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FAPC student wins honors during graduate research symposium

By Stacy Patton, FAPC Communications Graduate Assistant

(Oct. 28, 2008 Stillwater, Okla.) The Robert M. Kerr Food & Agricultural Products Center, located on the Oklahoma State University campus, supports its graduate students in participating in competitions to showcase the students' research. Because of this, many FAPC students participate in such events, and one recently won honors in a graduate student research symposium.

Kalpana Kushwaha, a food science Ph.D. student in the department of animal science and employee of the FAPC, received second place in the poster competition for the Biochemistry & Molecular Biology Graduate Student Association's Fifth Annual Graduate Research in Biological Sciences Symposium.

"I am honored and happy that our work was recognized by the BMBGSA judges and am thankful to my research advisor, Dr. Muriana, and the FAPC for their continued support of my research," Kushwaha said.

The symposium was open to all graduate students working in the area of biological science in the OSU system. Kushwaha received a certificate and a \$425 cash award for her second place in the poster. She said the cash award will help pay for her school this semester.

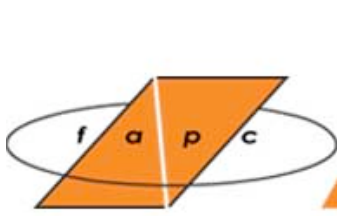
Kushwaha's poster focused on multilocus sequence typing, pulsed-field gel electrophoresis, and ribotyping for molecular typing of adherent phenotypes among isolates of *Listeria monocytogenes*.

"Isolates from raw and ready-to-eat meats and environmental samples from ready-to-eat meat processing facilities were divided into weak or strong surface-adherent phenotypes," Kushwaha said. "Based on our molecular typing and adherence and virulence analyses of these isolates suggested that strong adherence not only promote retention of strongly adherent strains in food processing facilities, but enhanced virulence as well."

Peter Muriana, FAPC food microbiologist and associate professor for OSU's department of animal science, said it is a pleasure to serve as Kushwaha's advisor.

"The work has important implications on the retention of adherent strains of *L. monocytogenes* in meat processing environments as well as practical solutions to eliminate them," Muriana said. "We have already started to examine the use of proteases and other hydrolytic enzymes in sanitation regimens to detach and remove remnants of the bacteria that could otherwise provide a basis for further attachment if they are simply killed *in situ*."

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