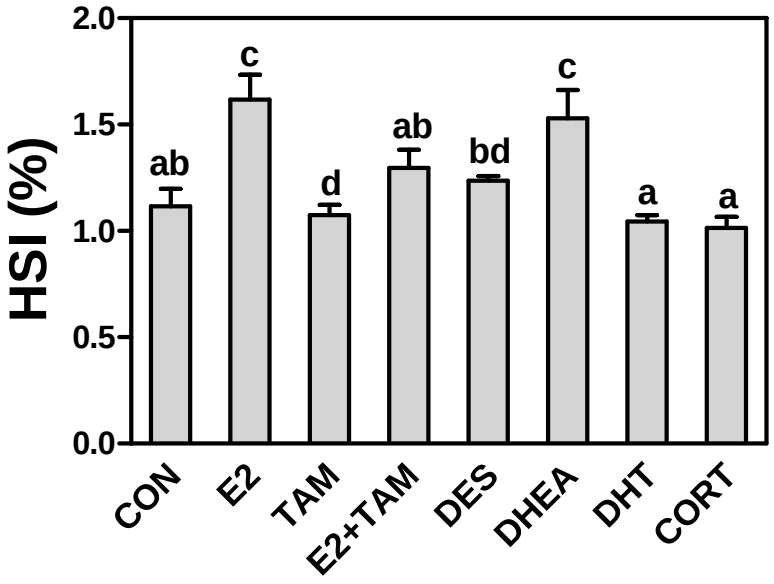
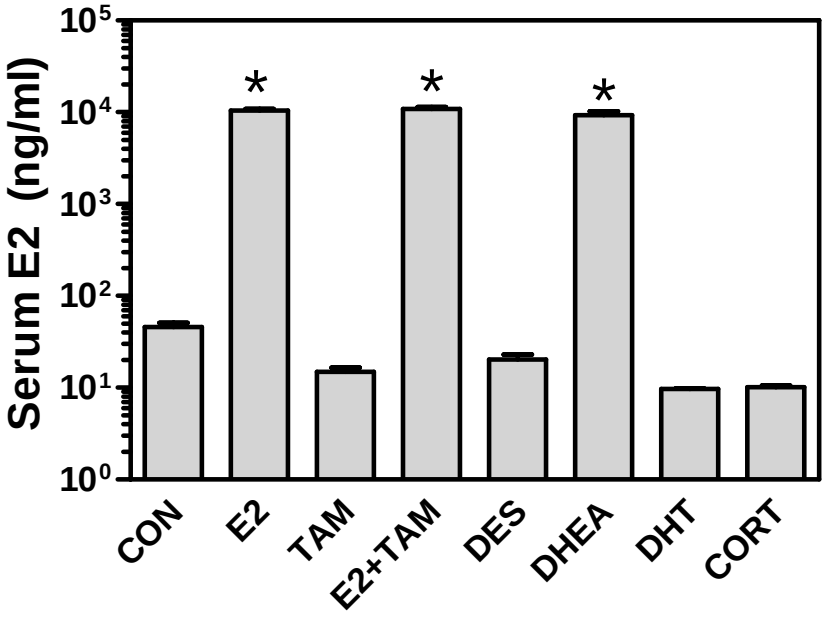
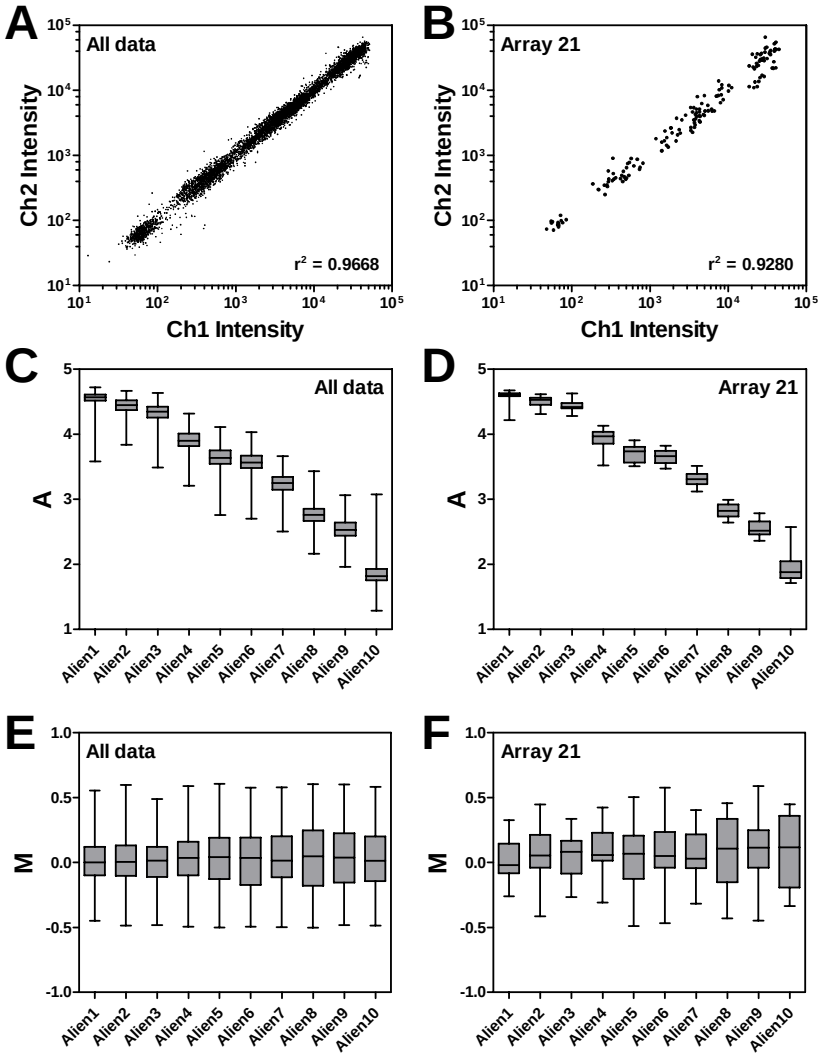
SUPPLEMENTARY FIGURES



Supplementary Figure 1. Effects of dietary estrogen and non-estrogen treatments on relative liver weights in rainbow trout. Mean hepatosomatic index (HSI) for each experimental treatment is shown + SD (N = 3 tanks). Each tank included 15 individuals from which four males were sampled. HSI values for individuals were calculated separately and then averaged per tank so that each tank represents a biological replicate. Different letters indicate that the treatments are significantly different from each other (P < 0.05) as determined by a one-way ANOVA with Student-Newman-Keuls Method for multiple comparisons.



Supplementary Figure 2. Blood plasma E2 levels in trout after a 14-day dietary exposure to 5 ppm E2, 50 ppm TAM, 5ppm E2 + 50 ppm TAM, 2 ppm DES, 500 ppm DHEA, 5 ppm DHT and 5 ppm CORT. Values represent duplicate measurements obtained from blood plasma from four individual male trout pooled by tank ($N = 3$). * indicates $P < 0.001$ according to results of a one-way ANOVA with Tukey's multiple comparison test.



Supplementary Figure 3. Quality control analysis of array hybridization. Data for each SpotReport Alien Oligo feature for a representative array (n = 16 spots per olio per array) or for all arrays hybridized in this study (n = 640) are shown. Panels A-B shows the pairwise correlation analysis of Ch1 and Ch2 intensities for all SpotReport Alien features. The other figures show box and whiskers plots of values for mean intensity (panels C and D; A = $\log_{10}$(sqrt(Ch1*Ch2)) and the ratio of intensities (panels E and F; M = $\log_2$(Ch1/Ch2). Summary: Non-specific hybridization to buffer spots was not detected, and background fluorescence was consistently low across the array. No apparent spatial bias was detected on the arrays

utilized in this study. As expected, a very strong correlation between Ch1 and Ch2 intensities was observed indicating that the potential problem of dye bias were eliminated by Lowess normalization of the raw data. The quality control analysis shows that these arrays can detect changes in gene expression across a broad range of signal intensities (three orders of magnitude). In general, the quality control analysis indicated that hybridization to the OSUrbt was consistent and reproducible.