

Genetics: Junk DNA as an evolutionary force

Christian Biémont¹ & Cristina Vieira¹

[Top of page](#)

Abstract

Transposable elements were long dismissed as useless, but they are emerging as major players in evolution. Their interactions with the genome and the environment affect how genes are translated into physical traits.

Transposable elements (TEs) — commonly called 'jumping genes' — are stretches of DNA that move around the genome of a cell, and the genomes of many higher organisms are cluttered with numerous copies of these enigmatic elements. They were discovered by Barbara McClintock in the 1950s ([Box 1](#)), but it has taken half a century to begin to understand how they act and the effects they can have.

<http://www.nature.com/nature/journal/v443/n7111/full/443521a.html>