

Background

Flame retardants found in industrial and consumer products

Exposure via ingestion and inhalation

Children and industrial workers are more susceptible populations

Ban on PBDE's increased use of TPP

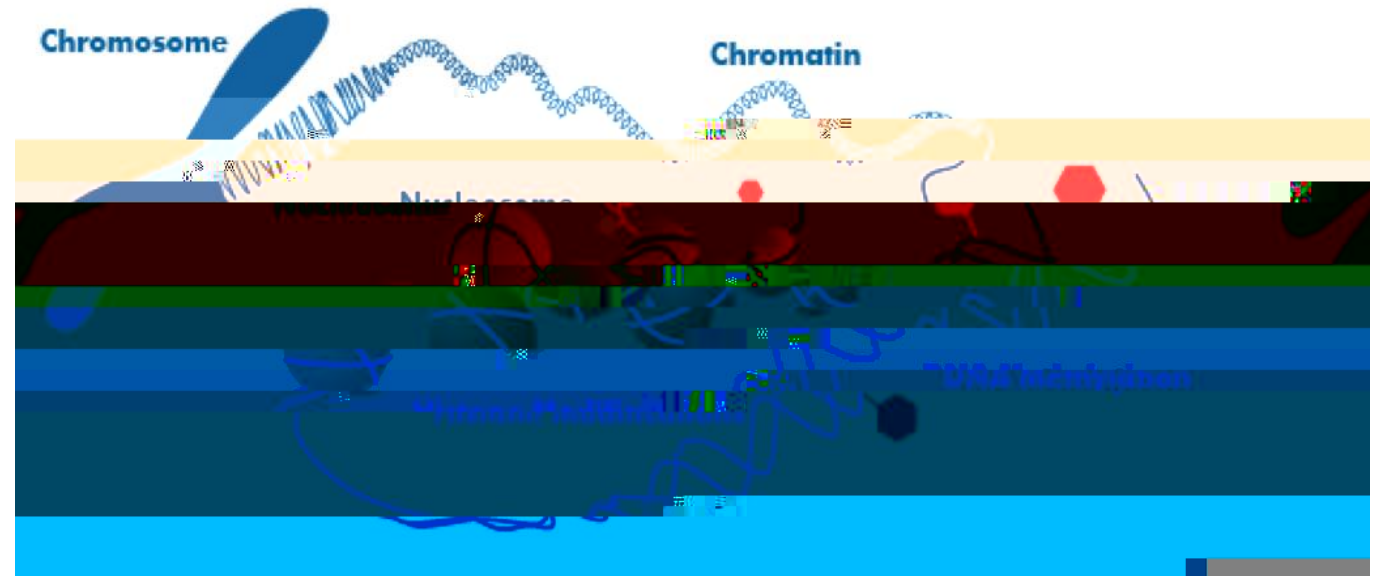
Epigenetics

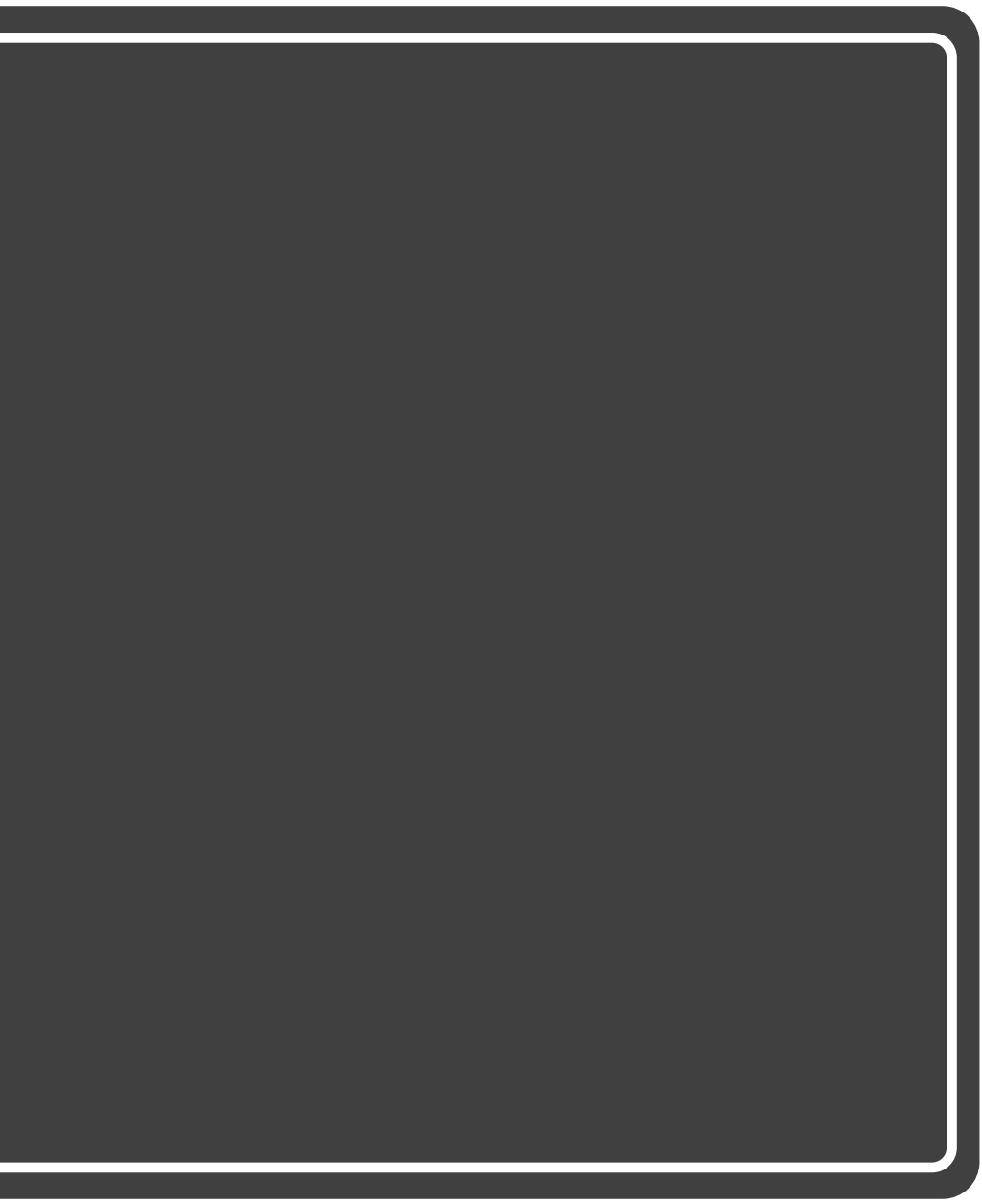
Histone modification

Addition of acetyl or methyl group to histone to alter conformation and induce transcription

DNA methylation

Addition of methyl group to DNA to interfere with transcription and induce gene silencing

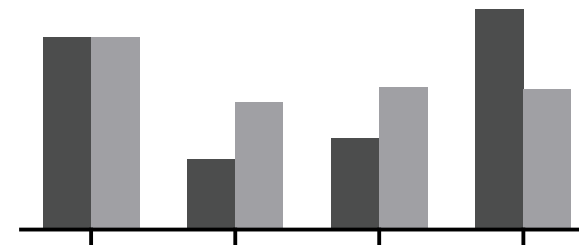
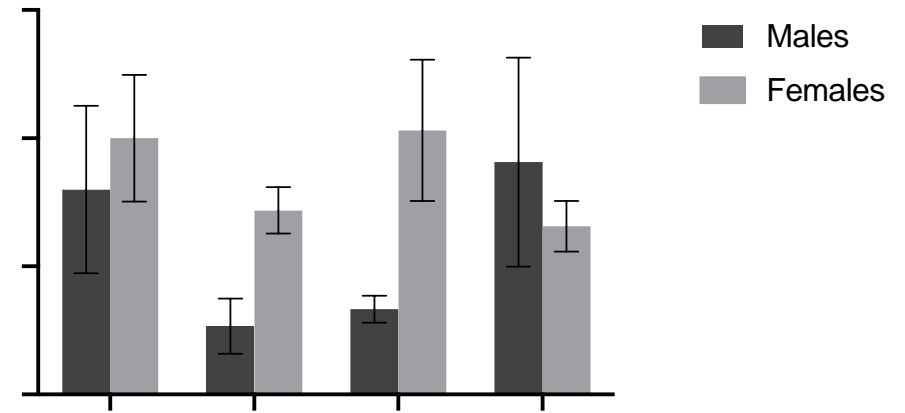


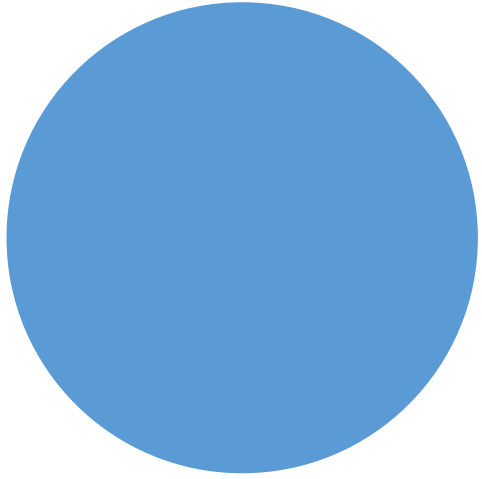


Results

Trimethylation and monomethylation of H3K9
No significance found

Used two-way ANOVA to contrast differences in dose and sex





Thank you for
listening!



References

Castorina, R., Butt, C., Stapleton, H. M., Avery, D., Harley, K. G., Holland, N., ...Bradman, A. (2017). Flame retardants and their metabolites in the homes and urine of pregnant women residing in California (the CHAMACOS cohort). *Chemosphere*, 179, 159–166.
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Hammel, S. C., Hoffman, K., Lorenzo, A. M., Chen, A., Phillips, A. L., Butt, C. M., ...Stapleton, H. M. (2017). Associations between flame retardant applications in furniture foam, house dust levels, and residents' serum levels. *Environment International*, 107, 181–189.
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