

Supranutritional Maternal Organic Selenium Supplementation During Different Trimesters of Pregnancy Affects the Muscle Gene Transcriptome of Newborn Beef Calves in a Time-dependent Manner

Wellison J. S. Diniz ^{1,*}, Gerd Bobe ^{2,3}, Joseph J. Klopfenstein ⁴, Yunus Gultekin ², T. Zane Davis ⁵, Alison K. Ward ⁶ and Jean A. Hall ^{7,*}

¹ Department of Animal Sciences, Auburn University, Auburn, AL 36849, USA

² Department of Animal and Rangeland Sciences, College of Agricultural Sciences, Oregon State University, Corvallis, OR 97331, USA; gerd.bobe@oregonstate.edu (G.B.); yunus.gultekin@oregonstate.edu (Y.G.)

³ Linus Pauling Institute, Oregon State University, Corvallis, OR 97331, USA

⁴ Department of Clinical Sciences, Carlson College of Veterinary Medicine, Oregon State University, Corvallis, OR 97331, USA; joe.klopfenstein@oregonstate.edu

⁵ USDA-ARS-Poisonous Plant Research Lab, Logan, UT 84341, USA; zane.davis@ARS.USDA.GOV

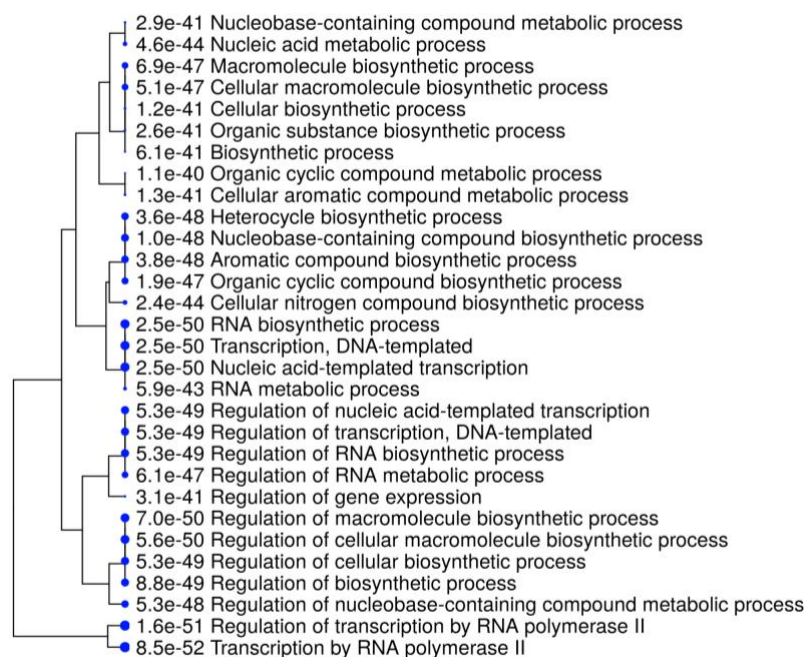
⁶ Department of Animal Sciences, North Dakota State University, Fargo, ND 58105, USA; alison.ward@ndsu.edu

⁷ Department of Biomedical Sciences, Carlson College of Veterinary Medicine, Oregon State University, Corvallis, OR 97331, USA

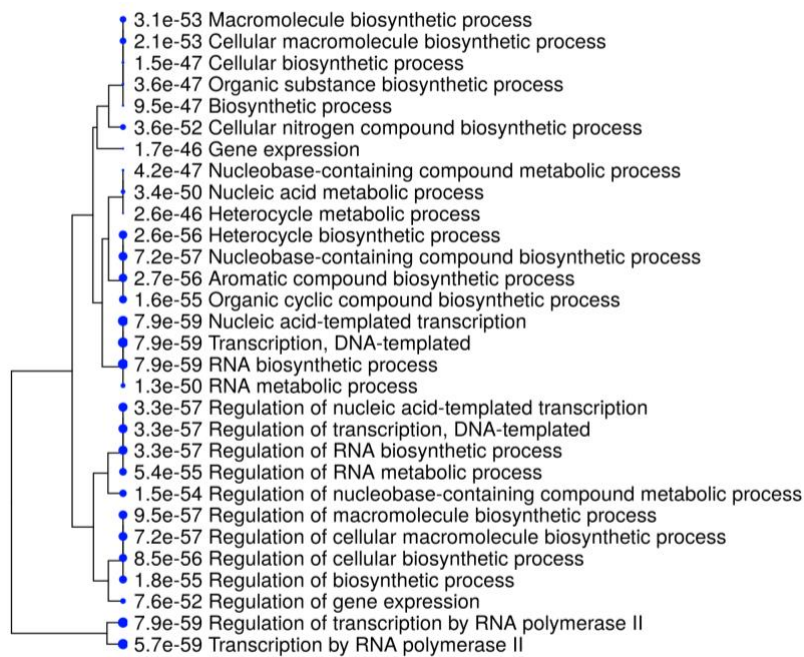
* Correspondence: wzd0027@auburn.edu (W.J.S.D.); jean.hall@oregonstate.edu (J.A.H.)

Supplementary Figures

A



B



C

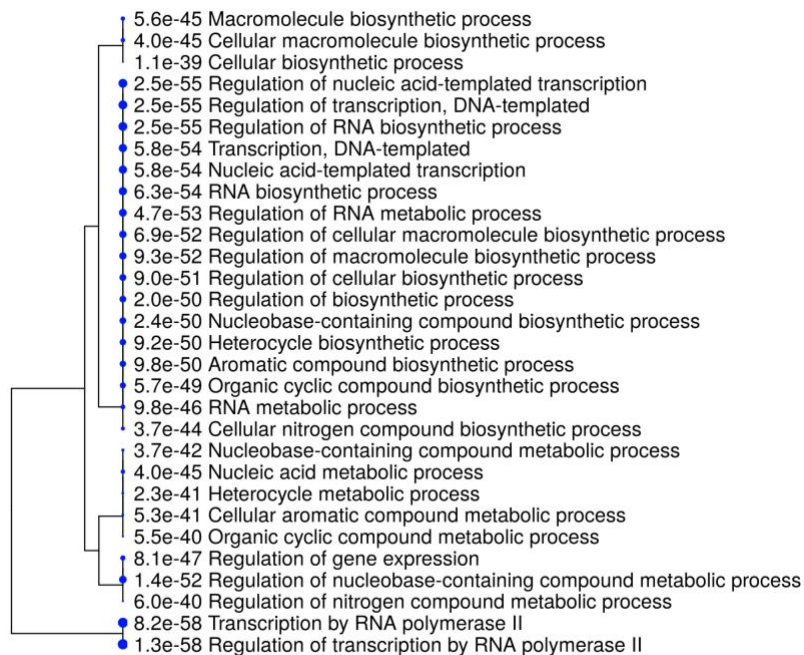


Figure S1. Biological processes over-represented by the key transcription factors. Contrasts were performed separately for each differentially expressed gene, comparing treatment *vs.* control. **A:** First (TR1); **B:** second (TR2); **C:** or third (TR3) trimester of gestation. The bigger the blue dot, the more significant the term is (FDR < 0.05).