

For Immediate Release
U.S. Poultry & Egg Association
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Researcher Evaluates Competitive Inhibition of Pathogenic *Enterococcus cecorum*

USPOULTRY and the USPOULTRY Foundation announce the completion of a funded research project at the North Carolina State University in which a researcher evaluated the competitive inhibition of pathogenic *Enterococcus cecorum*. The research was made possible in part by an endowing Foundation gift from Wayne-Sanderson Farms and proceeds from the International Poultry Expo, part of the International Production & Processing Expo (IPPE). The research is part of the Association's comprehensive research program encompassing all phases of poultry and egg production and processing. In total, \$35,700,000 has been invested in research by the Association and Foundation. A summary of the completed project is below.

Project #731: Competitive Inhibition of Pathogenic *Enterococcus cecorum* by Avirulent Strains

(Mitsu Suyemoto, Department of Population Health and Pathobiology, North Carolina State University, Raleigh, N.C.)

Mitsu Suyemoto, research specialist at North Carolina State University, recently completed a research project that aimed to test the efficacy of avirulent *Enterococcus cecorum* (EC) deletion mutants and commensal EC strains as probiotics to competitively inhibit the early colonization of the broiler gut with pathogenic EC. Findings showed that using the EC commensal strains as an orally delivered probiotic led to a significant decrease in the sepsis prevalence in broilers at 2 weeks post challenge with pathogenic EC. However, this difference did not persist for the 5-week duration of the study. The use of attenuated deletion mutants as probiotics did not disrupt long-term colonization of the gut by pathogenic EC, as no decrease in sepsis prevalence was seen at week 5 among treatment groups.

The research [summary](#) can be found on the USPOULTRY website. Information on other Association research may also be obtained by visiting the USPOULTRY website, www.uspoultry.org.

About USPOULTRY Foundation

The USPOULTRY Foundation's mission is to support the recruitment and training of the brightest students, seek and fund scientific research, foster student scientists and promote careers in the poultry and egg industry.