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ORIGINAL RESEARCH

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Anti-Mullerian Hormone (AMH) Levels are Reduced by Age, but do not Correlate with Pregnancy in Timed-Mated Rhesus Monkey Females

(*Macaca mulatta*)

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Supplementary Materials

Figure S1 A representation of the pregnancy outcomes in the cohort of cycles that were used in the study. Frequency of pregnant or not pregnant is seen on the x-axis, and the resulting pregnancy outcome is on the y-axis. Out of 90 cycles from 47 females, 28 resulted in pregnancy, as seen in red, and 62 did not result in pregnancy, as seen in blue.





Figure S2 Representation of the day of the cycle in which the first blood sample was taken that was utilized in hormone measuring of AMH and activin A. The day of the cycle (x-axis) ranges from day 5 to day 15 post menses. Most of the date from the 90 cycles used (y-axis) were from day 7 post menses, as seen in turquoise.



Figure S3 Box plot analyses of impact of age (years) on cycle outcomes (pregnant vs not pregnant, $\rho > 0.12$). Means are depicted by small box within 95% confidence interval, and lines depict median values. Error bars depict 99% confidence interval and stars depict outliers.



Figure S4 Box plot analyses of impact of weight (kg) on cycle outcomes (pregnant vs not pregnant, $\rho > 0.36$). Means are depicted by small box within 95% confidence interval, and lines depict median values. Error bars depict 99% confidence interval and stars depict outliers.



Figure S5 Correlation analyses between serum AMH concentration prior to breeding (pg/mL) versus either age (years) or weight (kg) as separated by cycles resulting in a Pregnancy (Panel A, top graphs) or not (Non-Pregnant Cycle; Panel B, bottom graphs). Individual boxes represent data from each sample, and lines representing linear fit as well as shaded area representing 95% confidence interval are depicted. Spearman correlation coefficient (R) and level of significance (P) are depicted for each analysis.

Activin A Results by Pregnancy Status of Cycle

[]			95% Confidence Interval	
Comparison	R value	P-value	Min	max
Pregnant Cycles Activin A (pg/ml) vs Age (years)	0.21	>0.23	-0.54	0.177
Pregnant Cycles Activin A (pg/ml) vs Weight (kg)	-0.38	0.047	-0.346	0.399
Non-Pregnant Cycles Activin A (pg/ml) vs Age (years)	-0.031	>0. 8	-0.279	0.22
Non-Pregnant Cycles Activin A (pg/ml) vs Weight (kg)	0.022	>0.87	-0.269	0.23
All Cycles Activin A vs Age (years)	-0.078	>0.46	-0.279	0.132
All Cycles Activin A vs Weight (kg)	-0.133	>0.21	-0.33	0.077

Figure S6 Correlation analyses between serum Activin A (pg/ml) concentration prior to breeding (pg/ml) versus either age (years) or weight (kg) as separated by cycles resulting in a Pregnancy or not (Non-Pregnant Cycles), as compared with combining analyses from all cycles. Results are depicted in Tabular form, as the one significant correlation (Pregnant cycles, Activin A versus weight) is depicted in Figure 7.