Mr. Paul Shullenberger
John D. and Catherine T. MacArthur Foundation
Suite 700
140 South Dearborn Street
Chicago, IL 60603

Dear Mr. Shullenberger:

First, please accept my apologies for the delay in answering your letter. I was away for almost the entire month of October and am only now catching up with things.

There are two aspects to Donald Fredrickson's career. One concerns his accomplishments as a research scientist and physician. Recalling his years of active research from the perspective of another NIH investigator, they were a time of exciting growth in biomedical research in general and of the NIH in particular. A large number of very bright, relatively young people established laboratories at the NIH. Intellectually, the atmosphere was extraordinary. Yet Don Fredrickson stood out even within that crowd. His fundamental discoveries on lipoproteins were imaginative and important and have stood up well. The work presented a model for one of the aims of the NIH, the interweaving of basic biology and clinical medicine.

The second aspect of Fredrickson's career is his leadership within the National Heart Institute, the Institute of Medicine and the NIH itself. To some extent his extraordinary success, particularly as the Director, NIH, was dependent on the earlier years in research. He brought (and brings) to public policy matters the experience and sense of science, critical elements. But not every scientist can couple those elements successfully to leadership, particularly within a fundamentally political context. Fredrickson did just that. The political context was two-fold: the politics of the scientific community and the larger political arena of the federal government. Here again, I point out my own perspective since it is relevant to your evaluations. During the time that Fredrickson was Director, NIH, I was a scientist in the NIH staff. The confidence of the staff in his leadership was strong and deep. Similarly, my colleagues in universities had a deep trust in his wisdom. Through those difficult years, biomedical research in the United States continued to flourish.

Fredrickson's years as Director encompassed the period of scientific and public concern about recombinant DNA experiments. As a molecular biologist. I served on the small in-house advisory committee to Fredrickson on recombinant DNA matters. We met frequently, often several times a week for some hours. The number of issues were legion, including environmental impact statements. congressional concerns, executive branch concerns, the distinct concerns of the scientific community, the substance of a rapidly moving science, substantive questions about the safety of the research and how to realize the promise of the techniques in a responsible manner. The outcome is history. In many people's judgments, it presents a model for governmental actions on the impacts of new technologies. The science has proceeded gloriously. And most reasonable people agree that the actions taken were cautious and responsible. As one who had the privilege to be an "insider", I can state that the extraordinary resolution of these problems depended absolutely on Fredrickson's wisdom and acumen. but most importantly on his abiding faith in science and in the fact that reasonable solutions were possible so long as people were thoughtful and honest.

As far as I'm concerned, Fredrickson is a truly great individual and surely worthy of your support. As for comparing him with anyone, I don't know anyone with an even similar set of talents and accomplishments. As far as what he is "likely to achieve" with a MacArthur Award, I can not say. I now see him at meetings of the Council of the National Academy of Sciences and know of some current interests. The most important and far-reaching of these is the relation between universities and the federal government. But whatever activities he undertakes under the Award, you can be certain that it will be scholarly, interesting and important and will make a difference.

Sincerely yours,

Maxine Singer, Ph.D. Chief, Laboratory of Biochemistry National Cancer Institute