

Hi, I am Jen the gene!

I will take you on a journey to discover the world of genes and biotech. But before starting, did you know that genes can be used together with biotech to create new tools, treatments, and innovations that benefit humans and the environment?

Improving lives

Biotech can use genes for diagnosis and early screening. Moreover, gene therapies can cure, treat and prevent diseases caused by missing or defective genes by adding or replacing those genes with functional ones.

They are some of the most innovative biotech discoveries as they can improve the quality of patients' lives by moving from disease management to disease treatment.



Finding solutions

Thanks to biotech, scientists can use genes and parts of genes to create vaccines to activate human immune systems and fight infections.

Genes can be also inserted into microorganisms to biomanufacture active pharmaceutical ingredients used to produce medicines.



Finding cures for diseases

Genome editing, including technologies like CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats), allows us to make specific, targeted changes in genes.

Genome editing is considered the easiest, fastest, and most economical way to edit genes and cure genetic diseases.

This opens the door to innovative pathways in healthcare including personalised medicines reducing side-effects in patients.



Enzymes



Preserving the environment

I am not only fundamental in the healthcare sector but also in many other sectors. Genes can be inserted into microorganisms to turn them into factories to produce many different kinds of products.

One example is enzymes - did you know that enzymes are able to preserve the environment? They can decompose toxic substances, clean up industrial sites, produce biodegradable plastics, and more.



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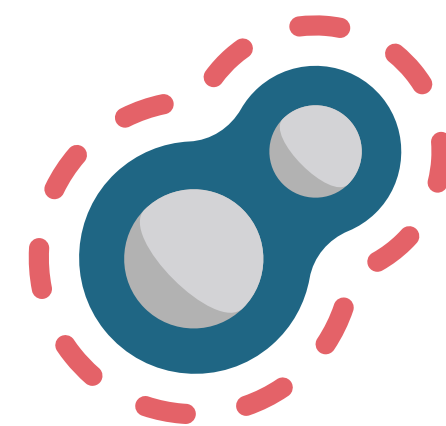
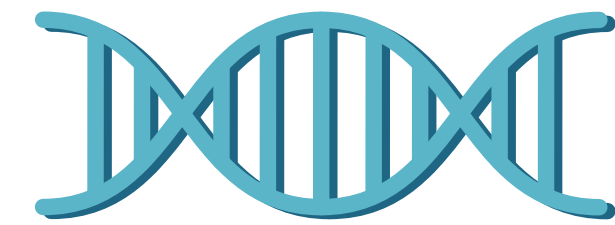
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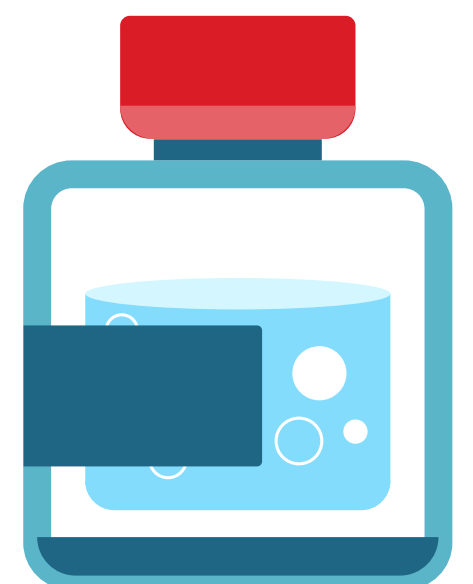
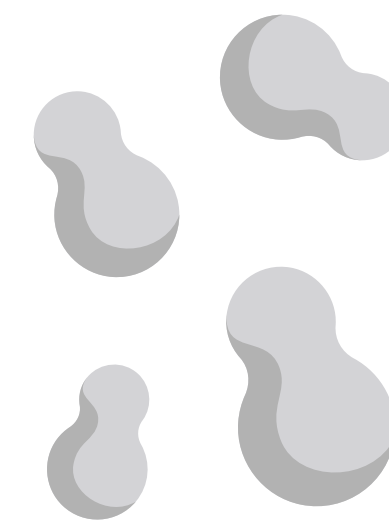
Finding solutions

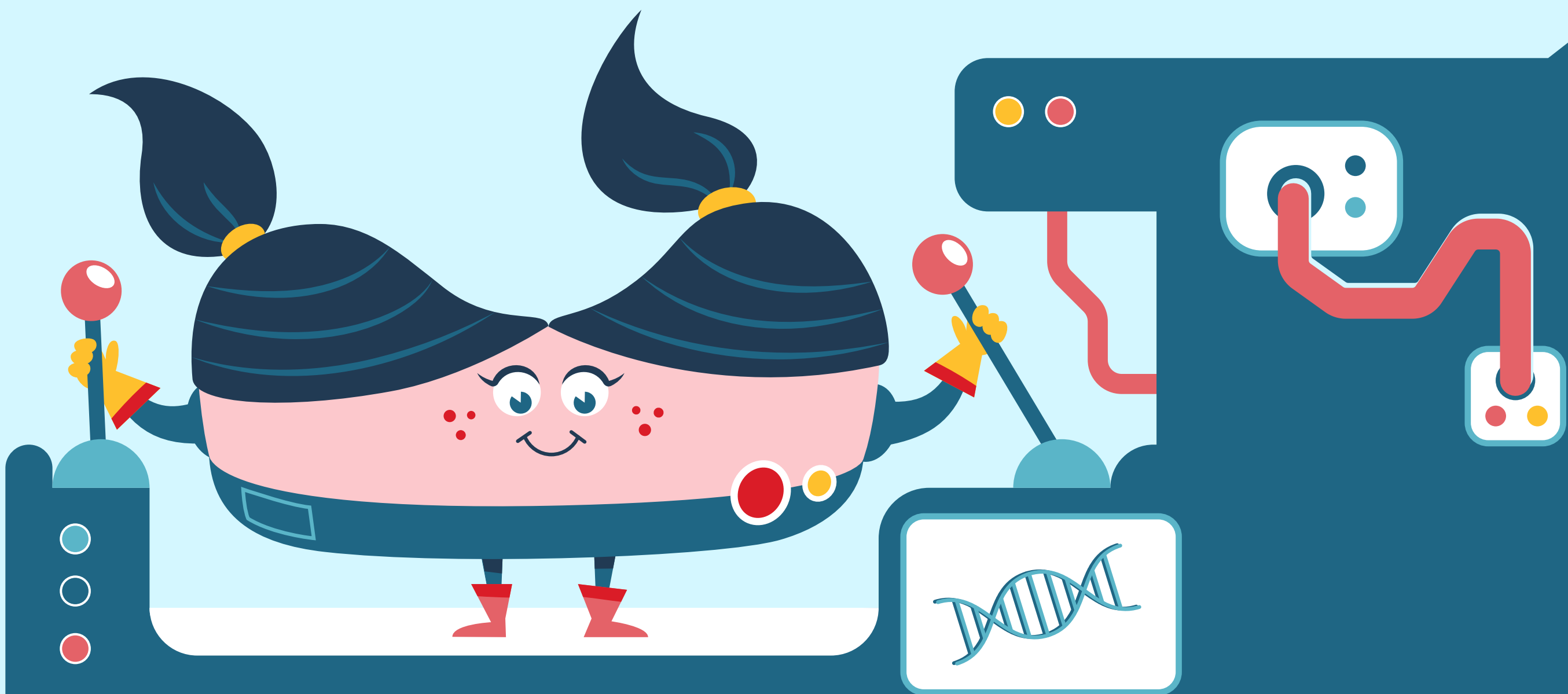
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Bacteria





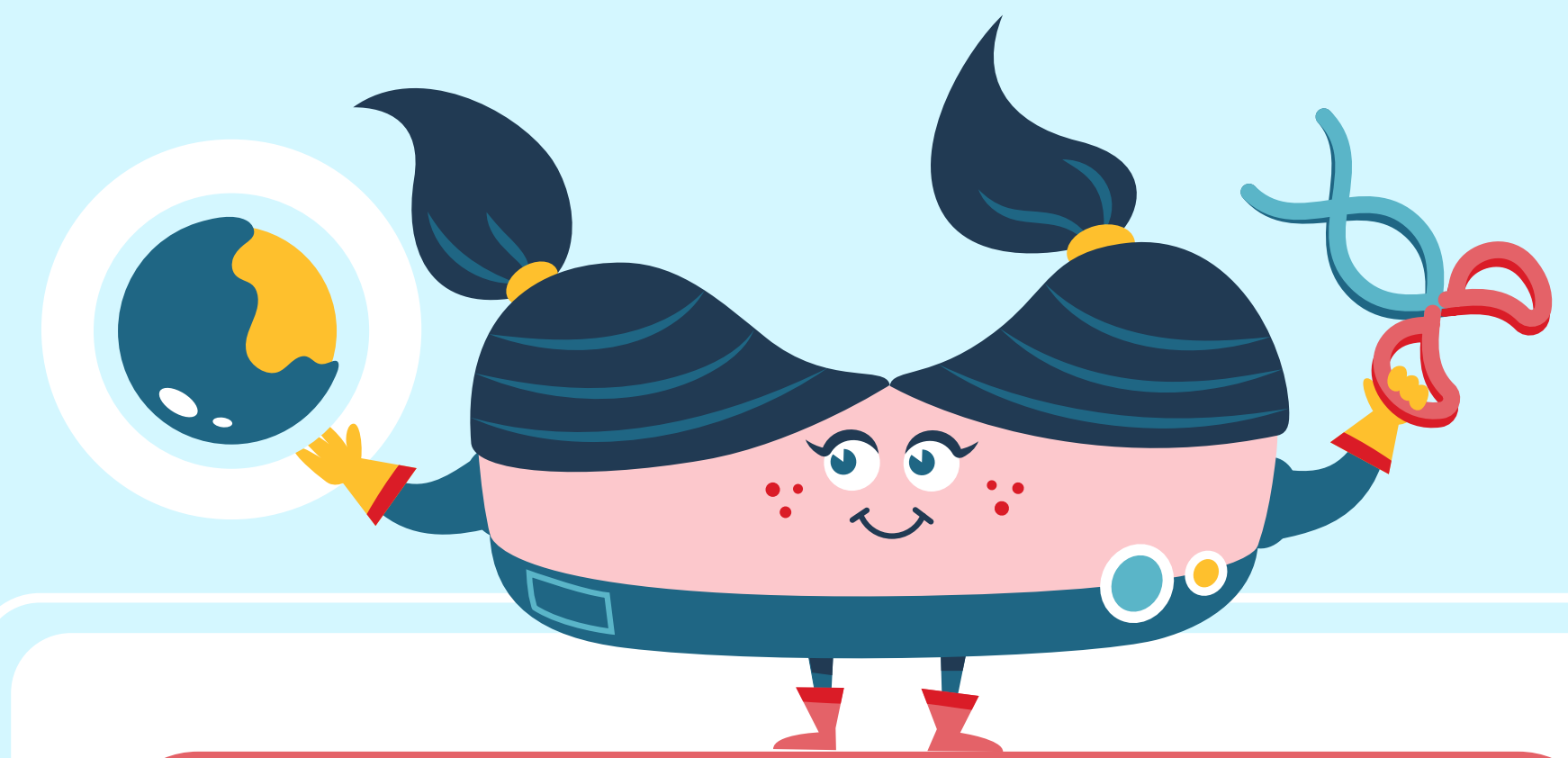
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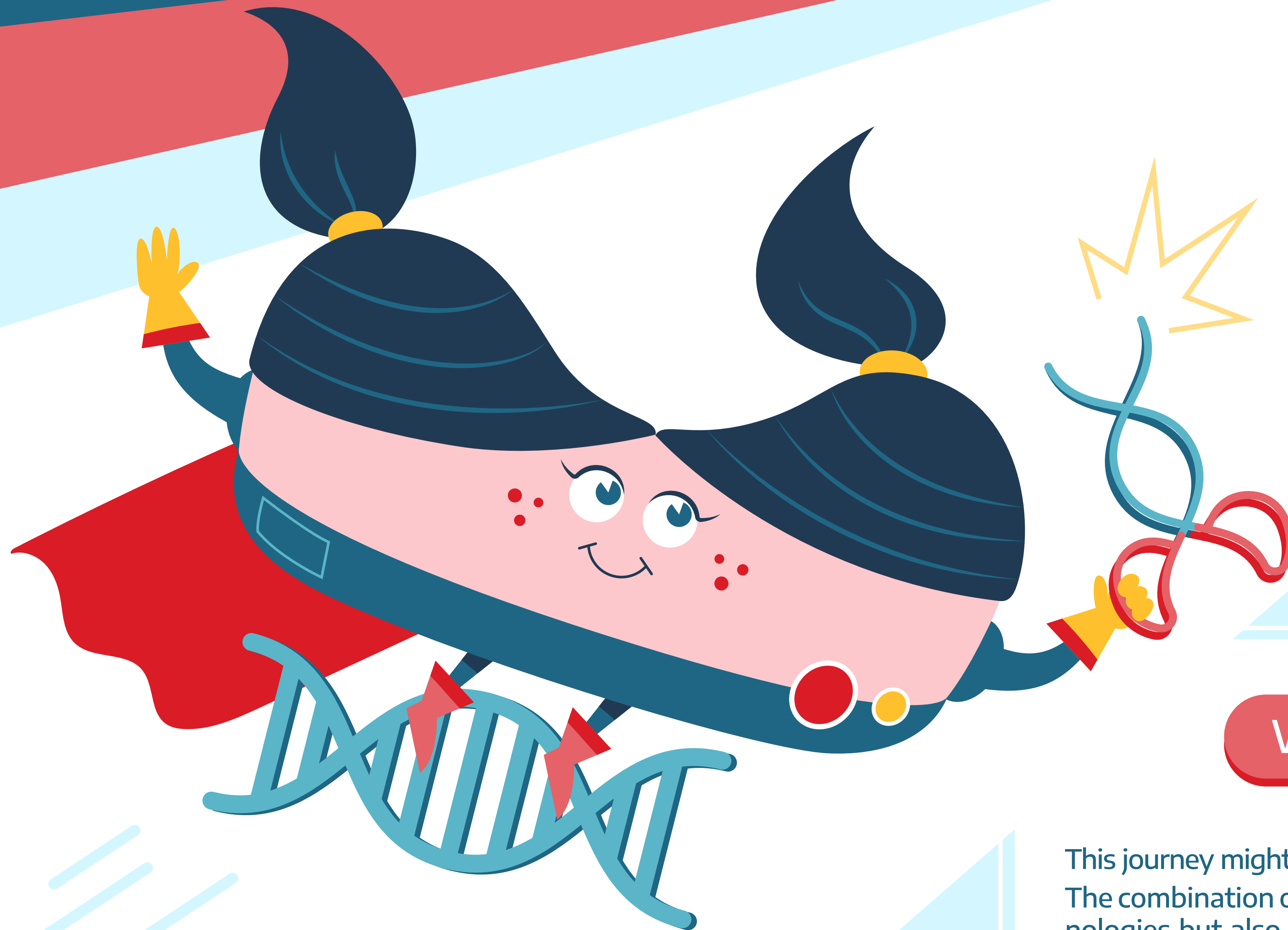




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What's next

This journey might be over, but my adventures are not! The combination of gene therapies with other biotechnologies but also AI advancements will pave the way to transformative biotech solutions.

The future of biotech is now!