

Department of Energy

Office of Science Washington, DC 20585

May 19, 2016

Office of the Director

Professor Daniel A. Reed, ASCAC Chair
Office of the Vice President for Research and Economic Development
University of Iowa
2660 UCC
Iowa City, IA 52242

Dear Professor Reed:

Thank you for your continued service to the Office of Science (SC) and the scientific communities that it serves as the Chair of the Advanced Scientific Computing Advisory Committee (ASCAC). Thank you for the committee's latest report assessing the quality and effectiveness of the Office of Science and Technical Information's (OSTI) recent and current products and services. This report will help both SC and OSTI transition its products and services to methods appropriate to the new era of information gathering and sharing.

I am writing to ask that ASCAC address a particularly important cross-cutting issue in the Department of Energy (DOE), namely an independent review of Laboratory Directed Research and Development (LDRD) work of the DOE Laboratories (Labs).

The objectives of the LDRD program are to: (1) maintain the scientific and technical vitality of the Labs; (2) enhance the Labs' ability to address current and future DOE and National Nuclear Security Administration (NNSA) missions; (3) foster creativity and stimulate exploration of forefront science and technology; (4) serve as a proving ground for new concepts in R&D; and (5) support high-risk, potentially high-value R&D. DOE policy allows the Secretary of Energy to authorize up to 6% of a DOE Lab's total operating and capital equipment budget, including non-DOE funded work, for LDRD work.

The June 17, 2015, the interim report of the Secretary of Energy Advisory Board (SEAB) Task Force on DOE National Laboratories recommended an independent peer review of the LDRD program impacts and process of four laboratories, evaluating up to ten years of funded projects. I am asking ASCAC to review the LDRD program processes and the impact of LDRD at four of the DOE Labs, to include at least one SC Lab, one NNSA Lab, and one of the applied energy Labs. Please choose Labs that have had LDRD programs for at least ten years.

In your review, please consider each Lab's processes to:

- determine the funding levels for the LDRD programs;
- determine Lab-specific goals and allocate resources among the goals;
- select specific projects; and
- evaluate the success and impact of the LDRD program against Lab-specific goals and the overall objectives of the LDRD program over a ten-year period.



In assembling a subcommittee, please consider members of or recommendations from the other Office of Science Federal advisory committees, the Defense Programs Advisory Committee, the Environmental Management Advisory Board, and the Nuclear Energy Advisory Committee.

The output of this review should be a brief report with an Executive Summary suitable for a general audience. The report should be available in the spring of 2017. We look forward to the results of your review and any recommendations that result from this study.

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C. A. Murray

Director, Office of Science