

# iGEM 2021 survey

**The vision of the iGEM UNSW 2021 team is to protect and preserve coral reefs: the heart of our oceans.** iGEM is a competition in which students create solutions to real-world problems using synthetic biology.

This survey aims to understand the opinions of the public towards both:

1. Coral bleaching
2. Genetic engineering to solve coral bleaching in the Great Barrier Reef

We appreciate your time in completing this 3 minute survey.

\* Required

## Demographic questions

1. What is your age group? \*

- ☐ 18 and under
- ☐ 19-24
- ☐ 25-34
- ☐ 35-44
- ☐ Over 45

2. What is your gender? \*

- ☐ Female
- ☐ Male
- ☐ Prefer not to say



Other

3. Where are you currently situated? \*

- ☐ New South Wales
- ☐ Queensland
- ☐ Victoria
- ☐ ACT
- ☐ Western Australia
- ☐ South Australia
- ☐ Northern Territory
- ☐ Tasmania
- ☐ International (outside of Australia)

4. What is the highest degree or level of education you have completed? \*

- ☐ Less than a high school degree
- ☐ High school
- ☐ Bachelor's degree
- ☐ Master's degree or above
- ☐ TAFE or college

☐ 

Other

5. Are you currently studying at university? \*

- ☐ Yes
- ☐ No

6. Which faculty/ies do you study in? \*

- ☐ Arts and Social Sciences
- ☐ Business
- ☐ Science
- ☐ Engineering
- ☐ Medicine
- ☐ Law
- ☐ Built Environment/Architecture/Design

7. What is your current employment status? \*

- ☐ Full-time (38+ hours per week)
- ☐ Part-time (less than 38 hours per week)
- ☐ Casual
- ☐ Unemployed
- ☐ Self-employed

8. Do you identify as Aboriginal and/or Torres Strait Islander? \*

- ☐ Yes
- ☐ No

9. Please provide your email if you would like to go into the running to win 2 x \$50 e-vouchers for completing our survey:

# Problem: Coral Bleaching

## You may be asking: What is Coral Bleaching?

Corals are colourful because of a marine algae called zooxanthellae which lives within the coral and provides an easy food supply. This gives the corals energy and allows them to grow.

However, climate change has led to a rise in ocean temperatures, resulting in the coral getting stressed and expelling the algae. The coral dies and leaves behind a white skeleton, which has devastating impacts on the reef ecosystem - harming food sources and habitats.

10. What is your level of knowledge about coral bleaching? \*

- ☐ Never heard
- ☐ Know but cannot describe in detail
- ☐ Understand and can describe it
- ☐ Understand, can discuss and contribute on issue
- ☐ Expert on the issue

11. Where have you heard information about coral bleaching from? (multiple answers allowed)

\*

- ☐ Social media
- ☐ Websites
- ☐ Magazines / Newspapers
- ☐ Scientific articles
- ☐ TV
- ☐ Radio
- ☐ School / University

☐ 

Other

12. Do you agree coral bleaching is a significant threat to our environment? \*

- ☐ Strongly agree
- ☐ Agree
- ☐ Neither agree nor disagree
- ☐ Disagree
- ☐ Strongly disagree

# Solution: Genetically engineering heat tolerant coral

## How does the public feel about genetic engineering?

Our project is using genetic engineering techniques to increase the heat tolerance of coral to rising ocean temperatures and to prevent coral death.

Genetic engineering involves introducing new functions by deleting, switching or inserting a DNA sequence which permanently alters an organism's genetics and its offspring. It is difficult to predict how this engineering may affect ecosystems.

### 13. To what extent do you agree with the following statements: \*

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I care about conserving the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I support using genetic engineering to restore coral reefs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There are more benefits than risks of using genetic engineering	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Genetic engineering is harmful for the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am concerned about the potential long term risks of genetic engineering	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scientists can be trusted to develop this technology responsibly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The government can be trusted to approve and regulate the technology to ensure it is safe	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14. Select 3 emotions below that best describe how you feel about using genetic engineering to prevent coral bleaching \*

☐ Curious

☐ Hopeful

☐ Anger

☐ Confused

☐ Excited

☐ Fearful

☐ Interested

☐ Happy

☐ Nervous

☐

Other

15. If you foresee any safety risks or concerns with our solution, provide your feedback

16. Would you like to learn more about our solution? \*

☐ Yes

☐ No

17. What would you like to learn more about in our project?

E.g. the scientific techniques in the lab, environmental impacts, potential risks, ethics...

18. How would you like to be engaged in the discussion about our project in the future?

- ☐ Reading a Wiki page
  - ☐ Report
  - ☐ Social media posts and feedback
  - ☐ Online seminar
  - ☐ Infographic summarising our findings
  - ☐ Written feedback
  - ☐
- Other

19. Please provide any additional feedback / comments to guide our project.



Microsoft Forms