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Are Significant Differences in Retroid Content Discernable Between Individuals?

All entities in a genome that encode a reverse transcriptase (RT) enzyme are called Retroids. Retroids have come about from ancient viral infections and are ubiquitous throughout mammalia. These Retroid agents have been able to alter gene function, expression and genome structure in the course of evolution. The studies presented here focus on the analysis of the Retroid content of humans and chimp to provide a context to determine if significant differences between the human composite reference genome (HGC) and the first fully sequenced, publicly available, individual human genome (HGI) can be discerned. One of the goals of this research is to try and identify any unique Retroids in an individual human genome. The chimpanzee genome (PT) is included in this study for comparison of differences between species. The Retroid content of the genomes is determined by the Genome Parsing Suite (GPS) (McClure et al. 2005). The GPS is software developed to find, classify and cut out all of the Retroid agents in a genome.