

# DNA duplications may be responsible for genomic-based diseases

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An important part of saving a species is often understanding its DNA. Through a collaborative effort including 14 scientists representing organizations across Europe and the United States, researchers have been able to analyze the genome of the great ape species of the world.

"A robust appreciation of the means and methods of the evolution of genomes which underlies the diversification of the great apes requires a more detailed knowledge of genome variation that is poorly revealed by current [genome sequencing](#) methods." said Oliver Ryder Ph.D., Director of Genetics for [San Diego Zoo](#) Global's Institute of Conservation Research. "This article represents an international collaboration that provides a new level of understanding of the evolutionary dynamics of relatively small DNA duplications that, in humans - and likely great apes as well - may be contributing factors to "genomic" diseases, that in include autism and mental retardation."

The study, published in the August issue of *Genome Research*, highlights the areas of DNA that appear to be most closely shared by different [great ape](#) species. Of particular note is the fact that bonobo and chimpanzee DNA share more [copy number variants](#) with gorilla than expected.

Provided by Zoological Society of San Diego

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