

A Survey of the Public Cognition and the Acceptance of the Gene-editing Technology

Dear interviewees,

The survey is conducted to understand the public attitude towards gene editing and other technical means. This is an anonymous investigation and the content is only used for scientific research. It is absolutely confidential. Please select the appropriate option according to your realities and views. This filling will take you about 5 minutes. Thanks for your support and cooperation.

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1 Basic Cognitive Concept

This module aims to understand your authentic views. Please fill in according to your own first reaction. Please do not refer to other people's opinions in the filling process. Thank you!

1.1 Self-evaluation of the cognition of related technologies :

Understand - deeply understand the principle or the progress of specific cases

General - have heard of relevant nouns or technologies and can give relevant examples;

Incomprehension - do not understand.

	understand	general	incomprehension
Transgenesis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gene editing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gene target therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DNA recombination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CRISPR system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

1.2 The following events you have some knowledge of are: (Multiple choice. Select at least one item.)

Please select all the events you know; if you have no knowledge of the event, please select "None".

- ☐ He Jiankui's "gene-editing baby" in 2018
- ☐ Gene-editing "modified pig" as donor for organ transplantation experiment
- ☐ Improvement of yield of soybean by using CRISPR
- ☐ Human genome project
- ☐ None

1.3 How do you get information about gene editing techniques: (Multiple choice. Select at least one item.)

Please try to choose as comprehensive as possible!

- ☐ Paper resources(such as books, newspapers and periodicals)
- ☐ TV, radio
- ☐ Class learning
- ☐ Internet
- ☐ Common discourse
- ☐ No relevant information has been obtained
- ☐ Others _____

1.4 The genetic material of the organism is: (single choice)

Used only to understand the true cognition of the relevant areas, please do not search the Internet.

- ☐ Gene
- ☐ Protein
- ☐ Water
- ☐ Sugar
- ☐ Not known

1.5 Can the double-fold eyelids obtained by plastic surgery be passed on to the offspring? (single choice)

Used only to understand the true cognition of the relevant areas, please do not search the Internet.

- ☐ Yes
- ☐ No
- ☐ Not known

1.6 If a new gene is successfully transferred into the liver cell of the mouse, is the gene present in its progeny? (single choice)

Used only to understand the true cognition of the relevant areas, please do not search the Internet.

- ☐ Yes
- ☐ No
- ☐ Not known

2 Personal Attitude

This module is mainly aimed at personal views on gene editing technology, please fill in after thinking!

2.1 The degree of your acceptance of gene editing technology is:

Gene editing technology - A technique capable of allowing the human to "edit" the target gene, and realizing the knock-out and addition of a specific DNA fragment. In short, by means of the use of biological means, the man-made modification gene helps human to achieve a certain purpose, and such a modification **has a genetic effect** in some cases.

Mainly approve - understand and **will not object to other people's exposure** to gene editing products or the use of gene therapy.

Completely accept - understand and **will not object to your and other people's exposure** to gene editing products or the use of gene therapy.

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	Resist	Mainly approve	Completely accept	Neutral./It doesn't matter.
Used in microbes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Used in non-edible plants	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Used in non-edible animals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Used in food	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Applied to human medical treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Applied to human embryo transformation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2.2 The degree of your acceptance of the following statements is:

	Totally agree	Agree	Neutral	Disagree	Totally disagree
Gene editing technology is the gospel of society.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The biggest problem of gene therapy at this stage is safety.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Even if parents think the modification is good for their children, parents can't choose to modify their child's genes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The development of medical treatment in modern society can not be separated from gene editing technology.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gene editing technology will further expand the class gap in society.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The modification of genes is contrary to the laws of nature, and there must be no good results in the end.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can accept gene editing techniques that work on non-human bodies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If the gene therapy is mature and safe, I'm in favor of its application	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If a child has a birth defect, he or she can accept genetic editing with the consent of his or her parents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gene editors will create monsters and should be banned.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2.3 In your opinion, in what order the following aspects should be considered in the process of gene editing and application promotion?

Please click on the options in order of priority to sort them with 1, 2, 3.

NO.____Technical safety

NO.____Economic cost

NO.____Ethic

3 Basic Information

This part of information will be used to confirm the classification criteria.

3.1 Your gender is: (single choice)

- ☐ male
- ☐ female
- ☐ Inconvenient to disclose

3.2 Your age is: (single choice)

- ☐ < 18
- ☐ 18~25
- ☐ 26~40
- ☐ 41~50
- ☐ 51~60
- ☐ > 60

3.3 The area where you live for a long time at this stage is: (single choice)

In this question, "big city" means: the provincial capital, the municipality, the Special Administrative Region and the planned cities (including Dalian, Qingdao, Ningbo, Shenzhen, Xiamen, etc.)

- ☐ rural area
- ☐ small-medium city
- ☐ big city

3.4 Your religious beliefs is: (single choice)

- ☐ None ☐ Buddhism ☐ Christianity ☐ Islam ☐ Taoism
- ☐ others _____

3.5 Your level of education is: (single choice)

"level of education" means the highest level of education or the current level of education while still in school.

- ☐ junior middle school or below
- ☐ senior middle school
- ☐ undergraduate college
- ☐ master
- ☐ doctor
- ☐ others

3.6 Your occupation is: (single choice)

- ☐ student
- ☐ Government / government functionary / civil servant
- ☐ Enterprise manager (including grass-roots, middle and senior manager)
- ☐ Ordinary staff (office staff)
- ☐ Professionals (e.g. doctors / lawyers / stylists / journalists / teachers / researchers, etc.)
- ☐ Ordinary workers (e.g. factory workers / manual workers, etc.)
- ☐ Business service workers (e.g. sales / store staff / waiters, etc.)
- ☐ Self-employed / contractor
- ☐ freelance worker
- ☐ Agriculture, forestry and fishery worker
- ☐ No occupation for the time being
- ☐ Others _____

3.6.1*(If you choose "student" in 3.6) Your major is: (single choice)

- ☐ Related to biology (Biology, Agriculture, Medicine, Pharmacy)
- ☐ Science /engineering (except biology)
- ☐ Humanities and Social Sciences
- ☐ Others _____

3.7 The level of your total annual income is: (single choice)

- ☐ None
- ☐ < ¥50000
- ☐ ¥50000 ~ ¥100000
- ☐ ¥100000 ~ ¥200000
- ☐ ¥200000 ~ ¥500000
- ☐ > ¥500000

3.8 Has your family / friend suffered from a "major disease" once or now? (single choice)

"major disease" refers to the items in the national major disease insurance.

☐ Yes ☐ No ☐ Not known

4 Supplementary and Extended Information (optional)

The following sections are optional.

Thank you for your support and understanding of the questionnaire. We will try our best to promote the positive use of synthetic biology , using our learning and collected data to serve the public!

4.1 (optional) Your supplementary views or suggestions on this questionnaire:

Thank you for your support! This part of the questionnaire is optional. We look forward to receiving your valuable feedback! Good luck!

4.2 (optional) If you are willing to have an in-depth interview, please leave your contact information:

It is recommended that you fill in your mobile phone number. We will not use your information for any other purpose! Thank you!
