

## Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: Chromosome visualizations for *P. falciparum* stages.

File Name: Supplementary Data 2

Description: Chromosome visualizations for *P. vivax* sporozoites.

File Name: Supplementary Data 3

Description: Loci that show a two-fold or larger difference in contacts between two stages with a false discovery rate of 1%.

File Name: Supplementary Data 4

Description: Significant interactions ( $q$

File Name: Supplementary Data 5

Description: H3K9me3 ChIP-seq results.

File Name: Supplementary Movie 1

Description: Animation of the changes in *P. falciparum* genome organization during stage transitions