

## RESEARCH PROJECTS MULTIPLY POTENTIAL SOLUTIONS

WHETHER SOLVING IMMEDIATE PROBLEMS THREATENING THE INDUSTRY OR GENERATING NEW KNOWLEDGE THAT WILL INFORM POLICY, BUSINESS AND OTHER DECISIONS, APPLIED RESEARCH IS CRITICAL TO MOVING THE U.S. EGG INDUSTRY FORWARD. THAT'S WHY THE EGG INDUSTRY CENTER ENDOWMENT SUPPORTS RESEARCH THAT LEADS TO THE DISSEMINATION OF PRACTICAL, SCIENCE-BASED INFORMATION.

**This year, thanks to growing support from the center's generous and forward-thinking donors, partners and friends, the center has invested more than \$630,000 in endowment funds to new and ongoing research projects that address the industry's most pressing issues.**

### ARE EGG YOLKS AN ALTERNATIVE TO SPRAY-DRIED PLASMA? YES ... AND MAYBE

**In a business as enduring as the U.S. egg industry, it's challenging to find new product markets. But Phillip Miller, professor at University of Nebraska-Lincoln, and his research team may have done just that.**

In their study, "The Effects of Egg Yolk on Piglet Growth, Health and Microbial Populations," UNL scientists compared the effects of egg yolk to spray-dried animal plasma in nursery diets on pig growth, health and microbiome populations. They concluded that growth performance and circulating immunoglobulins are similar in pigs receiving nursery diets containing egg yolk or spray-dried plasma. The team is still analyzing data related to the microbiome.

"There hasn't been a lot of work done with egg yolk and performance," said Miller. "While you hope to see more dramatic results, we at least know egg yolk doesn't have any deleterious effects, and there may be some instances where it works well."

**Whether or not egg yolk catches on as an alternative to spray-dried plasma will likely depend on its cost,** which has increased since last year's avian influenza outbreak. To compensate for this anomaly, Miller amended his economic analysis to include diet cost per unit gain at the study's starting and ending points.

"It's worthwhile to look at two points in time in order to be fair," said Miller. "If eggs add value at a lower cost, there could be a real demand for this."

And, reminded Miller, circumstances change. Even if the analysis does not show an economic benefit for egg yolk now, a future shift in market conditions could favor the use of egg yolk over spray-dried plasma.

**"That's why we do research and share results with industry. If you just put it in a journal and never look at it, you'd never know about it,"** said Miller.

**"THE ADVANCEMENT OF OUR SOCIETY IS INSEPARABLE FROM EVER-EVOLVING SCIENCE AND TECHNOLOGY. THE EGG INDUSTRY IS NO DIFFERENT."**

*– excerpt from an article in Poultry Times, written by **Hongwei Xin**, center director*