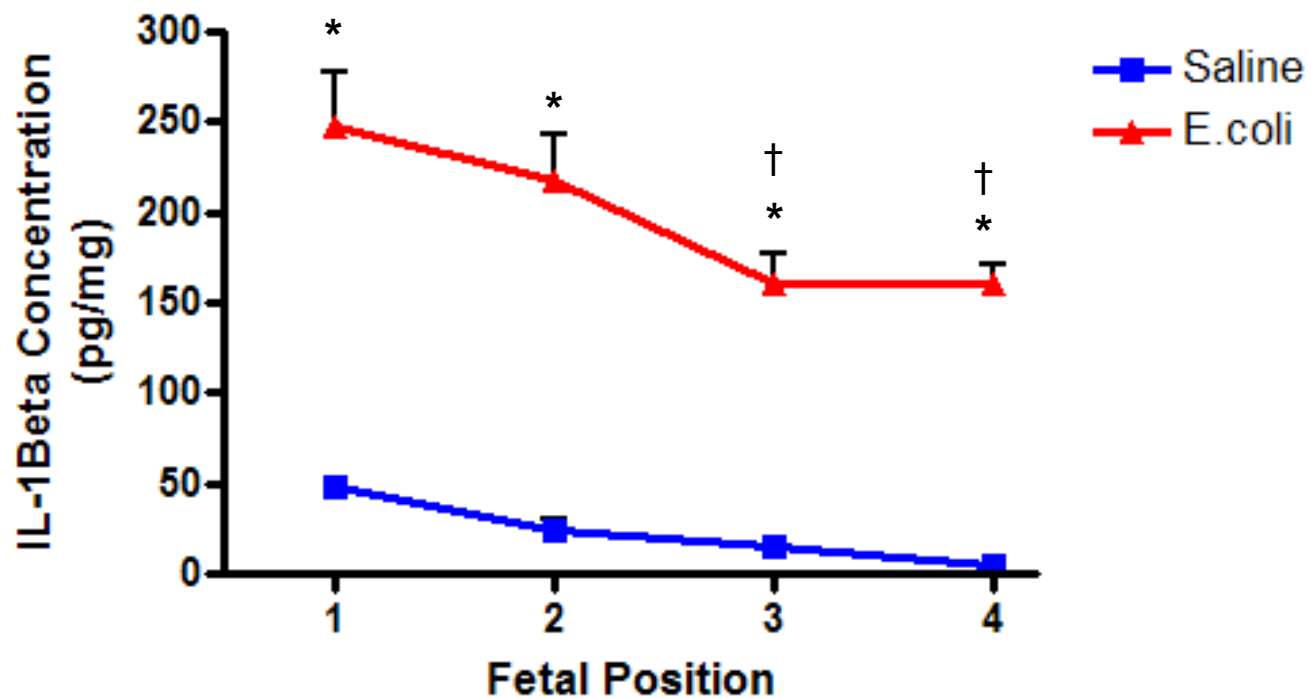


### IL-1Beta in the fetal brain 96 hrs after E.coli injection



Two dams were injected with  $1 \times 10^5$  colony forming units of *E. Coli* at gestational day (GD) 17 at the bifurcation of the uterine horns. Ninety-six hrs after *E. coli* injection, the dams from each group were anesthetized with isoflurane and a caesarean section performed. A midline abdominal incision was performed, and the uterine tract removed and placed on ice. Each pups' position was notated using the site of injection as a reference point and the fetal brain were harvested from each pup. Once the uterine tract was removed, maternal blood was collected via cardiac puncture. Blood was centrifuged at 1600 rotations per minute (RPM) ( $\sim 900 \times g$ ) for 10 minutes at  $4^\circ \text{C}$  and the supernatant stored at  $-80^\circ \text{C}$ . The tissue was frozen on dry ice and then transferred to a permanent container and stored at  $-80^\circ \text{C}$  until further analysis. IL- $1\beta$  was increased in fetal brains 96 hrs after *E. coli* injection. *E. coli* injection significantly increased IL- $1\beta$  levels in fetal brains 96 hrs post injection. There was a statistically significant difference in IL- $1\beta$  expression between fetal positions 1 and 3 and 4. Pups furthest from the site of injection had significantly increased levels of IL- $1\beta$ . Data is reported as the average IL- $1\beta$  concentration  $\pm$  S.E.M. \* Significantly different from fetal brains in corresponding saline group as indicated by ANOVA and post-hoc Bonferroni, corrected *t*-tests ( $p < 0.05$ ). † Significantly different from fetal position 1 as indicated by ANOVA and post-hoc Bonferroni, corrected *t*-tests ( $p < 0.01$ ). N = 3-8 placentas per treatment group for each fetal position.

**Supplementary Data Table 1.** The following table displays the average  $\pm$  S.D. pup weight on PND16. The pup(s) in the middle of the litter weight range were selected for immunohistochemistry.

	<b>No. of Pups</b>	<b>PND 16</b>	<b>P Values</b>
Saline 1	5	31.84 $\pm$ .92g	P = 0.119
Saline 2	4	30.27 $\pm$ 1.25g	
Saline 3	4	31.90 $\pm$ .97g	
Saline 4	4	30.75 $\pm$ .82g	
Saline 5	4	30.70 $\pm$ .79g	
Saline 6	4	30.94 $\pm$ .91g	
E.Coli 1	4	30.68 $\pm$ .53g	P = 0.137
E.Coli 2	3	30.67 $\pm$ .58g	
E.Coli 3	3	30.33 $\pm$ .98g	
E.Coli 4	3	31.40 $\pm$ .85g	
E.Coli 5	3	29.67 $\pm$ .86g	
E.Coli 6	3	31.27 $\pm$ .67g	
E.Coli 7	3	30.57 $\pm$ .99g	
E.Coli 8	3	31.17 $\pm$ .46g	