

July 10, 2020

U.S. House of Representatives Committee on Science, Space, and Technology, Energy Subcommittee **RE: ANS Comments on Low-dose Radiation Research Legislation**

To Whom it May Concern:

Understanding of the health effects of ionizing radiation at low doses and low dose rates is critically important for the success of a broad range of social endeavors, from medical advancements to space exploration, energy production, and advanced nuclear pioneering. Yet federally sponsored research in this area effectively ended more than a decade ago, leaving large gaps in our understanding of radiation hazards and human biological protection mechanisms.

Through recent Congressional direction, the Department of Energy's (DOE) Office of Science Biological and Environmental Research is to re-establish a research program devoted to the human health effects of low-dose radiation at funding level of no less than \$5 million for FY 2020. To maintain progress in FY 2021, ANS recommends \$20 million for the program.

Expanded funding will allow for new technologies and approaches for examining biological mechanisms by which ionizing radiation produces cancer and non-cancer health outcomes, and the integration of mechanistic biological insights with epidemiological data. This funding is also needed to support interdisciplinary training and integrated cross-professional research programs devoted to understanding and quantifying radiation health effects at low doses. Specifically, the DOE low-dose radiation program needs to include a radiation risk communication research program.

A sustained low dose program will benefit the regulated community through harmonization of radiation standards and alignment of regulatory approaches both domestic and international, as well as risk informed decision processes based on science.

Sincerely,

Craig H. Piercy, Executive Director/CEO American Nuclear Society