

# 2007 Beef Improvement Federation 39th Annual Meeting

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## Frank Baker Award Winner

Betz wins award studying how to better target genetic progress.

by **Mathew Elliott**



PHOTO BY ERIC GRANT

► The Beef Improvement Federation honored Gabriela Márquez Betz (left), Colorado State University, with the Frank Baker Memorial Scholarship during an awards luncheon June 7 at the 2007 BIF Annual Meeting and Research Symposium in Fort Collins, Colo. Presenting the award is Ronnie Silcox of the University of Georgia. Betz won the scholarship with her essay, "Using the Rate of Genetic Change and the Population Structure of Cattle to Better Target Genetic Progress."

FORT COLLINS, COLO. (June 7, 2007) — The Beef Improvement Federation (BIF) honored Gabriela Márquez Betz with the Frank Baker Award. Betz, a graduate student at Colorado State University, wrote her essay on "Using the Rate of Genetic Change and the Population Structure of Cattle to Better Target Genetic Progress."

One of Betz's main findings is that none of the components that affect the rate of genetic change — accuracy, intensity of selection, or genetic variation and interval are isolated from each other.

Betz notes that tradeoffs will occur in practical situations. For example, higher intensity can be achieved by using older and fewer animals, but that will have a negative effect on generation intervals. Accuracy can be achieved if we use fewer, proven individuals as parents, but this would result in a loss of genetic diversity.

Breeders must make choices that will affect the rate of genetic change in their herd.

Not all breeders will have the same goals, but practical issues must be made on the basis of genetic improvement, says Betz in the award-winning research paper.

Betz concludes by emphasizing the importance of studying pedigrees and understanding how genes affect genetic changes in breeds will improve genetics faster.

Frank Baker played a key leadership role in helping establish BIF in 1968, while he was chairman of the animal science department at the University of Nebraska, Lincoln. The Frank Baker Memorial Scholarship Award essay competition for graduate students provides an opportunity to recognize outstanding student research and competitive writing in honor of the man widely recognized as BIF's founding father. **AJ**

A proceedings paper is available on the "Symposium Papers" page.



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