

# Mouse to man: The story of chromosomes

April 19 2006

---

U.S. scientists say sequencing human chromosome 17 and mouse chromosome 11 has offered unique insights into the evolution of the genome of higher mammals.

A Baylor College of Medicine researcher who participated in the effort says the work represents the first time a mouse chromosome has been completely sequenced and annotated.

That feat, says Professor James Lupski, presents scientists with the opportunity to intensively examine the similarities and differences in the DNA sequence of human and mouse.

Lupski was brought into the work while on sabbatical at the Wellcome Trust Sanger Institute in Cambridge, England. The Sanger Institute, the Broad Institute of MIT, and Harvard University were the primary institutions involved in the sequencing effort.

Lupski says the study presents a clearer picture of how genome changes through evolution.

"As we go up the mammalian line, and particularly in primate, it is obvious that rearrangement in the genome is the predominant force in the evolution of genomes," said Lupski. "Perhaps one way to evolve faster is not by making changes (the chemicals that make up DNA), but by changing chunks of genome."

The study appears in the journal Nature.

*Copyright 2006 by United Press International*

Citation: Mouse to man: The story of chromosomes (2006, April 19) retrieved 27 April 2024 from <https://phys.org/news/2006-04-mouse-story-chromosomes.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.