four food industry internships, alternative service break volunteer trips, and studied abroad in Chile. Caroline has enjoyed discussing her research with undergraduate students at NCSU and is passionate about recruiting new students to the profession as well as expanding public awareness of the food sciences. After completing her Master's and PhD in Food Science, she intends to apply her knowledge of biochemistry and food ingredient functionality to a career in long-term food research.

# Phi Tau Sigma Outstanding Chapter of the Year Award

"The **Phi Tau Sigma Outstanding Chapter of the Year Award** shall be given to honor a Chapter of Phi Tau Sigma that has achieved excellence in the areas of research, scholarship, leadership and service. The award comes with a plaque and a \$1000 honorarium to be used by the Chapter to advance distinction in the food science discipline."



The **University of Minnesota, St. Paul, Minnesota** is named the Outstand Chapter of the Year for 2014. The University of Minnesota Chapter was founded in 1981 and has a long history of scholarly research in food science and technology, high level leadership and outreach to the

local community and across the globe. The Chapter is especially recognized for it collaborative efforts between faculty, staff, students, local industry and the Minnesota Section of IFT. Working with the support of the Department Head of Food Science and Nutrition, the Phi Tau Sigma officers developed a strategic plan to excel the growth and the activities of the organization. The focus remains on the students, ensuring those who have demonstrated excellence in their academic achievements, leadership and service are honored and recognized for their commitment to food science and technology. Students recognize the benefits that include opportunities for awards, scholarships, leadership, networking along with the exclusive induction ceremonies where the local officers bestow the Phi Tau Sigma pin, certificate and Honor Cord on the NEW associate members. The Honor Cord is very special for the students at the University of Minnesota. The University has granted the students permission to wear them with their graduation regalia--black cap and gown and the Phi Tau Sigma Honor Cord! The maroon and gold Honor Cord distinguishes the students from all other graduates giving them the recognition and honor they deserve for their excellence in food science and technology!



# 2014 Phi Tau Sigma Award & Scholarship Winners June 21, 2014

Celebrating 61 Years of Phi Tau Sigma!

The Honor Society of FOOD SCIENCE & TECHNOLOGY

### **Dr. Carl R. Fellers Award**

"The **Dr. Carl R. Fellers Award** Is given to an individual who has brought honor and recognition to the profession of Food Science and Technology through a distinguished career in the profession displaying exemplary leadership, service and communication skills that enhance the effectiveness of all Food Scientists in serving society. The award consists of an honorarium of \$3,000 furnished by Phi Tau Sigma and a plaque furnished by IFT that is presented at the Awards Celebration of the IFT Annual Meeting."



**Dr. H. Russell Cross** epitomizes the intent of the Dr. Carl R. Fellers Award. Dr. Cross has published 235 scientific refereed journal articles, including 59 that were published in IFT's Journal of Food Science. He personally presented about 25 of those research papers at annual meetings of the Institute of Food Technologists. He is a Lifetime Member of Phi Tau Sigma - The Honor Society of Food Science and Technology and is an elected member of the Executive Committee as a Councilor At-Large (2012-2015). In addition to

participation in the Institute of Food Technologists and Phi Tau Sigma, Dr. Cross' record of service has included Board Member and President of the American Meat Science Association; Past Board President and active Member since 1986 of the International Stockmen's Educational Foundation; Board Member of the National Meat Association from 2001-2002; and Member of the American Society of Animal Science since 1972. Dr. Cross has given over 200 presentations to industry, university, and government, including Committees of the United States Congress. Many of those presentations were made as Administrator of the Food Safety and Inspection Service of the United States Department of Agriculture, a position Dr. Cross held under Presidents Bush (41) Dr. Cross earned B.S. and M.S. Degrees in Animal Science from the University of Florida in 1966 and 1969, respectively. He earned his Ph.D. in Animal Science from Texas A&M University in 1972. In 1983, following 11 years of successful research in the USDA, he joined the Texas A&M University Department of Animal Science as Professor and Section Leader of the Meats and Muscle Biology Section. He was elevated to Head of the Department in 1990. In 2005, Dr. Cross was appointed Deputy Vice Chancellor and Associate Dean, Agriculture and Life Sciences. In 2008, he was named Chief of Staff to the President and Executive Vice President of Operations at Texas A&M University. In 2010, he returned as Head of the Department of Animal Science. From 1997 to 1999, he was Director of IDEXX Food Safety Net, Inc. In 2000-2001, as Chief Executive Officer of Future Beef Operations, he planned and initiated a beef slaughter operation that provided value-added beef products from the most modern beef facility in the world. He joined the National Beef Packing Co., Kansas City, MO as Executive Vice President, Food Safety/Government Affairs, where he effectively improved food safety practices and minimized adverse

where she was able to experience industrial research first hand. She is currently serving as the Vice President for the  $\Phi T\Sigma$  Honorary Society of the UMass Chapter, and is dedicated to reactivating and strengthening the Chapter. She has also been recruited as the student representative and the Engagement Chair for the IFT Food Chemistry Division, and as a committee member for the IFT Fun Run committee. She held several leadership positions while at Purdue University, including organizing workshops and career fairs as a senator of the Graduate Student Government and serving as an officer in the Food Science Graduate Student Association. Bicheng has actively volunteered at various events to represent the Food Science Department to promote Food Science among teenage students.

### Dr. Gideon "Guy" Livingston Scholarship of Phi Tau Sigma

"The **Dr. Gideon "Guy" Livingston Scholarship of Phi Tau Sigma** shall be given to an Associate Member of Phi Tau Sigma in honor of the founder of Phi Tau Sigma, and to acknowledge that student's scholastic achievements and dedication to Phi Tau Sigma." (This scholarship comes with a plaque and \$1000.)

**Caroline Campbell, M.S.** is currently pursuing her Master's degree at NC State University under Dr. Keith Harris and Dr. Allen Foegeding. Her research project is a combination of her interests in functional foods for health and biochemistry and is titled 'Cocoa polyphenols and whey proteins: the potential of bioactive ingredients to increase satiety and aid in weight management.' The project is driven by the national obesity epidemic as well as the lack of convenient, nutritious, and enjoyable snacks currently on the market. The project involves cell culture research, beverage development, and the



planning and execution of a human clinical trial. These projects will investigate the effects of cocoa and whey proteins on physical and physiological markers of satiety. It is hoped that Caroline's research could support the formulation of indulgent functional foods that people want to eat and feel good about eating. Caroline plans to complete her Master's degree in June and to begin her PhD in Dr. Foegeding's lab in Fall 2014. In addition to her Master's research, Caroline has maintained a graduate GPA of 3.77 and completed a minor in Biochemistry. She has been highly involved in the NCSU Food Science Club and served as a co-chair two years in a row for the club's major fundraiser. She is now serving as the Disney-IFTSA Product Development competition student coordinator. As an undergraduate at the University of Idaho, Caroline participated in grape puree with interest in antioxidant activity. Her current GPA is 3.65 and her awards and recognition attest to her outstanding scholastic achievement and devotion to the food industry, such as being recipient of the 2013 IFT Feeding Tomorrow Scholarship Award. Her internship experiences in the food industry have given her practical applications that she carries with her to advance her career. Also, her dedication to food science and her department is evident by her involvement with academic clubs and events in the community.

#### Phi Tau Sigma Founders' Scholarship

"The objective of the **Phi Tau Sigma Founders' Scholarship** is to emphasize the importance of original research, carefully selected, to solve vexing problems of the food industry." (This scholarship comes with a plaque and \$1000.)



**Bicheng Wu, M.S.**, University of Massachusetts, Amherst, received her Bachelor degree from Zhejiang Gongshang University in China and a Master's degree in Food Science from Purdue University. She is currently working in Prof. David Julian McClements' group at the University of Massachusetts Amherst on her Ph.D. thesis. Bicheng's research project is to create fat reduced food products as part of a preventive health care strategy for diseases associated with obesity. In her research, Bicheng is identifying the physicochemical mechanisms

responsible for sensory fat perception in foods and then uses structuring design approaches, such as hydrogel particles and controlled particle heteroaggregation, to fabricate food materials that mimic the sensory perception of fat. Bicheng has been extremely productive as a graduate student. She has a number of publications in respected scientific journals. Bicheng has been chosen as a finalist of the ACS Graduate Research Symposium Competition in Agriculture and Food Chemistry Division at the ACS spring meeting this year. Her poster presentation also won the first place of IFT/ΦTΣ Graduate Research Paper Competition in the Food Chemistry Division in 2013. She has been invited as a speaker at an international conference by the São Paulo Research Foundation in Brazil. In addition, she is a recipient of a number of prestigious honors and scholarships including a Travel Grant from the UMass GraduateSchool, the Graduate Award from the Northeast section of IFT. Bicheng received the very prestigious Eugene M. Isenberg Scholar Award from UMass Amherst. This \$10,000 award is presented to 10 graduate students who "reflect the highest academic standards of the university and whose projects demonstrate a commitment to the integration of science/engineering with management". She has worked as a research and development intern in PepsiCo Frito-Lay, interactions with regulatory authorities. Dr. Cross founded and served as Executive Director (1994-1997) of the International HACCP Alliance, an organization designed to prepare the food industry for compliancy with the mandate that all affected facilities formulate and manage a Hazard Analysis Critical Control Point (HACCP) program. The Alliance continues to successfully provide training to processors for compliance with HACCP regulations. For the last two years, seeking additional funding for animal research, Dr. Cross established and serves as President of the National Association for the Advancement of Animal Science, a 501(c) 6 association charged with lobbying funding sources, particularly federal, to support animal research at the university level. Dr. Cross is the recipient of numerous awards, recognitions and honors including the Young Scientist Award, American Society of Animal Science (1978); American Society of Animal Science National Meat Research Award (1983); Progressive Farmer Man of the Year Award (1989); Distinguished Research Award, American Meat Science Association (1990); Signal Service Award, American Meat Science Association (1992); Forbes Award, National Meat Association (1996); Distinguished Service Award, U.S. Meat Export Federation (1998); R. C. Pollock Award, the highest award of the American Meat Science Association (1999); Induction into the International Stockmen's Educational Foundation Hall of Fame (2002) and the Meat Industry Hall of Fame (2009).

## Phi Tau Sigma Special Recognition Award

"The **Phi Tau Sigma Special Recognition Award** shall be given to a Member of Phi Tau Sigma who has shown exceptional dedication to Phi Tau Sigma - The Honor Society of Food Science and Technology, as evidenced by significant accomplishments towards the goals and/or administration of Phi Tau Sigma."

**Kathryn L. Kotula, Ph.D.**, Lifetime Member of Phi Tau Sigma, has performed the duties of Co-editor, 2010-2012, Editor of the Newsletter, 2012 to present, as Chair of the Awards Committee, 2011 to 2012, as Chair of the Newsletter Committee, 2012 to present, and as Executive Secretary, of Phi Tau Sigma, 2012 to present, in an exemplary manner. To assist in revitalization of the Society she formatted, typed, and even distributed the Newsletter to the Members using her own internet. She wrote features like "Interesting Forgotten Research",



"Careers", and "Editorials" and planned most of the news sections of the Newsletter. She edited all submissions. She created Society forms, emblems, ribbons, scholarship and award certificates, brochures, etc., updated the Membership records, and increased Membership. Dr. Kotula, though not a voting Member of the Executive Committee until her third year of service, was involved in every monthly conference call and actively championed concepts that have helped revitalize Phi Tau Sigma. She sought, effectively, to structure the revitalization to best recognize and improve professionalism among students and Professional Members in food science and technology. She developed the criteria for Scholarships and Awards for Associate Members (students) and Members (professionals). She then led a team that successfully solicited funding to support those awards. Dr. Kathryn L. Kotula indeed epitomizes the dedication, work ethic, and professionalism, that has profoundly hastened the revitalization of Phi Tau Sigma, through her efforts and those of others on the Executive Committee.

#### **Phi Tau Sigma Student Scholarship Recipients**

"The **Phi Tau Sigma Student Achievement Scholarship** shall be given to an Associate Member of Phi Tau Sigma who has shown exceptional scholastic achievement and a dedication to Phi Tau Sigma." (This scholarship comes with a plaque and \$1000.)



**Eileen Enid Duarte Gomez, M.S.** first came to Purdue University in 2006 as part of an internship program the department had with Zamorano University in Honduras. She joined the Department of Food Science for the Master's degree program in 2009 and completed that degree in 2011. While her M.S. work focused on the effect of moderate hydrostatic pressure on bacterial strains of food safety concern, her Ph.D. work has transitioned into a more molecular approach aimed at better understanding the effects and interactions of proteins involved in the lux bioreporter system. A peer reviewed

manuscript entitled "High hydrostatic effects on bacterial bioluminescence," based on the findings from her Master's dissertation, has been published by LWT – Food Science and Technology Journal. Eileen has made significant contributions to the Phi Tau Sigma Hoosier Chapter at Purdue University. She has been an active member of the Hoosier Chapter since 2010 and has served different roles on the Chapter Board. She was appointed Treasurer in 2011-2012 and President in 2012-2013. As a Chapter officer, she collaborated in organizing the Phi Tau Sigma Annual Luncheon, which honors the excellence achieved by food scientists at Purdue University. She is currently the Student Representative for the Hoosier Chapter at the National Phi Tau Sigma Chapters Affairs Committee. Her outstanding scholastic performance and dedication to the Phi Tau Sigma Hoosier Chapter and to the National Society make her worthy of the Phi Tau Sigma Student Achievement Scholarship.



**Maxine J. Roman, M.S.**, is a Ph.D. student in the Department of Food Science at the University of Massachusetts, Amherst. Prior to entering the graduate program at UMass, she received a bachelor's degree in Food Science and Human Nutrition from the University of Illinois and a master's degree in Food Science from UC Davis. While an undergraduate student at the University of Illinois, Maxine was an executive board member of several registered student organizations, including the Association of Food Technologists (IFTSA chapter) and

Minorities in Agriculture, Natural Resourcesand Related Science (MANRRS). In addition, she conducted undergraduate research in the lab of Elvira de Mejia, was an IFT/Masterfoods Scholar in the lab of Phil Crandall at the University of Arkansas, and completed two internships for Kraft Foods. She obtained her master's degree from UC Davis under the guidance of R. Paul Singh which focused on evaluating how processing of food can affect its disintegration and nutrient release in the digestive system using mechanical digestion models. She interned on a collaboration with nutritional scientists at the Riddet Institute in New Zealand. Presently, Maxine is conducting research on the synthesis and applications of non-migratory metal chelating active packaging under the guidance of Julie Goddard. As a first year graduate student, she was awarded the Northeast Alliance for Graduate Education and the Professoriate (NEAGEP) Fellowship and the Peter Salmon Fellowship. In addition to her research, Maxine has actively sought opportunities to teach and engage audiences outside of academia on behalf of our department for ScienceQuest, Science Olympiad and 4-H programs to bring laboratory experiences in Food Science to local high school students. Maxine was inducted in the UC Davis Phi Tau Sigma Chapter in 2011.

**Kendra D. Stallings, M.S.**, is a Master's student in Food Science in the Department of Food, Bioprocessing, and Nutrition Sciences at North Carolina State University. She has been a student member of the North Carolina Chapter of Phi Tau Sigma since 2012. Her research, awards and recognition, leadership, and community/ departmental involvement reflect the goals of Phi Tau Sigma and makes her a good candidate for this award. Kendra's undergraduate and Master's research showcases her application and technical skills toward



food science concepts as well as leadership towards peers around her. Her undergraduate research resulted in her being primary author for the peerreviewed publication "A High-Temperature, High-Throughput Method for Monitoring Residual Formaldehyde in Vaccine Formulations" published in the Journal of Laboratory Automation (JALA) in 2013. Her thesis research focuses on the effects of processing on phenolics and other bioactive compounds in fruit smoothies while investigating the value-added properties of muscadine