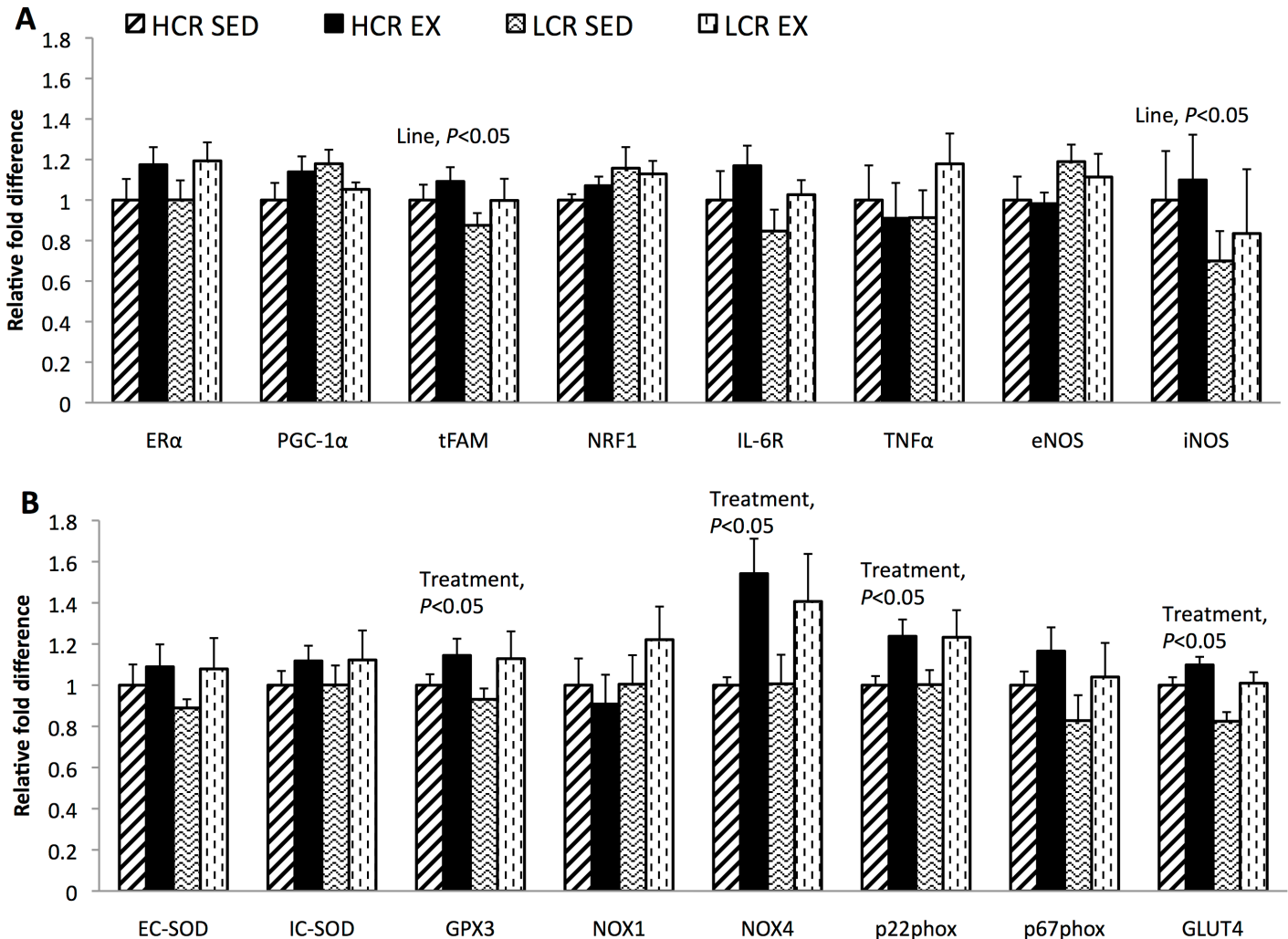


Supplementary Figure: Gene expression in skeletal muscle



Relative mRNA expression of genes associated with skeletal muscle metabolism in

ovariectomized LCR and HCR rats fed high fat diet. Ovariectomized low capacity running (LCR) and high capacity running (HCR) rats fed a high fat diet were given access to a voluntary running wheel (EX) or remained sedentary (SED) for 11 weeks and their gastrocnemius muscle tissues were compared. Data are expressed relative to HCR SED. Values are means \pm SE (n=6-8 per group). Line = line main effect, HCR vs. LCR; Treatment = treatment main effect, SED vs. EX. ER α = estrogen receptor α ; PGC-1 α = peroxisome proliferator-activated receptor γ coactivator 1 α ; tFAM = mitochondrial transcription factor A; NRF1 = nuclear respiratory factor 1; IL-6R = interleukin 6 receptor; EC-SOD = extracellular superoxide dismutase; IC-SOD = intracellular superoxide dismutase; GPX3 = glutathione peroxidase; IL = interleukin; TNF α = tumor necrosis factor α ; eNOS = endothelial nitric oxide synthase; iNOS = inducible nitric oxide synthase; and NOX = NADPH oxidase; GLUT4 = glucose transporter type 4.