

# Transposon mutagenesis

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**Transposon mutagenesis**, or **transposition mutagenesis**, is a biological process that allows genes to be transferred to a host organism's chromosome, interrupting or modifying the function of an extant gene on the chromosome and causing mutation.<sup>[1]</sup>

## Contents

- 1 History
- 2 Dynamics
- 3 See also
- 4 References
- 5 External links

## History

Transposon mutagenesis was first studied by Barbara McClintock in the mid-20th century during her Nobel Prize-winning work with corn.<sup>[2][3]</sup>

## Dynamics

In the case of bacteria, transposition mutagenesis is usually accomplished by way of a plasmid from which a transposon is extracted and inserted into the host chromosome. This usually requires a set of enzymes including transposase to be translated.<sup>[3]</sup>

## See also

- Transposons as a genetic tool

## References

- ↑ "Feeding hungry mouths" - European Commission ([http://ec.europa.eu/research/biotech/biotech2-vol3/2-2-03-sub\\_en.html](http://ec.europa.eu/research/biotech/biotech2-vol3/2-2-03-sub_en.html))
- ↑ "Detecting a transposon in corn" - Weed to Wonder (<http://www.weedtowonder.org/experiments/transposon.html>)
- ↑ ***a b*** "Detecting a Transposon Tag in Arabidopsis" - Greenomes ([http://webcache.googleusercontent.com/search?q=cache:3ajtlfmRjNcJ:www.greenomes.org/pdf/clf\\_intro.pdf+%22Transposon+mutagenesis%22+McClintock+corn&cd=5&hl=en&ct=clnk&gl=us](http://webcache.googleusercontent.com/search?q=cache:3ajtlfmRjNcJ:www.greenomes.org/pdf/clf_intro.pdf+%22Transposon+mutagenesis%22+McClintock+corn&cd=5&hl=en&ct=clnk&gl=us))

## External links

- GMO Safety: Jumping genes - from phenomenon to tool (<http://www.gmo-safety.eu/basic-info/300.jumping-genes-phenomenon-tool.html>)
- "Transposon Mutagenesis" - Food Ingredient News ([http://goliath.ecnext.com/coms2/gi\\_0199-3433673/Transposon-Mutagenesis-Brief-Article.html](http://goliath.ecnext.com/coms2/gi_0199-3433673/Transposon-Mutagenesis-Brief-Article.html))
- "Pathogenesis and Immunity in Pertussis" - JAMA (<http://jama.ama-assn.org/cgi/content/summary/261/13/1981-a>)
- "Transposon mutagenesis of nuclear photosynthetic genes in Zea mays" - SpringerLink (<http://www.springerlink.com/content/kv133u7g02242463/>)

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