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### **Supplemental Material**

#### **The Association between Long-Term DDT or DDE Exposures and an Altered Sperm Epigenome—a Cross-Sectional Study of Greenlandic Inuit and South African VhaVenda Men**

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**Table S2.** Aggregated population data of South African men from this study (VhaVenda cohort;  $n = 51$ ; Figure S1B; mean  $\pm$  SEM or %).

**Table S3.** MethylC-Capture-sequencing (MCC-seq) read statistics of Greenlandic sperm.

**Table S4.** MethylC-Capture-sequencing (MCC-seq) read statistics of South African sperm.

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**Figure S1.** Characterization of Greenlandic and South African sperm relative to serum  $p,p'$ -DDE levels and single-nucleotide polymorphisms.

**Figure S2.** Genic and transposable element characterization of differentially methylated regions.

**Figure S3.** Identification of predicted persistent DNAm regions from sperm to the pre-implantation embryo.

**Figure S4.** Genic and transposable element characterization of differentially enriched H3K4me3 peaks.

**Figure S5.** Examples of peaks with deH3K4me3 that overlap promoters, transposable elements and / or putative enhancers.

**Figure S6.** Identification of predicted persistent H3K4me3 peaks from sperm to the pre-implantation embryo.

**Figure S7.** Promoters marked by H3K4me3 in sperm and pre-implantation embryos correspond to expressed genes in the embryo.

**Additional File-** Excel Document