

EAGLETON SCIENCE AND POLITICS WORKSHOP

CRISPR Governance: Regulating the Power of Gene Editing

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Is it ethical and politically acceptable to start a self-propagating change in the natural ecosystem without having a sure way to stop it or reverse it?

Who gets to decide whether to launch a gene drive given the possibility that impacts could cross political or geographic boundaries, and recognizing that each case may be different?

Should gene drives aim merely to reduce pest species' numbers or their damaging behavior, or in some cases might it be appropriate to engineer a species to extinction?

Some considerations on gene drives oversight

In the United States, environmental release of gene-altered organisms falls under the shared regulatory jurisdiction the Environmental Protection Agency, the U.S. Department of Agriculture, and the Food and Drug Administration.

Internationally, in December 2016, member nations of the United Nations Convention on Biological Diversity rejected calls by 170 environmental groups to declare a moratorium on the development and release of gene-drive technology and instead released a statement urging caution if gene-drive experiments were to be attempted in the field.

Nearly 200 nations—including all United Nations member states except for the United States—are parties to that Convention.