AMENDMENT IN THE NATURE OF A SUBSTITUTE
TO H.R. 4733
OFFERED BY M__ __________

Strike all after the enacting clause and insert the following:

SECTION 1. SHORT TITLE.

This Act may be cited as the “Low-Dose Radiation Research Act of 2019”.

SEC. 2. LOW-DOSE RADIATION RESEARCH PROGRAM.

Section 306(c) of the Department of Energy Research and Innovation Act (42 U.S.C. 18644(c)) is amended to read as follows:

“(c) LOW-DOSE RADIATION RESEARCH PROGRAM.—

“(1) IN GENERAL.—The Secretary shall carry out a basic research program on low-dose and low dose-rate radiation to—

“(A) enhance the scientific understanding of, and reduce uncertainties associated with, the effects of exposure to low-dose and low dose-rate radiation; and

“(B) inform improved risk-assessment and risk-management methods with respect to such radiation.
“(2) PROGRAM COMPONENTS.—In carrying out the program required under paragraph (1), the Secretary shall—

“(A) formulate scientific goals for low-dose and low dose-rate radiation basic research in the United States;

“(B) identify ongoing scientific challenges for understanding the long-term effects of ionizing radiation on biological systems;

“(C) develop a long-term strategic and prioritized basic research agenda to address such scientific challenges in coordination with other research efforts;

“(D) identify and, to the extent possible, quantify, potential monetary and health-related benefits to Federal agencies, the general public, industry, research communities, and other users of information produced by such research program;

“(E) leverage the collective body of knowledge from existing low-dose and low dose-rate radiation research; and

“(F) engage with other Federal agencies, research communities, and potential users of information produced under this section, includ-
ing institutions concerning radiation research, medical physics, radiology, health physics, and emergency response.

“(3) COORDINATION.—In carrying out the program, the Secretary, in coordination with the Physical Science Subcommittee of the National Science and Technology Council, shall—

“(A) support the directives under section 106 of the American Innovation and Competitiveness Act (42 U.S.C. 6601 note);

“(B) ensure that the Office of Science of the Department of Energy consults and coordinates with the National Aeronautics and Space Administration, the National Institutes of Health, the Environmental Protection Agency, the Department of Defense, the Nuclear Regulatory Commission, and the Department of Homeland Security;

“(C) advise and assist the National Science and Technology Council on policies and initiatives in radiation biology, including enhancing scientific knowledge of the effects of low-dose and low dose-rate radiation on biological systems to improve radiation risk-assessment and risk-management methods; and
“(D) identify opportunities to stimulate international cooperation relating to low-dose and low dose-rate radiation and leverage research and knowledge from sources outside of the United States.

“(4) RESEARCH PLAN.—Not later than 180 days after the date of enactment of the Low-Dose Radiation Research Act of 2019, the Secretary shall transmit to the Committee on Science, Space, and Technology of the House of Representatives and the Committee on Energy and Natural Resources of the Senate a 4-year research plan that identifies and prioritizes basic research needs relating to low-dose and low dose-rate radiation. In developing such plan, the Secretary shall incorporate the components described in paragraph (2).

“(5) DEFINITIONS.—In this subsection:

“(A) LOW-DOSE RADIATION.—The term ‘low-dose radiation’ means a radiation dose of less than 100 millisieverts.

“(B) LOW DOSE-RATE RADIATION.—The term ‘low dose-rate radiation’ means a radiation dose rate of less than 5 millisieverts per hour.

“(6) RULE OF CONSTRUCTION.—Nothing in this subsection shall be construed to subject any re-
search carried out by the Secretary for the program under this subsection to any limitations described in section 977(e) of the Energy Policy Act of 2005 (42 U.S.C. 16317(e)).

“(7) FUNDING.—For purposes of carrying out this subsection, the Secretary is authorized to make available from funds provided to the Biological and Environmental Research Program—

“(A) $20,000,000 for fiscal year 2021;
“(B) $20,000,000 for fiscal year 2022;
“(C) $30,000,000 for fiscal year 2023; and
“(D) $30,000,000 for fiscal year 2024.”.

SEC. 3. SPENDING LIMITATION.

No additional funds are authorized to be appropriated to carry out this Act and the amendments made by this Act, and this Act and such amendments shall be carried out using amounts otherwise available for such purpose.