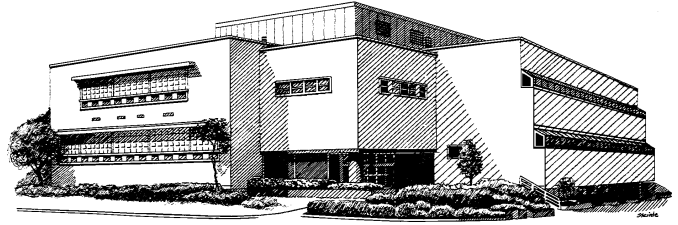


Department of Food Science

June 2001



Food Science Newsletter

FORMER STUDENTS & RESEARCHERS UPDATES

JEFFREY KORNACKI, formerly with Silliker Laboratories, is now an assistant professor of food microbiology at the Center for Food Safety of the University of Georgia in Griffin....

JILL SNOWDON, formerly with the Egg Nutrition Center, is now with the Institute of Food Technologists in its Washington, D.C. office....

KATHRYN BOOR, associate professor in the Food Science Department of Cornell University, received the 2000 ADSA Foundation Scholar Award; she also was elected a director of the American Dairy Science Association....

SUSAN SUMNER has been appointed chairman of the Department of Food Science and Technology at Virginia Tech; she received the 2000 Educator Award from the International Association for Food Protection....

H. S. PETER PARK, on February 15, 2001, retired from Marigold Foods in Rochester, MN....

JONATHAN FREY, formerly with Kal Kan Foods, is now Director of Product and Sensory Development at Taco Bell in Irvine, CA....

KATHY KNUTSON, formerly with Silliker Laboratories, is now with the National Center for Food Safety and Technology, Food and Drug Administration, Summit Argo, IL....

DANA WISEMAN completed an internship at the North Shore Golf Course in Menasha and continues there part-time as he completes his studies

Continued on Page 2

INTRODUCTION

A year has gone by since we last met through the medium of this Newsletter and so it is time to once again share information about what is happening in the Department of Food Science. We have the usual array of reports and news of former students. This year we note the passing of Emeritus Professor Harold Calbert and of long-time departmental secretary, Jean Steinmetz. Former students and researchers who passed away include Dr. Mahesh Goel, Bernard Golback and Remy Grappin. The new Dairy Store is mentioned as are major gifts made to the department. Activities of the Food Science Club and the Dairy Products Judging Team are described and retirement of the team's long-time coach, Dr. Robert Bradley, Jr. is noted.

We again include a questionnaire at the end of the Newsletter and invite you to complete the questionnaire and return it to us so we can include information you provide in the next newsletter. Alternatively, you can send the information by e-mail; the e-mail address appears with the questionnaire.

This year's Newsletter was organized by Elmer Marth and Yvonne Bushland. Persons who supplied material are noted at ends of articles.

Elmer H. Marth

MESSAGE FROM THE CHAIR

Greetings from the Department of Food Science at the University of Wisconsin-Madison. Once again, it has been a busy year in the department since the last Food Science Newsletter. We have completed a successful search for an Assistant Professor/Food Processing Specialist. This is the same position I reported last year that Dr. Carmen Hernandez-Brenes had accepted. Unfortunately, personal reasons caused her to decline the position not long after the newsletter was mailed. The good news is that we were able to attract another very strong field of applicants and are very pleased to announce that Dr. Scott Rankin has accepted this position and will be joining our faculty on or around July 1, 2001. Dr. Rankin was an Assistant Professor at the University of Maryland. His extension activities at Maryland included dairy foods processing and HACCP training for a variety of food industries, while his research interests include flavor chemistry and sensory analysis. Dr. Rankin's hire will allow the department to continue to move in a more discipline-based approach to extension programming while maintaining our traditional commodity strength in dairy processing. Dr. Rankin's background is described in greater detail later in this issue.

Continued on Page 2

in culinary arts at the Fox Valley Technical College in Appleton, WI....

NORAINI KHALID and NORMAH AHAMAD are with the Malaysian Agricultural Research and Development Institute in Kuala Lumpur; Noraini is with the food processing and product development section and Normah works on food ingredients and herbs....

NICOLE GRIGG BRAKE has been with Dreyer's Grand Ice Cream of Union City, CA, for four years; on August 26, 2000, her daughter, Jasmine, was born....

GULHAN UNLU YUKSEL completed three years of postdoctoral research at the National Renewable Energy Laboratory in Golden, CO, and in July, 2000, became assistant professor in the Department of Food Science and Toxicology at the University of Idaho-Moscow; her teaching program includes a course in food microbiology....

DIANA TIMPONE JONES and her husband, Ryan, are with the Cornerstone Church and are doing campus ministry at UW-Madison....

THEODORE MINOR has become an avid genealogist and has published a book on some of his German ancestors who settled in St. Joe County, MI; he also works with Habitat for Humanity, services pianos in the area around Traverse City, MI, and occasionally serves as a church organist...

KERRY KAYLEGIAN, after 10 years with the Wisconsin Center for Dairy Research, is moving to Cornell University where she will work on the Ph.D. degree...

DAVID EVERETT is a professor at the University of Otago, Dunedin, New Zealand...

Continued on Page 3

In November, the department underwent a review by an external panel of experts coordinated by the United States Department of Agriculture. Preparation of the review document was an excellent opportunity for the department to develop a unified vision and a plan to accomplish our goals. The review itself was very positive. Among the recommendations of the review team was adding an additional food engineering faculty member and completing the renovation of Babcock Hall. We were gratified to learn of these recommendations as they represent two of the department's highest priorities.

The second meeting of the "Babcock Associates – Industry Advocates for a Strong University of Wisconsin-Madison Food Science Department" was held in Madison on March 1-2, 2001. The meeting again provided an opportunity for faculty to discuss the challenges and opportunities that face the department with our industrial partners. Details of the meeting appear elsewhere in this Newsletter. The Babcock Associates agreed to advocate for addition of a faculty member in food engineering/food processing and completion of Phase II of the Babcock Hall renovation. Additionally, the Babcock Associates agreed to work with the department to initiate a fund drive to support educational activities in the Department of Food Science. I am confident that you will be hearing a great deal more about this fund drive in the near future. I would again like to thank the Babcock Associates for their willingness to contribute their time and energy to the department; their insights and assistance are essential if the UW-Madison Department of Food Science is to remain among the preeminent food science programs in the U.S.

Our students continue the tradition of excellence we have grown to expect both in and out of the classroom. Their academic achievements continue to be recognized in a variety of ways, the most tangible being their success in receiving a variety of college, campus, and national scholarships and awards. The UW-Madison Food Science Club continues to provide a variety of professional growth opportunities for our students. Last year's College Bowl team came in third in the national competition, while this year's team came in second at the Midwest Competition. For the third year running, the 2001 entry has been selected as a finalist in IFT's product development competition. Finally, last year's IFT product development team came in second at the IFT competition and won the NASA Product Development Competition. I would like to again take this opportunity to congratulate our students on their many successes both within and outside of the classroom. The department is proud of our students' accomplishments and thankful for all of the assistance they have provided.

I would like to conclude by announcing that I have decided to resign as chair of the Department of Food Science, effective June 30, 2001. The last three years have been a wonderful opportunity and I feel that the department has made significant progress on a number of critical needs. I simply have a strong desire to return to a more active role in my research program; specifically, I am planning to apply the advances being made in microbial genomics to the study of food fermentations. The department is very fortunate that Dr. Bill Wendorff has agreed to serve as the next Chair of the Department of Food Science. I am confident that the Department will flourish with Bill as chair. Please join me in congratulating Bill.

James Steele

SCOTT RANKIN ACCEPTS FOOD SCIENCE FACULTY POSITION

Scott A. Rankin, currently assistant professor of dairy foods at the University of Maryland, will be joining the UW Food Science faculty as an assistant professor and extension food processing specialist. He is scheduled to arrive in July, 2001.

Scott earned B.S. (1991) and M.S. (1992) degrees in food science and nutrition at Brigham Young University. He then moved to Oregon State University where, in 1995, he received the Ph.D. degree in food science and technology with a minor distributed between microbiology and statistics. From 1996 to the present he has been an assistant professor at

Continued on Page 3

the University of Maryland. His research at Maryland has included studies on the whiteness of skim milk, improving the flavor of low-fat cheddar cheese, and effects of phosphorus on the immune status and carcass quality of striped bass. Additionally, Rankin taught several courses and established a major extension program in dairy, fruits and vegetables, and meat processing.

E.H. Marth

DEPARTMENT RECEIVES DONATION OF LABORATORY EQUIPMENT AND SCHOLARSHIP FUNDS

The Department of Food Science has received nine pieces of sophisticated laboratory equipment thanks to a generous donation from the Monsanto Company. After Monsanto decided to close the Nutrasweet plant in the Chicago area, representatives from the company contacted Professor Srinivasan Damodaran and offered the equipment. There was an immediate use for almost all of the equipment so Professor Damodaran gladly accepted the offer on behalf of the department. Most of the instruments are less than two years old and have a combined book value of over \$300,000. A Micro DSC, an Imaging Densitometer, a Refrigerated Centrifuge and a Vision Workstation-Gelbert Imafidon are a few of the items received. We are extremely grateful to the Monsanto Company, a member of the Babcock Associates, for this gift. The equipment will allow us to maintain a leadership role in Food Science research.

Tom Kwak, Director of Operations Support for Chiquita Processed Foods, LLC and member of the Babcock Associates, donated the Young Professional Service Award to the UW-Food Science scholarship fund. Tom received the \$1,000 award from the Guard Society of the Food Processing Industry last year. The Department is grateful for this donation and will use it next year in its recruiting campaign. It is through the generosity of our alumni, such as Tom, that we are able to achieve a critical edge that helps distinguish the Department of Food Science at the University of Wisconsin. Thanks Tom, and congratulations on receiving the Young Professional Service Award.

Tom Blattner

BABCOCK ASSOCIATES MEET

The Babcock Associates representing various segments of the food industry, met in Babcock Hall on March 1 and 2, 2001. The group aids the department in its quest for excellence in teaching, research and extension. Chairman Jim Steele opened the meeting by briefly reviewing departmental activities and also changes made during the past year. Emphasis was on the recently completed USDA CREES departmental review and on the strategic plan being developed this year. Associates and faculty/staff then met in breakout sessions to formulate action plans for the department in high priority areas: undergraduate recruitment, enhancing and upgrading pilot plant facilities, and developing a departmental resource database entitled, "Food Industry Trends: A 10-Year Projection." The Associates also participated in a session on developing mechanisms for industry participation in outcome-based assessments of Food Science undergraduate students.

Later in the meeting there was a Technology Exchange session. The topic was "Soooooo You Want to Market a New Functional Food", which was discussed in presentations by Kirk Parkin (Food Science), Leslie Plhak (Food Science), Irwin Goldman (Horticulture) and John Folts (Medical School). The outcomes of the presentations and subsequent discussion were to provide the Associates with new information and to position the UW in the field of nutraceutical foods. Associates agreed to write advocacy letters in support of an additional faculty position in food engineering and completion of Babcock Hall remodeling - Phase II. Additionally, a subgroup of Associates will work with the department to initiate a fund drive to support Food Science education.

E.H. Marth

JOSEPH FRANK has been named an editor of the *Journal of Food Protection*, effective January 2002...

ROBERT BRACKETT, formerly professor of food microbiology at the University of Georgia-Griffin and more recently a senior microbiologist in the FDA's Office of Plant and Dairy Foods and Beverages, recently was promoted to Director of Food Safety in the FDA's Center for Food Safety and Applied Nutrition; in this position he will oversee all aspects of the FDA's food safety responsibilities.



REMY GRAPPIN, of Poligny, France, died last year.



BERNARD V. GOLBACH, age 61, died early in 2001 of complications related to leukemia. Golbach received the B.S. degree in dairy and food industries at UW-Madison in 1961. His professional career included employment with Kroger, Inc., Borden, Inc., and Masters Gallery Foods where he was a vice-president.



MAHESH C. GOEL, age 64, died on June 5, 2000, of an aggressive, fast growing and infiltrative type of brain tumor. Goel received the M.S. (1966) and the Ph.D. (1970) degrees in food science (food microbiology) at UW-Madison. For many years, Dr. Goel served as director of the Public Health Laboratories and the County Environmental Laboratories in Paterson, NJ. He also was the founder and national coordinator of "Hands to Clinical Laboratories of Third World Countries", an organization dedicated to improving conditions in clinical laboratories in the developing world. A memorial service for Dr. Goel was held on June 7, 2000, at the Ballard-Durand Funeral Home in White Plains, NY. He is survived by his wife, three daughters, three sons-in-law and five grandchildren.



NEWS FROM THE FOOD SCIENCE CLUB

It's been a great year so far in the UW-Madison Food Science Club and this Spring is even better! Fall semester was filled with exciting speakers from Oscar Mayer, Kellogg's, Kraft, M&M Mars, General Mills, Cargill/Sunny Fresh Foods, and Grande Cheese. Spring semester started with speakers from Quest International. The College Bowl Team practiced often, up to three times per week, in preparation for the Midwest regional competition. The team made it through to the last match at regionals, coming in at second place. The Product Development Team has also been working hard, writing reports about its product, "Handicotti", for the DMI and IFTSA competitions. The Team has had exciting news... it is one of six teams from across the country to make it to the IFTSA competition finals, and so will compete in the national finals at the IFT Annual Meeting this June in New Orleans. Good luck to the team! The 1999-2000 Team was also honored this year to have its product, "Chomp!", featured in the December 2000 issue of *Discover* magazine. The award-winning Dairy Products Judging Team has also been working on developing its senses for future competitions. As a new activity this year, a group of students in the Club has been developing a forum to be held this summer at the IFT Annual Meeting. The title of the forum is "From Graduation to the 'Real World': Industry and Student Perspectives". It is designed with students in mind, offering a relaxed setting to discuss concerns about the transition into industry. Panelists include representatives from Cargill, Oscar Mayer Foods-Kraft Foods, General Mills, Kellogg, and Purdue University. Food Science Club members have also been involved in some WIFT activities, and two members were awarded WIFT scholarships. (Thank you very much, WIFT!) Club members have been busy hosting several groups of high school students as they consider careers in Food Science. Our club provides presentations, tours, experiments, and demonstrations to the budding scientists. Our fund-raising efforts this year have included exam proctoring for the department, coupon books, and a cheese-box project. We are planning to order a new shipment of our Club's own cookbook since the first edition sold out quickly. The Food Science Club has also been having a *lot* of fun with events like the annual Halloween Trick-or-Treat at professors' houses, a fabulous holiday party, Valentine's Day dinner and movie, Mardi Gras potluck, St. Patrick's Day dinner (with green beer, of course), a picnic, and a "Faculty Appreciation" wine and cheese social. The club also went on two road trips in March - one to Chicago for a tour of Jelly Belly and the Fancy Food Show and another to support the College Bowl Team at the IFTSA Midwest Regional Meeting at Michigan State University. We very much enjoyed meeting our fellow Food Science students from many other universities at the meeting! For more information, resources, and current UW-Madison Club activities (or just to say "hi"), please visit our website at <http://www.sit.wisc.edu/~foodscience>.

Laura Lebak

REPEAT AND GOING FOR THREEPEAT!

It was a reasonable showing at the Chicago Regional Dairy Product Evaluation Competition where the Wisconsin team placed in the "middle of the pack," with no stellar performances by any of the Wisconsin competitors. The gauntlet was dropped on the return trip from Chicago on September 23. For the next two weeks in preparation for the National Contest in San Francisco on October 9, 2000, the coach was challenged to obtain/prepare enough samples for training. Training sessions were designed to build on existing strengths. The undergraduate team was Melissa Maragos, Craig Schutta and Jesse Vorwald. The graduate students in competition were Kerry Kaylegian and Sarah Rauschenberger. (Two grads were allowed this year to compete as individuals - no team competition.)

The undergraduate team performed with excellence. Jesse Vorwald was first place individual in the cottage cheese and yogurt competition with the team placing second in yogurt and Cheddar cheese evaluation. The team performance in the aggregate scoring for All Products gave Craig Schutta a sixth place and the team a fourth place.

Sarah Rauschenberger, in the Graduate Student Competition after only five weeks of practice, placed first in yogurt, cottage cheese and Cheddar cheese, second in butter (tied for first place) and third in ice cream. This outstanding performance yielded a first place in All Products scoring. For the second year, graduate students from Wisconsin have won this event. Kerry Kaylegian placed first in the milk competition and third in yogurt, earning second place in All Products.

The competitors from the University of Wisconsin faced teams from 20 other schools and universities. Returning with \$100 in scholarship money also added to overall satisfaction.

One final note—after 25 years of training students for sensory evaluation of dairy foods, Professor Bob Bradley is going to retire as of June 30, 2001. However, there is an excellent nucleus of partially trained students anxiously awaiting the next coach and competition in 2001.

R.L. Bradley, Jr.

BABCOCK HALL DAIRY PLANT

Renovation of the Dairy Store is on schedule and almost completed. Sometime around the first of July the store will reopen for business. The new design includes angled walls and an interesting color selection to create visual appeal to the otherwise boxy looking room. Food Science faculty worked with the architect and designers to create a conceptual bridge between the Dairy Store and the study of Food Science. A back-lighted collage panel showing the many aspects of Food Science and the phrase "From the Farmer's Gate to the Consumer's Plate" greets patrons to the Store. The adjacent consumer taste-testing room provides a practical example of applied Food Science that most customers can understand and in which they can participate. In addition to offering dairy products

Continued on page 5

manufactured in the dairy plant, the store will have an expanded delicatessen section to serve students and university workers in the area. Renovation of the Dairy Store is made possible by a generous donation from John and Donna Hansen, founder of Kwik Trip Inc. We are excited about the grand opening ceremony for the Dairy Store on Tuesday, July 31 with the ribbon cutting scheduled for 3:30. Stop in for a visit when you are in Madison.

Tom Blattner

EXTENSION / OUTREACH UPDATE

An offer extended to Dr. Carmen Hernandez-Bernes to join our faculty this year as an extension specialist in vegetable and fruit processing was declined for personal reasons. As a result, Bill Wendorff again was called on to chair the search committee for an Extension Food Processing Specialist. This 75% extension/25% research position is intended to address some of the food processing activities previously handled by Joachim von Elbe and Bob Bradley. With input from the Babcock Associates, our industry advisory and advocacy group, the department broadened the focus of the position to one of processing in either the dairy or vegetable/fruit area. A strong pool of candidates applied and interviews were conducted in January of this year. The department extended an offer to Scott Rankin currently at the University of Maryland. The offer has been accepted and Dr. Rankin will join the departmental faculty later this year. See related story elsewhere in this newsletter.

Outreach to the industry continues to be a primary focus of the department's extension activities. Our recent CSREES review highlighted the national stature of our dairy extension programs. Faculty are also working to ensure that state meat, seafood, and cider processors have the training necessary to meet new federal HACCP regulations.

Our extension Web site, Wisconsin F.I.R.S.T., will be operational later this year. Wisconsin F.I.R.S.T. (Food Industry Research Service and Training) will be a clearinghouse of information for consumers and for the Wisconsin food industry. The site will be linked through the department Web page. We welcome your feedback on any areas of need that you would like to see extension faculty address.

Barbara Ingham

MONICA THEIS RECEIVES TEACHING AWARD

Monica Theis, lecturer in food science, recently received the 2001 Spitzer Excellence in Teaching Award from the College of Agricultural and Life Sciences. She teaches Food Laws and Regulations, Organization and Management of Food Nutrition Services, Professions of Dietetics and Food Science Administration, and Supervised Practice in Foodservice Administration (for the Coordinated Undergraduate Program in Dietetics). Theis also is the co-author of *Introduction to Foodservice*, a major textbook that has contributed significantly

to the success of UW graduates in dietetics and to the national prominence of the UW Dietetics Program. James Steele, food science chairman said, "it is Monica's ability to elevate her students' own expectations of their performance that truly sets her apart." He continued, "I believe this is the result of Monica serving as a role model for commitment to excellence." Monica is the first UW-Madison food scientist to receive this award.

E.H. Marth

JAMES STEELE RECEIVES 2000 DSM FOOD SPECIALTIES AWARD FROM ADSA

The American Dairy Science Association (ADSA), at its 2000 annual meeting, conferred on James Steele the DSM Food Specialists Award in recognition of the excellence of his contributions to cheese microbiology and biochemistry. From 1995 to 2000 Steele authored or co-authored 20 refereed publications, five book chapters and 35 abstracts of papers given at professional meetings. His research accomplishments also have been recognized by 19 invitations, during 1996 to 2000, to present his research and to participate in symposia on cheese flavor. Steele's research has significantly increased our knowledge of metabolic and genetic properties of lactic acid bacteria and of the microbiology and biochemistry of cheese flavor development. His work also has led to new approaches for improvement of lactic acid bacteria to be used as cheese starter cultures and to accelerate cheese ripening.

The DSM Food Specialties Award replaces the Pfizer Award which was given by ADSA for many years. During that time the following UW-Madison food scientists won the award: W.V. Price (1959); N.F. Olson (1971), E.H. Marth (1975), C.H. Amundson (1987), and M.E. Johnson (1992).

E.H. Marth

JOHN LUCEY RECEIVES 2001 ADSA FOUNDATION SCHOLAR AWARD

John A. Lucey, assistant professor, was chosen by the American Dairy Science Association for its 2001 Foundation Scholar Award. Lucey joined the UW Food Science Department in 1999 after four years at Massey University in New Zealand. He received his Ph.D. degree from University College in Cork, Ireland. After three further years at University College, he spent a year at the Wageningen Agricultural University in the Netherlands before going to New Zealand.

Lucey's research has been on cheese, yogurt, and milk proteins. Currently he is examining the behavior of gels resulting from the joint action of rennet and acid. This work is aimed at understanding formation of texture in natural cheeses and other foods. Lucey also investigated interactions between milk proteins and hydrocolloids using rheological techniques and size-exclusion chromatography coupled with on-line light scattering. Dr. Lucey is the first UW-Food Science faculty person to receive the Foundation Scholar Award, which has been given annually by ADSA since 1999.

E.H. Marth

EDWARD DUDLEY IS WINNER OF GRADUATE STUDENT PAPER PRESENTATION CONTEST AT 2000 ADSA MEETING

Edward Dudley won the graduate student paper presentation contest in the Dairy Foods Division at the 2000 annual meeting of the American Dairy Science Association. The award is sponsored by the National Milk Producers Federation. Dudley's paper was entitled, "Citrate Catabolism and Succinate Production by Cheddar Cheese Non-starter Lactobacilli." He recently completed work toward the PhD degree under the supervision of James Steele and is now at the University of Maryland where he is doing postdoctoral research on characterizing enteroaggregative *Escherichia coli*.

E.H. Marth

JILL LOSINSKI RECEIVES MAJOR SCHOLARSHIP

Jill Losinski, a native of Richland Center, WI and a beginning graduate student in Food Science, received the John Brandt Memorial Foundation Scholarship. Jill, whose major professor is Dr. Barbara Ingham, is doing research on antimicrobial agents from plant sources and their possible use in dairy foods.

E.H. Marth

FACULTY NOTES

NORMAN OLSON will speak at the annual meeting of the New Zealand Institute of Food Technology in August, 2001... RICH HARTEL will give a lecture at the same meeting; Dr. Olson continues to serve on committees of the Center for Dairy Research and is preparing a chapter for the book, *Cheese Quality*, that is to be published by the International Dairy Congress in 2002... WILLIAM WENDORFF is the new chairman of the Food Science Department, effective July 1, 2001... ROBERT BRADLEY, JR., after a long (37 years) and distinguished career as teacher, researcher and extension worker, retires as of July 1, 2001... ELMER MARTH will be the after-dinner speaker at the 2001 annual meeting of the Wisconsin Laboratory Association, in September, his topic: "Food Microbiology- Then and Now"...SRINIVASAN DAMODARAN's research program has yielded a highly absorbent gel made from the protein of trash fish - the gel is of potential use in manufacture of diapers... MARY MENNES is president-elect of the University Retirement Association.

E.H. Marth

NEW BOOKS AVAILABLE

The second edition of *Applied Dairy Microbiology*, edited by Elmer H. Marth and James L. Steele, is now available from

Marcel Dekker, Inc., 270 Madison Ave., New York, NY (212-696-9000). UW faculty/staff who contributed chapters to the book include Paul J. Weimer (Dairy Forage Center), Robert L. Bradley, Jr. (Food Science), Mark E. Johnson (Center for Dairy Research), J. Russell Bishop (Food Science), and William Wendorff (Food Science). Several chapters also were contributed by former graduate students: Jeffrey L. Kornacki (University of Georgia- Griffin), Joseph F. Frank (University of Georgia-Athens), and Elliot T. Ryser (Michigan State University). The book has 736 pages and 18 chapters with six completely new chapters. They are: metabolism of starter cultures, genetics of lactic acid bacteria, fermented milks and cream, probiotics and prebiotics, cleaning and sanitizing in milk production and processing, and regulatory control of milk and milk products. All chapters retained from the first edition have been updated and expanded.

Another recently published book is *Milk, Microbes and Marth: An Autobiography* by Elmer H. Marth. The book, with 16 chapters, appendix and index, has 321 pages plus 23 pages of pictures. The first two chapters deal with Prussian Pomerania, the Pomeranian immigration of 1843 and settlement of the author's ancestors in Wisconsin. After describing life on the farm, several chapters detail the author's education beginning in a rural one-room school and ending with postdoctoral training at UW-Madison. Food microbiology research at a major food company is described and the author's return to academia is detailed. Teaching, research, publication, and public service by the author at UW-Madison are described. The book is available from Marsha Rogers, Food Research Institute, UW-Madison, 1925 Willow Dr., Madison, WI 53706 (608-263-7777).

E.H. Marth

HAROLD E. CALBERT, 1918 - 2000

Harold E. Calbert, emeritus professor of food science, died of congestive heart failure at Meriter Hospital in Madison, WI, on August 28, 2000. He was born in Edinburg, IN, on March 20, 1918. In 1939 he received the B.S. degree in biological chemistry from Allegheny College in Meadville, PA. After serving with the Pennsylvania Game Commission (1939-1941); the U.S. Army, reserve and active duty; and teaching chemistry at the University of Florence, Italy (1945-1946); Calbert enrolled at the University of Wisconsin and received the M.S. (1947) and Ph.D. (1948) degrees in dairy industry (now food science). On September 5, 1942, he married Mary Jane Fargo.

Dr. Calbert joined the staff of the Department of Dairy Industry as an instructor in 1948 and was named an assistant professor in 1950. He was promoted to associate professor in 1952 and to professor in 1960. In 1961, he was appointed chairman of what then was the Department of Dairy and Food Industries, which evolved into Food Science and Industries and then Food Science during Calbert's tenure as chairman through 1977. His retirement in 1980 was hastened by complications of heart surgery.

Continued on page 7

Calbert's research interests included food plant sanitation, quality control, food ingredients, and dairy technology and chemistry. In the later years of his career, Dr. Calbert established the aquaculture program (which continues to the present), and served as its director. During his career, Calbert taught courses in fluid milk processing, sanitation and quality control, food ingredients, dairy chemistry, and the introductory course in food science.

Calbert was active in the American Dairy Science Association where he served as chairman of the dairy foods section, membership committee, curd tension committee, resolutions committee, Borden Award selection committee, and advisory committee to Dairy Society International. He was president of the association in 1972, and in 1980 he received the association's Award of Honor. Dr. Calbert also served as president of the Wisconsin Association of Milk and Food Sanitarians, the Wisconsin Dairy Technology Society, and the Downtown Madison Kiwanis Club.

Calbert is survived by his wife, Mary Jane, daughters, Bonnie Lawyer (Franksville, WI) and Barbara Mancuso (Wisconsin Rapids, WI) and son Brad (Littleton, CO), and six grandchildren.

E.H. Marth

JEAN M. STEINMETZ, 1909-2000

Many readers will remember Jean Steinmetz who for years was in charge of the departmental office. Jean, age 91, died at St. Mary's Hospital, Madison, WI, on November 24, 2000. She was retired since 1975. Her husband, Arthur, died on April 5, 1999. She is survived by a son, Paul, and three grandchildren. Funeral services for Mrs. Steinmetz were held on November 28, 2000, at St. Maria Goretti Catholic Church in Madison.

E.H. Marth

NEWS FROM THE CENTER FOR DAIRY RESEARCH

1. Juan Romero, Associate Researcher at the Wisconsin Center for Dairy Research was issued a patent for "Oil produced from the *Brassica napus*". This oil combines oxidative stability sufficient for industrial applications with a desirable dietary fatty acid profile.
2. Marianne Smukowski, Dairy Safety and Quality Applications Coordinator, was a judge at the 2000 World Championship Cheese Contest held March 21-24 of last year at the Monona Terrace Convention Center in Madison, Wisconsin. She was one of ten experts from six nations chosen to judge cheeses and butters entered in 28 classes. Of the 10 judges, only two came from the State of Wisconsin.
3. The Wisconsin Center for Dairy Research recently dedicated a reference library and conference room in Babcock Hall to honor Norm Olson, Emeritus Professor, Department of Food

Science and former director of the Center for Dairy Research. Dean Elton Aberle, College of Agricultural and Life Sciences, gave the dedication address.

4. Brian W. Gould received the Award for Professional Excellence from the American Agricultural Economics Association. The award recognizes his superior achievement in agricultural economics as exemplified by the Distinguished Extension Program Group. The award was presented at the Association's annual meeting last August. Brian is the marketing/economics coordinator at CDR.

5. Jim Path, Cheese Outreach Specialist at the Wisconsin Center for Dairy Research, along with seven others, was inducted into the "Commanderie de Fromages Society" at the Foire Nationale aux Fromages, a large speciality cheese fair and exposition held near Tours, France. This Society honors individuals that excel in promoting Specialty Cheese. Only five Americans have been inducted into the Society in the last 30 years. Jim was honored as the first inductee from academia.

6. Juan Romero was chosen as Deputy Chair of the International Dairy Federation (IDF) Standing Committee on Quality Assurance, Statistics of Analytical Data, and Sampling. The announcement was made at the Action Team meetings during IDF Analytical Week in Ljubljana, Slovenia.

Mary Thompson

NEWS FROM THE AQUACULTURE PROGRAM

The Aquaculture Program's series of experimental ponds at the Lake Mills State Fish Hatchery are already paying dividends. Going into our second season of production, the ponds have allowed us to successfully pursue almost \$200,000 in research grants. The ability to conduct replicated experiments in ponds is clearly helping our Program conduct applied research relevant to much of our fish farming industry. Pond aquaculture is responsible for over 60% of total aquaculture production both worldwide and in Wisconsin, and is currently the fastest growing segment of aquaculture in the state.

The 2001 Wisconsin Aquaculture Conference was held at the Marriott Madison West, March 23rd and 24th. The annual convention featured addresses by James Harsdorf, new secretary of the Wisconsin Department of Agriculture, Trade and Consumer Protection, and Darrell Bazzell, new secretary of the Wisconsin Department of Natural Resources; both were well received by a crowd of over 400 interested in Wisconsin aquaculture. As always, environmental and economic topics led the discussions. Jim Held of the Aquaculture Program gave a presentation on yellow perch fingerling production. Dr. Myron Kibus, state aquaculture veterinarian and Aquaculture Program alumnus, organized a series of presentations aimed at veterinary medicine in aquaculture. Veterinarians from 14 states and Canadian provinces participated in the program.

Several international students are currently working with the Aquaculture Program. Yuliana, an undergraduate student

Continued on Page 8

from Indonesia, is working on a project to investigate changes in stress responses of coho salmon and rainbow trout as fish reach sexual maturation. Cavi-Ann Ramdeo, an exchange student from Trinidad, who is spending her undergraduate year here at UW, is working on her second consecutive independent study project with the Aquaculture Program. Luciene Lima is a Brazilian aquaculture graduate student who has become involved with our Recirculation Aquaculture System (RAS) project. The RAS project is a joint effort involving scientists from the Aquaculture Program, the Department of Biological Systems Engineering, and the USDA Forest Products Laboratory. Luciene plans to be here for several years while her husband completes his Ph.D. in the School of Education. Using our wet laboratory facilities at the Water Science and Engineering Laboratory, Luciene hopes to resume her research on surubim, a highly valued (and apparently delicious) Brazilian catfish. We hope we get a chance to savor some of the results of Luciene's research sometime in the future.

Jim Held and Jeff Malison

NEWS FROM THE FOOD RESEARCH INSTITUTE

Meetings. Our 2000 Annual Meeting was held in May and the 2001 meeting on May 16-17. These meetings bring together scientists from government, universities, and industry to discuss current food safety issues. In addition to summaries of food safety research at FRI, the 2000 meeting addressed issues related to agricultural biotechnology and *Escherichia coli* O157:H7. The 2001 meeting discussed mycotoxins, antibiotic resistance, and lessons learned from dealing with such notorious issues as BSE, *Listeria*, and GMO foods. FRI co-sponsored and participated in short courses on safety of RTE products and on managing technology from research to market.

Awards. Emeritus professor Dr. E. M. Foster was inducted into the WI Meat Industry Hall of Fame. Dr. Amy Wong was promoted to full professor. Dr. Charles Kaspar received the Pound Research Award and also became associate director of the Environmental Toxicology Center. Dr. Elmer Marth was presented with the NFPA Food Safety Award. Dr. Michael Priza has become a member of Wisconsin's Food Safety Task Force.

Research. Our mainstay research on the important foodborne pathogens, *Campylobacter*, *Salmonella*, *E. coli* O157:H7, *Listeria*, and *Bacillus cereus*, and the anticarcinogen, conjugated linoleic acid, continues in earnest. In addition, researchers at FRI are pursuing some new and innovative lines of research. For example, Dr. Eric Johnson's laboratory is collaborating on a project to determine whether clostridial neurotoxins are involved in development of childhood autism.

Personnel Changes. Dr. Jae Hyuk Yu joined FRI in July 2000 and has set up his laboratory to pursue research on genetics and biochemistry of mold sporulation and mycotoxin biosynthesis with help of a post-doctorate researcher, two graduate students and some undergraduate students. Other

recently hired faculty, who will be collaborating with FRI research projects, include Frank Denes (Biological Systems Engineering) and Nancy Keller (Plant Pathology).

Ellin Doyle

CURRENT FOOD SCIENCE FACULTY

The last decade or so has seen retirement of many professors and the concurrent addition of new faculty to the Department of Food Science. Although many of the new faculty have been mentioned in this and earlier issues of this Newsletter; it was felt that readers would find a complete list of current faculty to be of interest.

Professors and Lecturers

Bishop, J. Russell; Ph.D., Louisiana State Univ.; Professor and Director of the Center for Dairy Research; dairy/food microbiology.

Bushland, Yvonne K.; M.S., Univ. of Wisconsin; Lecturer; food and nutrition management systems.

Damodaran, Srinivasan; Ph.D., Cornell Univ.; Professor; food chemistry.

Etzel, Mark R.; Ph.D., Univ. of California-Berkeley; Associate Professor; food engineering.

Gunasekaran, S.; Ph.D., Associate Professor (joint with Food Science, primary appointment in Biological Systems Engineering Dept.); food engineering.

Hartel, Richard W.; Ph.D., Colorado State Univ., Professor (joint appointment with Biological Systems Engineering Dept.); food engineering.

Hill, Charles G., Jr.; Ph.D., Professor (joint with Food Science, primary appointment in Chemical Engineering Dept.); chemical engineering.

Hyslop, Douglas A.; Ph.D., Univ. of Wisconsin, Lecturer; food chemistry.

Ingham, Barbara H., Ph.D., Cornell Univ.; Assistant Professor and Food Science Extension Specialist; food quality and safety.

Ingham, Steven C.; Ph.D., Cornell Univ.; Associate Professor and Food Safety Extension Specialist; food microbiology/safety.

Lindsay, Robert C.; Ph.D., Oregon State Univ.; Professor; food chemistry/food flavors.

Lucey, John A.; Ph.D., Univ. College-Cork; Assistant Professor; dairy chemistry/technology.

Lund, Daryl B.; Ph.D., Univ. of Wisconsin; Professor and Academic Program Director, Research Division, CALS; food engineering.

Norback, John; Ph.D., Univ. of Wisconsin; Professor (joint appointment with School of Business); food systems management.

Continued on page 9

Parkin, Kirk L.; Ph.D., Univ. of Massachusetts; Professor; food chemistry and biochemistry.
Plhak, Leslie C.; Ph.D., Univ. of Alberta; Assistant Professor; food chemistry.
Rankin, Scott A.; Ph.D., Oregon State Univ.; Assistant Professor and Food Processing Extension Specialist; dairy technology.
Steele, James L.; Ph.D., Univ. of Minnesota; Professor; food/dairy microbiology.
Theis, Monica L.; M.S., Univ. of Wisconsin; Lecturer; foodservice administration.
Wendorff, William L., Ph.D., Univ. of Wisconsin; Professor Dairy Manufacturing Extension Specialist and Department Chairman; dairy technology.
Wong, Amy C. Lee; Ph.D., Univ. of Wisconsin; Professor (joint with Food Science, primary appointment in Dept. of Food Microbiology and Toxicology [Food Research Institute]); food microbiology/safety.

Emeritus Professors

Bradley, Robert L., Jr.; Ph.D., Michigan State Univ.; dairy technology (retired 2001).
Chu, Fun Sun; Ph.D., Univ. of Missouri; also Dept. of Food Microbiology and Toxicology; food toxicology, mycotoxins (retired 2000).

David, Beatrice; Ph.D., Iowa State Univ.; foodservice administration (retired 1978).
Dunn, Charlotte M.; M.S., Oklahoma State Univ.; consumer food science (retired 1983).
Fennema, Owen R.; Ph.D., Univ. of Wisconsin; food chemistry (retired 1996).
Johnson, Clarence E.; Ph.D., Univ. of Wisconsin; food processing (retired 1991).
Marth, Elmer H.; Ph.D., Univ. of Wisconsin; also Dept. of Bacteriology and Dept. of Food Microbiology and Toxicology; food/dairy microbiology and food safety (retired 1990).
Matthews, M. Elieen; Ph.D., Univ. of Wisconsin; foodservice administration (retired 1995).
Mennes, Mary E.; M.S., Iowa State Univ.; consumer food science (retired 1996).
Olson, Norman F.; Ph.D., Univ. of Wisconsin; dairy technology (retired 1997).
Stuiber, David A.; Ph.D., Univ. of Wisconsin; seafood processing (retired 1994).
von Elbe, Joachim; Ph.D., Univ. of Wisconsin; food chemistry (retired 1998).

Questionnaire

Name _____

Home Address _____

Employer and address _____

Degree(s) earned at U.W. and year(s) _____

Information for future Newsletter _____

Return questionnaire to:

Dr. Elmer H. Marth
Department of Food Science
University of Wisconsin-Madison
1605 Linden Drive
Madison, WI 53706

OR, log onto our web site at: <http://www.wisc.edu/foodsci/> to give us an update.