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Prof. Melvyn Shochet, Chair
DoE/NSF High Energy Physics Advisory Panel
University of Chicago
Department of Physics; HEP-211
5801 South Ellis Avenue
Chicago, Illinois 60637

Dear Mel,

Please find attached a copy of the report of the HEPAP University Grants Program Subpanel. As you are aware, this document reflects the hard work of a set of distinguished high energy physicists, chosen by HEPAP and the agencies, who are deeply concerned about the future of the U.S. high energy physics program. The findings and recommendations we are presenting represent the result of one of the most comprehensive consultative processes ever undertaken in the U.S. high energy physics community.

Our recommendations are not intended to be prescriptive, and provide leeway for HEPAP and the agencies to devise appropriate responses. But we must emphasize that a failure to act would pose serious risks for the national program. Universities are the primary portal for new researchers to enter the field, universities are where most of the data analysis of ongoing experiments occurs, and they are the places where most new ideas for future experiments are born. Given the broad role of the university program, I hope that addressing the problems we have identified will become one of the highest immediate priorities of HEPAP and the agencies.

The budget implications of our report are very modest. The report suggest a reprogramming at a level of ~ 1% of the HEP budget, a sum that should be within the reach of a national program that is closing its major domestic colliders and attempting to redefine it's future. The state of the university program is not a project to be reviewed like a major experiment. Instead, it is a matter fundamental to the survival of the entire US program. It cuts across almost all aspects of the national high energy physics program and, we hope, will command the direct attention of HEPAP and not be further delegated. There is urgency for action and any delays with further studies and assessments could simply allow the problems we have identified to grow and become less manageable.

Our report calls for a set of straightforward, common-sense actions. It says we need an ongoing process to permit university concerns to be collected and presented within the existing administrative superstructure, that there should be a modest and justifiable budget adjustment primarily to cease the constant cuts in research personnel, it calls for the support of the absolutely essential efforts to attract and nurture new talent, it notes that additional support is needed to enable existing researchers to carry out their work at the LHC and other off-shore sites, it calls for a structure to help provide increased opportunities for smaller experiments within our budget profile, and requests the necessary resources to prepare for the next generation of accelerators.

Members of the subpanel realize that, with the submittal of this report, we will have completed our formal task. But we all stand by to be of assistance as our recommendations are considered and, hopefully, implemented. We committed to work on this extended project because we felt that the mission was vitally important. We still hold this view and want to do whatever we can to help. We believe the matter is sufficiently important that the results of our findings should be widely shared both within related research communities and in the Executive and Congressional branches of government. Your advice on how to achieve this goal would be appreciated, and we are willing to help with the dissemination process in any way we can (I note that you have already referred the chair of the nuclear science advisory committee to me, and I will resume my discussions with him soon, now that the report is submitted).

As we noted early in our report, we stand at a crossroads, and it behooves us all to take note of this and for the agencies to act. For HEPAP, this is a time for it to come to grips with the changing environment and to lay out, and to vigorously defend, a plan for the future. The current path will not get the national program to where we, in the overall HEP community, have collectively stated we want it to be.

Many of our recommendations could easily be implemented. For example, the alarming structural deficiency highlighted at the last HEPAP meeting, where there was widespread confusion about the pathway for universities to express their concerns to HEPAP, should be promptly addressed.

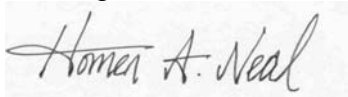
Given the intense participation of PI's and other members of the community in our surveys, town hall meetings and messages, we would like to have a mechanism for the broad distribution of our report to the community and other interested parties. That is, we would like to go beyond the usual web posting. If there are resource restrictions that would prevent this, please let me know and we will mount an effort to secure private funds to offset any costs.

As a courtesy to the members of the subpanel who have invested their time over the past year in this project, I would like to give them an update on the status of our report in the Fall. I would like to contact you following the next meeting of HEPAP to get some sense of the status of our recommendations so that I might provide an update to the subpanel members at that time.

Finally, I would like to formally acknowledge the assistance provided to the subpanel by Marsha Marsden. We also wish to take note of the assistance provided by the cognizant program officers, Randal Ruchti and P.K. Williams. Their help was invaluable as we gathered and analyzed the myriad pieces of information required in our study.

Please let us know if there are any questions.

Best regards,

A handwritten signature in cursive script that reads "Homer A. Neal". The signature is written in dark ink on a light-colored background.

Homer A. Neal