當藝術遇上 CRISPR 基因改造:透過 *CRISPR 基因藝術* 探討基因改造對人性、永續、及未來基因科技發展的影響

Investigating Humanity, Sustainability, and the Future Impact on Gene-editing Technology through "CRISPR-enabled Art"

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Keywords: CRISPR, Gene-editing Technology, Sustainability, Humanity, Technology-enabled Art.

Over thousands of years, farmers converted the wild rice plant into a staple crop. Today, researchers are using CRISPR to change genes to optimize grain yield. However, rice is more than food. In ancient China, it was used to make paper.

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Sheng-Ying Pao (TW) **CRISPR** and the Art of Paper

This research focuses on developing interdisciplinary research and creating new artworks made of CRISPR-altered organisms. To date, the discussion around CRISPR (clustered regularly interspaced short palindromic repeats) has heavily focused on its exceptional potential to cure challenging diseases. However, the scientists worldwide who develop this technology have been encountering a much more nuanced set of investigative and social concerns. The collaborative research proposed here aims to focus on the investigative and social concerns through the creativity, aesthetics, and cross-disciplinary possibility of art integrated with science. This project has been conducted in the form of a series of artwork, which has been invited to exhibit at the 40th anniversary of Ars Electronica, one of the most renown interdisciplinary exhibition and festival for art, technology and society [1].



This project is under the collaboration with UC Berkeley. The results have been recently published in the form of audio [2,3] and speeches as follows:



https://www.listennotes.com/es/podcasts/health-and/crispaper-understanding-T26_jWLDqQS/



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Art Forum at ART TAIPEI & Taiwan Art Gallery Association and keynote speech at the Annual American Innovation Center (AIC) Innovation Forum, hosted and invited by AIT

References

- [1] Strange Temporalities, Ars Electroinica, Sep 2018,
 - https://ars.electronica.art/outofthebox/de/strange-temporalities/
- [2] CRISPaper: Understanding CRISPR Gene-Editing through Art, Sep 2021, Genetics Up Close, UCTV https://podcast.app/genetics-audio-p377181/
- [3] CRISPaper: Understanding CRISPR Gene-Editing through Art, Sep 2021, Listen Notes https://www.listennotes.com/es/podcasts/health-and/crispaper-understanding-T26_jWLDqQS/