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COMMENTARY

Food Safety Research at Virginia State University

Chyer Kim[1]*, David Crosby[2] and Jimin Kim[3]

[1]Agricultural Research Station, USA
[2]Cooperative Extension, Virginia State University, Petersburg, VA, USA
[3]Northwest High School, Greensboro, NC, USA

Recognizing the importance of food safety education toward students and stakeholders, the Food Safety and Microbiology program at Virginia State University (VSU) works continually to improve the safety and quality of our nation's food supply through research, teaching and outreach.

The program's research is designed to increase knowledge of microbial ecology with regard to the routes of contamination from on-farm investigations to food distribution. The program also evaluates methods and approaches to better prevent, intervene and verify the presence of foodborne pathogens from farm to fork.

Program resources are utilized to teach and train students on current and emerging food safety issues. The program provides students conventional and advanced techniques in food safety analysis, empowering them to meet global societal needs. One of the beneficiaries trained in enumerating and confirming foodborne pathogens and contributed to the preparation of ACS Agricultural & Food Chemistry presentation was a high school student (Mr. Jimin Kim) from Northwest Guilford High School in North Carolina. Briefly, following performance tested methods [1-3], the student enumerated *E. coli*, *Salmonella*, and *Listeria* in *E. coli* broth containing 4-methylumbelliferyl-b-D-glucuronide, buffered peptone water, and University of Vermont Medium, respectively. Assumptive *E. coli* and *Salmonella* species were confirmed with the API 20E test while *Listeria* species was confirmed with the API Listeria test. After the training, the student stated, "It was an incredible experience and intrigued me to pursue my career in biology."

The program works closely with Cooperative Extension specialists to benefit small-scale farmers and processors with limited resources. The program endeavors to develop a regional educational and training initiative for stakeholders on safe food production and handling.

In keeping with the vision of the program, active collaborations with intra- and extra-mural institutions and government agencies are sought to promote multidisciplinary approaches and to strengthen research and education capacity related to current and developing issues in food safety.

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***Corresponding author**

Chyer Kim, Agricultural Research Station, USA

Tel: +804-524-6715
E-mail: ckim@vsu.edu

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