**Table of Figures**

**Figure 1. 1:** Schematic representation of bacterial transcription .................................................. 2  
**Figure 1. 2:** Schematic depicting possible mechanisms of RNAP interruption by H-NS at different phases of transcription .......................................................................................................................... 7  

**Figure 2. 1:** Growth curves and the gene expression profiles of various single and double mutants used in this study .......................................................................................................................... 24  
**Figure 2. 2:** The pie chart shows the number of genes belonging to each class of genes (epistatic, unilateral and the negative control) studied here .................................................................................................................. 26  
**Figure 2. 3:** Epistatic genes are enriched with longer H-NS binding tracts, high density of high affinity binding sites of H-NS and genes regulated by StpA in the absence of H-NS. .......... 27  
**Figure 2. 4:** Gene expression levels of different classes of H-NS targets ............................................... 30  
**Figure 2. 5:** Summary of the results. ........................................................................................................ 32  

**Figure 3. 1:** Large-scale disruption of gene expression states in a Δ*hns*-stp*A* mutant. ........... 49  
**Figure 3. 2:** Suppression of the growth defect of Δ*hns*-stp*A* during the course of a laboratory evolution experiment ................................................................................................................................. 50  
**Figure 3. 3:** Amplification of ~40% of the E. coli chromosome around the origin of replication. ......................................................................................................................................................... 54  
**Figure 3. 4:** Converging transcriptional outputs of distinct evolutionary strategies ........................ 56  
**Figure 3. 5:** Gene expression correlations in the context of chromosome architecture................. 60