

Emmanuelle Charpentier receives the Nobel Prize in Chemistry 2020

The Nobel Prize in Chemistry is awarded to the French Emmanuelle Charpentier and the American Jennifer Doudna for their discovery of the genome modification technique called Crispr-Cas9.

“It is a method that is revolutionary and derived from discoveries made by Emmanuelle Charpentier in a bacterium. What she had discovered was that there was a way to guide an enzyme to a very specific site. This enzyme had properties that we didn’t expect and Emmanuelle Charpentier teamed up with Jennifer Doudna to make this tool”, Pascale Cossart, Professor at the Pasteur Institute and Perpetual Secretary of the Academy of Sciences, told FranceInfo. *“We are now able to modify certain parts of the genome by using an enzyme that comes from a bacterium”.*

The consequences of this technique have revolutionized molecular chemistry in recent years and pave the way for future exceptional progress for human health, without, however, being devoid of ethical risks.

Emmanuelle Charpentier and Jennifer Doudna are the sixth and seventh women to win a Nobel Prize in Chemistry since 1901.

Both researchers have already received several awards, such as the Breakthrough Prize (2015), the Princess of Asturias Science Prize (2015) and the Kavli Prize for Nanoscience in Norway (2018).

In reaction to this announcement on 7 October 2020, the President of the Republic, Emmanuel Macron, tweeted: *“Great joy to see Emmanuelle Charpentier recognized by the Nobel Prize in Chemistry. Her use of molecular scissors has major clinical applications. France has all the talents in fundamental research, but it must know how to retain them and make them bear fruit. »*

For her part, the Minister of Higher Education, Research and Innovation, Frédérique Vidal, said: *“My most sincere congratulations to Emmanuelle Charpentier who has been awarded the 2020 Nobel Prize in Chemistry with Jennifer A. Doudna for their*

work on molecular scissors. This is an immense pride for all our research and for French chemistry. »

The Office for Science and Technology at the Embassy of France in the United States extends its congratulations to Emmanuelle Charpentier, our compatriot, and Jennifer Doudna.

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