dependence

Logic – Do the models – support the evolution of the conserved aspects of heterochiasmy identified in this study i) typical recombination landscape, ii) chromatin compaction and interferences differences and iii) difference in the variance across cells.

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| --- | --- | --- | --- | --- | --- |
| **Model name** | **Typical Landscape**  **Male telomere**  **Female uniform** | Male long dna loops -> strong interference  Female, short DNA loops weak interference | **Female more**  **within mouse variance for mlh1** | **Reverse hetC**  **(Male gwRR > female gwRR)** | **Positive correlation interference strength and CO number** |
| Gamete selection  (reduction principle / stronger selection reduces RR) | ?  (not sure how to distinguish from SACE predictions) | Yes  (stronger interference results in fewer Cos) | Yes  (strong selection in males reduces between cell variance) |  |  |
| S.A.C.E.  (how is this model different than reduction) | Yes  (male large blocks result with strong telomere bias) | Yes  (stronger interference results in larger blocks for males) | Maybe  (strong selection in males reduces between cell variance) |  |  |
| Two locus modifier  (protection against meiotic drive systems) | Yes  Females generally higher RR and COs closer to centromeres. | Yes  (prediction of weaker interference in females) | Yes  More variance between oocytes to reduce effectiveness of centromere drive. |  |  |
| Spindle differences (centrosome),  SAC stronger in males:  (directional selection)  Leaky egg SAC:  (relaxed selection) | Yes  Telomere position maximizes sister cohesion with tension. | Yes  Weak interference makes more variance across landscape. | Yes  Relaxed selection on SAC would increases variance across cells. |  |  |