

U.S. Department of Energy and the National Science Foundation



FEB 1 2 2015

Professor Andrew Lankford Chair HEPAP University of California at Irvine Physics & Astronomy Department 4129H Frederick Reines Hall Irving, CA 92697

Dear Professor Lankford:

In addition to advice on broad initiatives and strategic opportunities for particle physics, the Department of Energy (DOE) Office of Science also requires periodic input from the High Energy Physics Advisory Panel (HEPAP) on specific investments of critical importance to the Department. One of these investments is the U.S. Particle Accelerator School (USPAS), a long-standing partnership between several DOE laboratories and the Office of Science. This program plays a key role in training the next generation of researchers and practitioners who are skilled in harnessing the potential of particle accelerator technology to advance science and engineering across a broad spectrum of disciplines and applications. This program also plays an important role in attracting very well qualified researchers to the national laboratories to advance DOE missions.

With this letter, we are charging HEPAP to assemble a sub-committee to examine, for DOE only, the effectiveness and cumulative impact of the USPAS over the past two and a half decades, in the context of both workforce development and training; as well as to assess the overall quality and breadth of the program. The sub-committee should take into account the unique qualifications and skills of accelerator scientists and their role in the public and private sectors, and how USPAS training prepares participants for careers in accelerator physics and accelerator R&D. It should evaluate the need for this kind of program, given the available academic resources and worldwide competition for a skilled technical workforce; and address which unique and essential capabilities are provided to the program via the involvement of the DOE laboratories. It should also address the efficacy of the current USPAS management model, the participation of women and under-represented minorities in this area, and the projected need for trained accelerator scientists to support both DOE science missions and continued U.S. leadership in accelerator science.

This assessment will be a critical milestone in the development of this activity and can inform the future evolution of the program. We would appreciate the committee's preliminary comments by April 2015 and a final report by May 2015. We appreciate HEPAP's willingness to undertake this important effort.



If you have any questions regarding this matter, please contact either Jim Siegrist, the Associate Director of the Office of Science for HEP or Glen Crawford, the Designated Federal Official for HEPAP.

Sincerely,

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Patricia M. Dehmer Acting Director, Office of Science U.S. Department of Energy

Henning Crim

Dr. F. Fleming Crim Assistant Director Directorate for Mathematical and Physical Sciences National Science Foundation