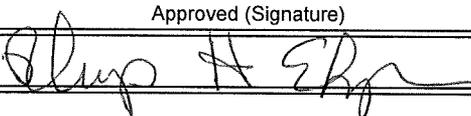


*Animal*

U.S. Department of Agriculture <b>Accomplishments Report AD-421</b> U.S. Dept. of Agriculture, State Agricultural Experiment Stations and Other Institutions			Date (Month, Day, Year)
1. Accession 0222470	Agency Identification No. 2. NIFA 3. LA.B	5. Work Unit/Project No. LAB94044	6. Status Annual Report
7. Title Identification of SNP Associated with Carcass Quality and Composition Traits through the Development of a Multi-breed Mapping Population			
12. Investigator Name(s) (Last Name and Initials) Garcia, M. D.; Bidner, T.			
20. Termination Date 04/30/2014		40. Period Covered (mo/da/year): 01/01/2011 TO 12/31/2011	
Outputs: Presentation to the Mississippi State Learn at Lunch Beef seminar about proper selection of animals and current and future tools that can be utilized for more accurate selection of breeding animals. 2. Presentation for Master Cattlemens program about genetic tools.			
Outcomes/Impacts: An additional 450 individual animals have had DNA extracted, tissue banked in the DNA repository, and new phenotypic data has been collected on all new herd additions. Year number 3 carcass and feedlot data has been collected and is currently under analysis. First round of genotyping has been completed. Genotyping was conducted on 6 candidate genes and SNP associations with production growth and efficiency traits, along with carcass quality and composition traits is currently under evaluation. Increasing the population represented in the LSU AgCenter beef DNA repository gives researchers an added resource of high statistical power to conduct genomics studies and furthers the possibility for grantsmanship and out of state collaborations. SNP genotyping may allow for more accurate detection of beef cattle that are genetically predisposed to perform and a high level for production and carcass traits. Early identification of these individuals would make beef producers more profitable and sustainable.			
Publications: No Publications Reported			
Participants: M.D. Garcia (PI), T. Bidner, R. Hill, J. Bailey, T. Howard, and S. Mizelle, LSU AgCenter.			
Target Audiences: Target audiences include beef production managers and owners.			
Project Modifications: Nothing significant to report during this reporting period.			
Approved (Signature)		Title	Date
			3-23-12