



From Genome to Genome in the Quest to Decipher Life

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ABSTRACT The publication at the beginning of 2001 of the human genome project has opened up a new era into biological researches. Starting from these preliminary sequences, a complete list of all human genes and the proteins which they codify will be filled out. This will permit their utilisation in biomedical investigations. Although the function of the largest part of the genome is still unknown (about 98%), it has been recognised that all the proteins and RNAs, which are involved in cellular functions, are codified by the picked out sequences. This outcome is of great importance because it will help identify all the molecular components and the control mechanisms of the cellular functions. The results of the Human Genome Project (HGP) together with the few obtained by the Human Genome Diversity Project (HGDP), which for some reason failed to attract the same widespread support and funding, and those gathered by the Ape Genome Project, will allow a better understanding of human evolution, the causes of diseases, and the relationships between genetic and environment in shaping the human condition.

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