# **8 WAYS CRISPR CAN CHANGE THE WORLD**

Human is constantly finding ways to change the face of today's world using physical science, chemical science or biological science. Nowadays, biological science has taken the wheel to change the course of the world by its day by day new inventions. Six years ago a gene editing tool named CRISPR has brought a revolution in the field of biological sciences. Due to its amazing qualities it can save human lives, also can bring a change in ecology, plant biology and so more. Some of the ways through which we can change the world with the help CRISPR are as follow;

# Malaria Resistant Mosquito:

Mosquitoes play a big role in spreading of malaria. Malaria is a deadly parasite that kill thousands of people every year. Scientist after a long battle has been able to modify a mosquito that's been resistant to malarial parasite. It all been achieved with the help of the CRISPR.

Using this CRISPR technology we can modify mosquito that'll be resistant to dengue parasite. The technology used is called gene drive. Gene drive is basically is achieved with the help CRISPR.

# **Limitless Supply of Transplant Organs:**

As we know that nowadays there is been high shortage of transplant organs. Patients wait too long for their number to show up on the transplant match list. Scientist are currently working on pigs to grow human organs in pigs. CRISPR can help? The answer would be yes. CRISPR can eradicate the pigs based disease from the pigs. The reason of the above research is that pigs have organ similar in size to the human organs.

## **Encoding GIFs into Your DNA:**

Well the next application here we have is not much of a lifesaving application of CRISPR. Imagine your DNA have been encoded with movie or a song. Sounds weird isn't it. It's possible now, with the help of a CRISPR. Harvard university scientist have successfully encoded a GIF from a movie clip called the "Star Wars" in the DNA of E.coli. This has been possible with the help of CRISPR. In the near future we can be really free of the tattoo world and we'll have movie or songs encoded into our DNA, well future looks fascinating.

## Saving the World Coral Reefs:

Coral reefs are very sensitive to the environmental changes. A slight change in the environment of the sea can cause the death of the coral reefs. Scientist are working on the ways save the coral reefs. CRISPR might help in this regard. Modified coral reefs would be resistant to environmental changes.

## **More Efficient Crop:**

Farmers lose billions of tons of crops every year due to pests. CRISPR can help in engineering pests resistant crops in the near future. World is also facing water shortage problem due to which some crop cannot grow. CRISPR can engineer plants that can only 25% of the normal water. Also the growing population needs to be fed. So, fast growing plants would be perfection and we can achieve this with the help of CRISPR.

#### **Heat Resistant Cows:**

Scientist in university of Florida are working on cows that would thrive to live in warmer condition. By isolating the specific DNA sequence that regulate the body temperature, this all is possible with the help of CRISPR.

#### **Curing ALS:**

We all remember the ice bucket challenge started b Facebook. That challenge was to fund the charitable organization that helped the ALS (amyotrophic lateral sclerosis) patients. Nowadays, CRISPR can help in curing that diseases. Scientist have cured this disease in mice which expanded the life expectancy of mice by 20 percent. Scientist might be able to silence that defected gene that causes ALS with the help of CRISPR.

#### Home Disease Diagnosis:

Imagine having the ability to use CRISPR technology as a hi-tech unwellness identification platform from the comfort of your own residence. That's the goal of a replacement startup known as Mammoth Biosciences. The corporate is busy developing at-home tests that promise to be able to observe everything from STDs to cancers.

"Similar to a pursuit engine, our scientists enter a code into the guide ribonucleic acid to seek out the matching super molecule (DNA or RNA) strand within the unwellness," Mammoth CEO Trevor Martin told Digital Trends. "Once the code is found, rather than solely piece the strand of matched ribonucleic acid or desoxyribonucleic acid like one would for redaction, it additionally contains a collateral result on communicator molecules that unleash a color to visually show the presence of the unwellness."

The tests can reportedly be as simple as Associate in Nursing at-home bioassay, with Associate in Nursingswers obtainable to customers in below an hour. There's no word on once these tests are going to be obtainable however, once they ar, it might persuade be a game changer.