

HOUSE BILL REPORT

HB 2273

As Reported by House Committee On:
Innovation, Technology & Economic Development

Title: An act relating to creating a study committee on human genome editing.

Brief Description: Creating a study committee on human genome editing.

Sponsors: Representatives Slatter and Irwin.

Brief History:

Committee Activity:

Innovation, Technology & Economic Development: 1/14/20, 1/24/20 [DPS].

Brief Summary of Substitute Bill

- Directs the Washington Academy of Sciences to establish a study committee to examine scientific, ethical, and societal issues associated with human genome editing.

HOUSE COMMITTEE ON INNOVATION, TECHNOLOGY & ECONOMIC DEVELOPMENT

Majority Report: The substitute bill be substituted therefor and the substitute bill do pass. Signed by 9 members: Representatives Hudgins, Chair; Kloba, Vice Chair; Smith, Ranking Minority Member; Boehnke, Assistant Ranking Minority Member; Entenman, Slatter, Tarleton, Van Werven and Wylie.

Staff: Yelena Baker (786-7301).

Background:

Human Genome Editing.

Human genome editing is a group of technologies that give the scientists the ability to add, remove, or alter genetic material at particular locations in human genome. A recent approach to genome editing is known as CRISPR, short for "Clustered Regularly Interspaced Short Palindromic Repeats."

This analysis was prepared by non-partisan legislative staff for the use of legislative members in their deliberations. This analysis is not a part of the legislation nor does it constitute a statement of legislative intent.

Human genome editing can be used in biomedical research to help advance understanding of human diseases, in clinical applications to treat or prevent disease or disability, or potentially for enhancement or modification of human traits beyond those considered typical of adequate health.

Washington Academy of Sciences.

Created by the Legislature in 2005, the Washington Academy of Sciences (WSAS) is a nonprofit organization whose principal mission is to investigate, examine, and report on any subject of science referred to the WSAS by the Governor or the Legislature.

Summary of Substitute Bill:

The Washington Academy of Sciences is directed to establish a study committee to examine scientific, ethical, and societal issues associated with human genome editing and to inform legislative approaches to safe and ethically responsible uses of human genome editing.

The membership of the study committee must include:

- researchers and clinicians from relevant scientific disciplines;
- experts in the area of bioethics, ethics and public health, or ethics and the emerging biomedical technologies;
- scientific and technical experts in the biotechnology industry; and
- four legislative members to serve in a nonvoting observational capacity.

The study committee must solicit public participation and hold at least one meeting to provide a public forum for diverse perspectives about human genome editing.

By October 1, 2021, the study committee must submit to the Legislature a report that summarizes the activities and findings of the study committee and recommends guiding principles for regulating human genome editing.

Substitute Bill Compared to Original Bill:

The substitute bill:

- removes the provision requiring the study committee to consider additional regulatory approaches to human genome editing; and
- requires the study committee membership to include scientific and technical experts in the biotechnology industry.

Appropriation: None.

Fiscal Note: Preliminary fiscal note available.

Effective Date of Substitute Bill: The bill takes effect 90 days after adjournment of the session in which the bill is passed.

Staff Summary of Public Testimony:

(In support) Genome editing has significant potential to advance human health, but there are important ethical questions to consider, including the potential for misuse. A well-thought out regulatory framework for this young technology is needed to protect and educate the public without unduly restricting essential innovation and diverse applications. This bill creates a study committee on human genome editing to frame the key issues and educate regulators on the potential benefits, risks, and ethical considerations of this technology. Washington is known to be at the forefront of innovation. Human genome editing technology needs to be introduced with forethought, and this is a chance to be proactive about its introduction.

(Opposed) None.

(Other) The Washington State Academy of Sciences (WSAS) does not advocate or take positions on legislation. The WSAS responds to requests from the Legislature to provide independent scientific and technical advice to inform policy development and decision-making. Gene-editing technologies have the potential to greatly benefit human health and society, but there are also risks to be weighed when establishing regulations. The WSAS is prepared to carry out a study on human genome editing and provide specific, state-level reviews and recommendations for Washington policy.

Scientific advances in gene editing have the promise of curing previously incurable diseases, but gene therapy is very different from traditional medicine and, as a result, it is not well understood. A robust dialogue around gene editing therapies is needed to ensure ethical research and development of these treatments. As currently drafted, the bill presumes a need for additional regulations, which would get in the way of developing some of these therapies. A 2017 report from the National Academy of Sciences looked at the issue of human genome editing and did not find the need for additional regulation at this time. The whole area of gene editing is subject to an extensive body of research and regulation; the bill should not presuppose that additional state-level action is needed.

Persons Testifying: (In support) Representative Slatter, prime sponsor; and Representative Irwin.

(Other) Donna Geradi Riordan, Washington State Academy of Sciences; Mark Cummings, Life Science Washington; and Bill Clarke, Biotechnology Innovation Organization.

Persons Signed In To Testify But Not Testifying: None.