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The Honorable Lamar Smith,
Chairman, House Committee on Science, Space, and Technology,
2321 Rayburn House Office Building,
Washington, DC 20515

Re: The Low-Dose Radiation Research Act of 2017, H.R. 4675

Dear Chairman Smith:

As the Director of the Columbia University Center for Radiological Research, which was founded back in 1916 by a student of Marie Curie, I am writing to express strong support for the Low-Dose Radiation Research Act of 2017, H.R. 4675.

The Fukushima nuclear accident in 2011 revealed significant gaps in our understanding of the health effects of low doses of ionizing radiation. These gaps would seriously impact our ability to make optimal science-driven decisions in response to a major nuclear event in the United States, accidental or otherwise. It follows that the United States has a critical need to enhance research on low-dose health effects as well as to ensure that the nation maintains a sufficient pool of relevant expertise.

Our limited understanding of low-dose health risks seriously impairs the nation's decision- making capabilities, both in the short and the long term, after a large-scale radiological event. For example, differing strategies for evacuation after Fukushima ultimately relate to our limited quantitative knowledge of low-dose radiation risks. But it is also true of our understanding of the long-term health consequences of a radiological event involving large populations: while the regulatory agencies assume that there is no radiation dose below which the health risk is zero, we really do not have sufficient data or sufficient understanding to know whether this is really the case, or whether, as some assert, low radiation doses may even be beneficial. Setting permissible standards too high will result in an unnecessary major economic burden to the nation, whereas setting standards too low would present an unacceptable cancer burden for the population.

While a large-scale radiological event is perhaps the most obvious issue of concern here, other issues such as the rapid increase in medically-based radiation exposures, cleanup of radioactively contaminated sites, as well as the need for science-based policies regarding the possible expansion of nuclear power, require a level of research and scientific expertise that the US is rapidly losing – in universities, in national labs, and in industry. Apart from the human health issues, all these topics have, of course, major economic consequences for our nation.

For many years the US has been the world leader in the field of low-dose radiation research, but more recently the US has lost significant momentum, noticeably so in comparison with Europe and Asia. The single US program principally dedicated to supporting US-based extramural low-dose radiation research was the Department of Energy's Low Dose Radiation Research Program, and the loss of this program has led to a major diminution of research on the key issues outlined above, as well as a critical decrease in the pool of US subject-matter experts who will be available to assist in high-level policy and decision making.

The Low-Dose Radiation Research Act of 2017, H.R. 4675, provides for a milestone-driven research program which will put the US in a position to appropriately respond to a future large scale radiological event, be it accidental or otherwise, and I commend it to you and your Committee.

Please feel free to contact me if you would like more information on this topic.

Yours Sincerely,

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