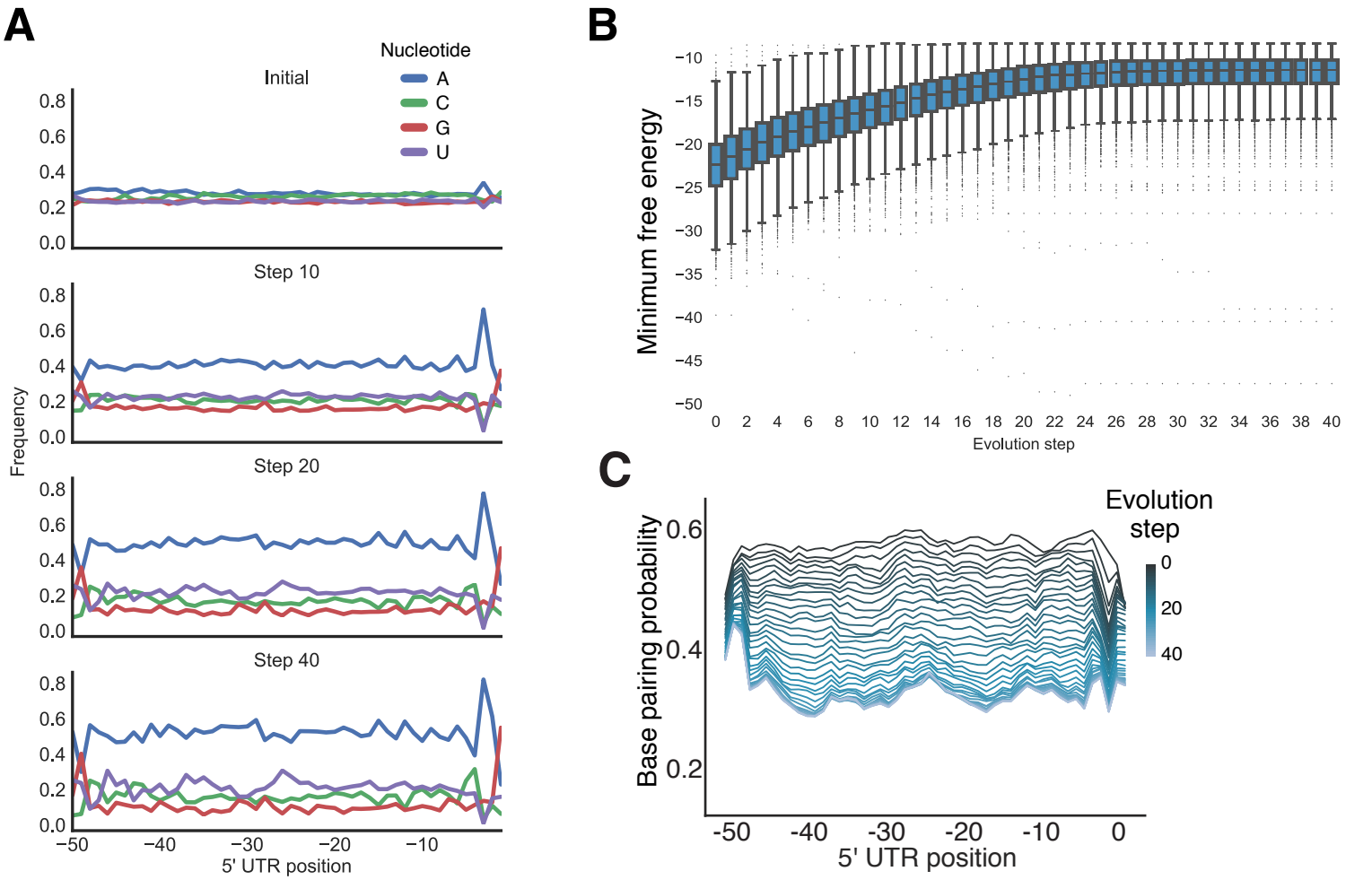

Supplemental Figure 9. (A) Average nucleotide frequency, (B) minimum free energy of the -50 to +70 region, (C) base pairing probability at each position of the 5'UTR, and (D) the most enriched (left panel) and depleted (right panel) 4-mers at each position across the 5,000 5' UTRs at the indicated steps of the model-guided in silico evolutions. The effects of having the indicated enriched and depleted 4-mers occur multiple times in a single 5' UTR were assessed by querying our original experimental random 5' UTR dataset for enrichments based on the motif occurrences.