented a poster on "Antibody-based detection of Bacillus and Clostridium spores" at the International Conference on Bacillus Cereus in Milk and Milk Products in Ede, The Netherlands, on October 13 and 14, 1992.

Dr. Arthur P. Hansen presented two papers titled "The binding of benzaldehyde to \( \beta \)-lactoglobulin and the effects of thermal processing on binding parameters" and "Sorption of nonanal and 2-decanone by a polypropylene cup used in aseptic packaging of cheese sauce" at the American Dairy Science Association meeting held at Ohio State University, Columbus. Dr. Hansen has presented seminars at FMC Corporation in Princeton, New Jersey, and H.P. Hood in Oneida, New York. Dr. Hansen has received two research grants. One grant is from International Paper Company entitled "The effect of various dairy packaging materials on the shelf life and flavor of ultrapasteurized milk." The other grant is from FMC Corporation and is entitled "Production of reduced-fat cheese curd using cellulose gel and carrageenan." Dr. Hansen has a new graduate student from Indonesia, Melati "Mel" Simon. Mel is working on extended shelf life of pasteurized and ultrapasteurized milk.

Todd Klaenhammer was appointed Director of the Southeast Dairy Foods Research Center on July 1, 1992. He presented a seminar in Helsinki, Finland on September 3, 1992 at their International Bioscience Symposium on "Gene transfer and expression systems in Lactobacillus", and he also spoke at the Nordic Food Biotechnology Umbrella Program (also in Finland) on "Bacteriocins".

Duane K. Larick had a proposal funded by the National Live Stock & Meat Board on "Development of natural flavor systems to improve the palatability
of low-fat beef products". As of January 1, 1992, Dr. Larick's position and title were changed to include the duties of Graduate Administrator.

Dr. David Lineback reported on his busy travel and speaking schedule, much of which results from his tenure this year as President of the Institute of Food Technologists. A sampling: Speaker at British Section, IFT meeting on "Nutrition Labelling: Comparing Nutrition Labelling in the US and Europe" where he spoke on the "Proposed US Food Regulations". London as President, IFT; Speaker at Minnesota Section, IFT meeting on "Biotechnology from Both Sides"; banquet speaker on "Challenges and Successes" at California Regional Symposium, IFT, Fresno, CA as President, IFT. He participated in the Graduate Student Development Workshop as chairman of the organizing committee and chair of one session, Quail Roost Conference Center, Rougemont, NC; Extension Leadership Development Institute, co-chairman of organizing committee for this section, and speaker on Leadership: A Journey, Conference Center, Brown's Summit, NC. At the International Food Technology Exhibition and Conference, The Hague, The Netherlands (Nov. 15-18), he chaired the opening session as President, IFT. Lineback participated in an AACC short course on "Starch: Structure, Properties and Food Uses" as course director and lecturer, Chicago, IL. December 7-22 he visited Taiwan and Japan, where he reviewed research programs with emphasis on future program directions and potential collaboration with our department at Food Industry Research and Development Institute (FIRDI), Hsinchu, Taiwan; gave seminars on "Future Trends in Food Science and Technology" at FIRDI and as keynote address at annual meeting of the Chinese Society of Food Science and Technology at Ping Tung Technical College, Ping Tun; gave seminars on "Recent Advances in Starch Chemistry" at Department of Food Science, National Chung Hsing University, Taichung, at Department of Marine Food Science, National Taiwan Ocean University, Keelung, and at Graduate Institute of Food Science and Technology, National Taiwan University, Taipei.

Brian W. Sheldon was an invited speaker at the National Poultry Waste Management Symposium in October 1992 in Birmingham, AL, on the topic of "Processing Wastewater Efficiency for Turkeys and Ducks"; he also presented a talk, "Environmental Update", at the North Carolina Poultry Processors Workshop on October 11, 1992 in Raleigh. Sheldon recently had two grants awarded from Southeastern Poultry and Egg Association and Applied Microbiology, Inc., "Development of nisin-based treatments to reduce or eliminate microbial cross-contamination of poultry carcasses". His new Regional project, "Development of new processes and technologies for the processing of poultry products", was written and submitted.

Harold Swaisgood began his tenure as a member of the Board of Directors of the American Dairy Science Association. He also was appointed to serve on the ADSA National Needs Task Force. Dr. Swaisgood is serving as organizer and General Chairman for the Seventh Annual J.R. Brunner Protein Symposium to be held May 6-7, 1993 at Michigan State University.

Dr. Donn R. Ward, Associate Professor and Specialist-in-Charge, was appointed by the Secretary of Agriculture, Edward Madigan, to the National Advisory Committee on Microbiological Criteria for Foods. This committee is charged with the responsibility of providing advice and recommendations to the Secretaries of Agriculture and Health and Human Services on the development of microbiological criteria which can be used to assess the safety and wholesomeness of food. The committee is also responsible for recommending microbiological criteria that indicate whether foods have been processed using good manufacturing practices. Committee membership is composed of representation from various federal agencies such as: Food Safety and Inspection Service, Food and Drug Administration, National Marine Fisheries Service, and the Department of Defense's U.S. Army Office of the Surgeon General. Other members include food industry representatives and individuals from public and private institutions having expertise in food science, microbiology, and other relevant disciplines.

William M. Walter, Jr., chaired the final meeting for Regional Project 5-214, "Product Development for Increased Utilization of Sweetpotato", in August, 1992, at Louisiana State University (Baton Rouge, LA).

The U.S. Department of Agriculture Competitive Grants program awarded two new grants to researchers in the Food Science Department. Dr. H.E. Swaisgood was awarded $167,000 for "Recombinant Enzymes for Preparation of Bioreactors by Selective Adsorption". A grant of $189,000 was made to Drs. T. Kienhammer, D. O'Sullivan and M.A. Conkling for work on "Bacteriophage Specific Suicide and Expression Systems for Industrial Fermentation". This was the first year of funding in the area of Processing Antecedent to Adding Value or Developing New Products, and these awards were extremely competitive.

STUDENT, STAFF AND ALUMNI NEWS

Tom Aurand (BS 1972) has left Otogene and is now Associate Director of Technology for Rich Products in Buffalo.

Yun Hee Chang (Ph.D. in 1992) is working at the Korean Food Research Institute. A microbiology Ph.D. student from Yugoslavia, Gordana Djordjevic, has joined Dr. Kienhammer's lab.

Dr. H. Edward Kennedy, is currently President
of Bioxis, 2100 Arch Street, Philadelphia, PA, 19103. He completed his M.S. in 1952 and Ph.D. in 1954 under Professor (Emeritus) Marvin Speck on lactic acid bacterial growth factors from corn steep liquor. Dr. Kennedy is planning to retire May 1, 1983.

Prostate cancer is the most common serious cancer affecting men. It is also one of the most curable, and a screening method is recommended for men. Screening will include the Prostate Specific Antigen (PSA) blood test which was developed by Dr. Tsun Ming Chu. Dr. Ming Chu received his MS degree in Food Science at NCSU in 1985, working with Professor Len Aurand. His research while at State dealt with the role of xanthine oxidase in oxidized flavor in milk. Dr. Chu received his Ph.D. in biochemistry at Penn State.

Presently, he is Director of Cancer Research and Chairman of the Department of Biochemistry, Roswell Park Memorial Institute, New York State Department of Health, Buffalo, N.Y. Dr. Chu has been an extremely productive research scientist. His publication record, for example, includes 283 papers, 172 abstracts and 8 patents. He serves on many national committees related to Cancer Research. He also serves as either Editor or Associate Editor for the following journals: Cancer Investigation, Journal of Tumor Marker Oncology, Journal of Clinical Laboratory Analysis and Tumor Biology. His business address is Roswell Park Memorial Institute, New York State Department of Health, Buffalo, N.Y., 14263.

Melissa Fulp Thomas (M.S. 1987) was married in September 1992 to Mack Thomas. Melissa is with International Paper in Research Triangle Park, NC.

Dr. Molly Warren, December 1991 Ph.D. graduate, was presented the American Egg Board Research Award for her paper entitled “Lipid composition of hexane and supercritical carbon dioxide reduced cholesterol dried egg yolk.” The award was presented to her at the Awards Banquet, August 6, 1992, held during the Annual Meeting of the Poultry Science Associations in Fayetteville, AR. The paper presented a portion of her Ph.D. research that was supported by the Southeastern Poultry & Egg Association. Dr. Warren is now Technical Director for National Egg Products Company, Inc., Social Circle, GA.

Dr. Young-Joon Choi, of National Tong-Yeong Fisheries Technical College, recently completed a one-year sabbatic visit with Dr. Tyre Lanier. He studied the source, types and properties of heat-activated proteases in Atlantic menhaden which are responsible for softening of surimi gels. Dr. Jesus Granja of the CSIC Institute for Marine Research in Spain has now joined Dr. Lanier’s group to further their on-going work on the mechanisms of cryoprotection of proteins by carbohydrates.

The Food Science Department welcomes Angela Baker and Paula Pharr as new secretaries for the two faculty office groups on the second floor, and Marlu Upchurch, secretary for third floor faculty.

Calendar

FOOD SCIENCE ALUMNI REUNION

The first Food Science Department Alumni Reunion has been planned for Saturday, March 20. Hopefully by now all the alumni have received information about the day-long event and have sent in their reservations. Reservations must be in by March 8. Scheduled events include: an NCSU baseball game complete with hot dogs, fixin’s and, of course, sundae’s made with unbeatable NCSU Dairy ice cream and toppings; time to reminisce with faculty, staff and students from years past and present; great slides of department happenings through the years and a short presentation; dinner on your own (maybe at an old hangout), and then a wine and cheese tasting/party to top off the evening.

For more information or to reserve your tickets, call (919) 515-2965.

AWARDS DINNER

The Annual banquet honoring scholarship recipients, and winners of Departmental and Food Science Club Awards will be held Tuesday April 13, 6 PM at the NCSU Faculty Club. Call Susan Kall for tickets, (919)515-2952.

H. BROOKS JAMES LECTURE

The nineteenth annual H Brooks James Memorial Lecture will be held at 4 PM, March 8, 1993, in the University Student Center, South Gallery. Dr. David Kritchevsky, Associate Director of the Wistar Institute in Philadelphia, will speak on “Variation in Blood Cholesterol.” The public is invited to hear this renowned and entertaining lecturer.

INFORMATION NEEDED: SEE YOUR NAME IN PRINT!

NCSU Food Science News is always looking for news from alumni. Write and tell us what you are doing, where you work, or news and addresses of your classmates who may be lost from our mailing list. The address is in the back!