

STEC CAP News

CONTROLLING SHIGA TOXIN-PRODUCING *E. coli* TO IMPROVE BEEF SAFETY

Update from the Director

Greetings STEC CAP Colleagues! I am most pleased to inform you that we are continuing to make great progress on all fronts of the STEC CAP. As of March 29, we had a cumulative total of 18 publications, 64 scholarly presentations, 7 workshops or specialized training events, 51 media contacts, 10 educational media products, 13 partnerships, 6 research progress (milestone and discovery) accomplishments, and 21 other notable activities. We have numerous research and outreach projects beginning or planned over the remainder of 2013, including 22 new internship projects for summer and fall terms, so I also see great STEC CAP accomplishments ahead. On April 2, several of the STEC CAP collaborators, staff and students, and administrators from the University of Nebraska-Lincoln had the opportunity to meet here in Lincoln with staff from the office of U.S. Senator Deb Fischer (R-Neb). After a PowerPoint overview and progress update on the STEC CAP, collaborators and administrators addressed questions from her staff. It was an honor once again to represent the STEC CAP team, and Sen.



Rodney Moxley

Fischer's staff was highly complementary of our efforts. Please continue to share your various accomplishments each month when contacted by our friends with the OEIE so we can add to the above mentioned tally of "points on the board" for our team.

In this issue of the newsletter, I would like to call your attention to articles featuring two members of our STEC CAP team at Kansas State University

who are the recipients of noteworthy and prestigious local and international awards, namely Ms. Sarah Reasoner and Dr. Randy Phebus. Congratulations Sarah and Randy! Also, in this issue we again have an article featuring two of our current interns. In the very near future their work and that of our other interns and students will be featured in poster presentations at our first annual meeting, May 28-30 at the Embassy Suites here in Lincoln, NE. This is another reminder for you to please register for the meeting if you have not done so already, as time is growing short. As of today, we have 69 registrants. A link for you to register is on our STEC CAP website (<http://www.stecbeefsafety.org>). Also, please note that the deadline to book a room for the meeting is May 5. When registering, I invite you to please indicate if you are also able/willing to highlight your STEC CAP as a poster at our annual

meeting. Look for more information in this issue of the newsletter.

Please feel free to share this newsletter with your friends and colleagues to stay abreast of our many grant activities. Suggestions and newsletter contributions are appreciated anytime. I look forward to hearing from you about your many accomplishments and greatly value your efforts on the STEC CAP.

Best Regards,
Rod

OEIE Evaluation Update

We hope that everyone is having a good semester and making progress on STEC CAP activities.

OEIE and the Executive Management Team would like to remind all collaborators of the upcoming Supplemental Report that is due to our USDA program officer June 15, 2013.

To continue the receipt of funding, we must demonstrate to USDA that progress has been made in accordance with our project goals in each quarterly Supplemental Report. The Supplemental
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Report requires detailed information about science impacts, milestones reached, changes in science direction or program management, science challenges, and next steps.

A substantial part of the report is derived from achievement documentation submitted to OEIE each month. Therefore, it is essential that OEIE is current on all monthly achievements for the purpose of documenting project progress in the Supplemental Report. Please ensure that all of your achievements, progress updates, and next steps pertinent to this report are sent to OEIE as soon as possible. You may use

the achievement document process and complete the brief survey to record your information or send an email directly to steccap@ksu.edu.

We welcome your feedback and questions regarding the new achievement documentation reporting system or evaluation activities in general. Please feel free to contact OEIE at:

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The 21st Frontier Field Trip - June 19-23

Since its founding in 2004, the Frontier program has sought to help scholars acquire great interdisciplinary learning experiences and develop invaluable career- and life-relevant skills. One way (but not the only way, to be sure!) we accomplish our mission is by convening, approximately quarterly, unique Frontier Field Trips, where students can experience and witness—first-hand—the complexity of the global food supply chain.

It is in that spirit that we happily announce yet another such trip—the 21st Frontier Field Trip! We have organized a number of events in southern California: tour of the port of Los Angeles, meetings with industry-based global food supply chain experts, and a Frontier-organized skill-development workshop. For more information and to sign up, go to <http://www.stecbeefsafety.org/field-trip>.

STEC-STEP Internship Program Update

A native of Wichita, KS and Kansas State University student, **Melissa Juby** will be working with T.G. Nagaraja to develop and validate multiplex PCR based on serogroup-specific, flagella-specific, and major virulence genes for each of the ‘top six’ shiga toxin-producing *E.coli* (O26, O45, O103, O111, O121, and O145). Melissa states, “the vitality of food is often overlooked by the general public. I have spent the past year working at Kansas State University’s College of Veterinary Medicine in the Department of Diagnostic Medicine and Pathobiology. It was here that I really gained an appreciation for the art of research and the consequential impacts of the results on general practices. As someone who has recently been accepted into the college of veterinary medicine, I look forward to making connections between food safety and disease prevention/food animal medicine. I hope to take away from this internship a better understanding of and appreciation for the prevalence of Shiga



Melissa Juby

toxin-producing *E. coli* in the world around us as well as invaluable experience in diagnostics.”

Joy Maus will be working with T.G. Nagaraja to develop and validate multiplex PCR based on serogroup-specific, flagella-specific, and major virulence genes for each of the ‘top six’ Shiga toxin-producing *E.coli* (O26, O45, O103, O111, O121, and O145). The Kansas State University student and Conway Spring, KS native feels food safety is important and is of vital concern in food industries today. She stated, “research to gain a better understanding of food borne pathogens is important. The knowledge that can be gained from food safety such as to: what, how and why microbes affect certain foods can help prevent or reduce foodborne diseases. Not only does working in a lab on food safety research projects help learn more about food borne pathogens, such as the various types of *E. coli*, but I will gain the experience to be independent and become a confident career microbiologist in the future.”



Joy Maus

Reasoner receives Promoting An Accessible Campus awards

Promoting An Accessible Campus is an award that is given to one faculty and one staff member who have gone above and beyond their role to improve the experiences of students with disabilities at K-State. Each year students nominate individuals who they feel have made their K-State experience exceptional.

The 2013 Promoting An Accessible Campus staff award was presented to **Sarah Reasoner**, Food Science Institute.

The student who nominated Reasoner said, "I had the opportunity to work with Sarah Reasoner as a distance education student. I am deaf and some of the accommodations that I request can be challenging. During the course of my schooling from August 2010 to May 2013, Sarah exceeded my expectations on getting me the transcripts I needed for all my lectures. My distance education experience was a smooth transition thanks to her. Because of her, I would recommend distance education at KSU to anybody."



Sarah Reasoner

Phebus receives International Association for Food Protection Educator Award

Randall Phebus, professor of food safety in the animal sciences and industry department and core faculty in the K-State Food Science Institute, is the 2013 recipient of the International Association for Food Protection Elmer Marth Educator Award.

This award is announced annually by the International Association for Food Protection, or IAFP, to recognize an active member for dedicated and exceptional contributions to the educator profession.

Selection is determined based on length of service and positions held in educator professions; contributions to leadership in teaching, extension and/or research; publications and educational materials developed; participation in activities of the association; peer assessment of the nominee; and other activities and characteristics of the nominee that emphasize their dedication to food protection and high personal standards.

The International Association for



Randall Phebus

Food Protection was founded more than 100 years ago with the mission of providing food safety professionals worldwide with a forum to exchange information on protecting the food supply. The association has a membership of more than 3,000 from approximately 50 countries and is comprised of

professionals from academia, government, the food industry and affiliated industries.

Phebus served as the annual program chair of the association in 2011 at its 100th anniversary celebration in Milwaukee, Wis. He has held several committee assignments, including annual program committee as chair, its developing scientist selection committee as chair and nomination committee during his 28-year membership with the association. He is also an active participant in several of the association's professional development groups, including its applied laboratory methods, food defense, meat and

poultry, education and pre-harvest food safety focus areas.

"This is the biggest honor that I have received in my 20-year career as a university educator," Phebus said. "I have dedicated myself to the IAFP organization since 1985 when I joined as a graduate student. I won their Developing Scientist Competition in 1993 as a student, and honestly, this was the launching pad for my long career as an educator and researcher. I have used my food safety and food defense research program at K-State as the driving force for much of the educational activities that I try to provide undergraduate and graduate students. The professional network that IAFP provides is invaluable for my students as they look towards their own successful careers in food safety.

"In addition to this award being such an honor because it is bestowed by IAFP, the fact that it is named after Dr. Elmer Marth who is internationally recognized as one of, if not the, most gifted food safety educators ever makes it all the more special," Phebus said.

Marth was a food safety bacteriologist who began his academic career at the University of Wisconsin-Madison in

...Phebus Receives Award (continued from page 4)

1954. He spent a decade in research and development for Kraft Foods, and then returned to UW-Madison as a professor of food microbiology and toxicology until his retirement in 1990. Marth co-authored more 660 scientific publications and he won many awards for his teaching and research. He died in 2006.

"I am humbled to be recognized with this Educator Award, and want to thank my former students and food safety colleagues across the country who compiled and submitted my nomination," Phebus said.

Phebus will receive the award during the International Association for

Food Protection annual conference in Charlotte, N.C., in July.

<http://www.kstate.edu/today/announcement.php?id=7983&category=kudos&referredBy=email#UV7G2xrl10Y.email>

By Randall Phebus

Check us out on the Web! Visit us at: www.stecbeefsafety.org
Subscribe to the listserv. Send an email to: listserv@unl.edu In the message field: [subscribe stecbeefsafety](#)

STEC CAP Annual Meeting

The STEC CAP Team will kick off the annual meeting May 28–30, 2013, in Lincoln, Nebraska. The meeting will be held at the Embassy Suites in downtown Lincoln. Attendance for all STEC CAP collaborators who receive funding is mandatory. Registration is now open at <http://www.k-state.edu/vet/stec-13/>. Deadline for the rooms is May 5th. Just a reminder that all interns of the program are required to attend the annual meeting and present posters of their research. More information is posted on the STEC CAP website, www.stecbeefsafety.org.



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