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Michael L. Gargano*, 5 Windermere Lane, New City, NY 10956-6535, and **Louis V. Quintas** and **Gregory A. Vaughn**. *Improving a Greedy DNA Motif Search Using a Multiple Genomic Self-Adapting Genetic Algorithm*. Preliminary report.

The problem of combining a greedy motif search algorithm with a self-adapting genetic algorithm using multiple genomic representations is considered in order to find high scoring string patterns of size k in a set of t DNA sequences of size n . This will improve the results of the stand-alone greedy motif search. A method employing multiple genomic (i.e., redundant) representations of permutations in a self-adapting genetic algorithm (GA) employing various codes with different locality properties is proposed. (Received February 09, 2007)