

**Annual Report S-1086**  
**Years 2021 – 2022**

**Project Title: S-1086: Enhancing sustainability of beef cattle production in Southern and Central US through genetic improvement**

**Publications:**

K. A. Midkiff, E. B. Kegley, B. W. Krumpelman, B. R. Kutz, and J. G. Powell. 2022. Evaluation of winter hair coat shedding on cow and calf performance in crossbred Angus cattle in Arkansas. American Society of Animal Science Annual Conference. Oklahoma City, OK.

Burnett, R. H., Z. Contreras-Correa, R. D. Messman, K. A. Midkiff, C. O. Lemley, and T. Smith. 2021. Effect of hair coat shedding ability on uterine artery hemodynamics in Angus cattle. *J. Anim. Sci.* 99(Suppl. 2):2-3. (Abstr.) doi:10.1093/jas/skab096.002.

Simmons, M.A.\*, P.K. Riggs, S. Sanders, A.D. Herring, J.O. Sanders, and D.G. Riley. 2021. Distributional characterizations and testing for differences of relatedness and inbreeding of a subpopulation of American Hereford bulls. *Transl. Anim. Sci.* 5:1–10. doi: 10.1093/tas/txab008.

Angulo-Valenzuela, N.I., M.G. Thomas, D.G. Riley, J.F. Medrano, J.R. Reyna-Granados, C.M. Aguilar-Trejo, and P. Luna-Nevárez. 2021. A SNP within the PMCH gene as a molecular marker associated with fertility traits in Angus and Brangus beef heifers raised under a desert environment. *Trop. Anim. Health Prod.* 53:355. <https://doi.org/10.1007/s11250-021-02794-0>.

Baker, E.C.\*, A.D. Herring, T.S. Amen, J.E. Sawyer, J.O. Sanders, C.A. Gill, P.K. Riggs, and D.G. Riley. 2022. Evaluation of post-weaning efficiency in Nellore-Angus crossbred steers through model predicted residual consumption. *Sust. Agric. Res.* 11:46–57.

Dodd, L., D. Anderson, D.G. Riley, B. Johnson, and A.D. Herring. 2021. Assessing variability of herd sire economic value for commercial operations. *J. Anim. Sci.* 99(Suppl. 3):46–47(Abstr.). <https://doi.org/10.1093/jas/skab235.082>

Mickey, D., J. Sanders, D.G. Riley, and A.D. Herring. 2021. Calf performance and sex ratios in second generation reciprocal Nellore-Angus crosses. *J. Anim. Sci.* 99(Suppl. 3):46–47(Abstr.). <https://doi.org/10.1093/jas/skab235.024>