THE ROCKEFELLER UNIVERSITY

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President's Committee on the National Medal of Science National Science Foundation 1800 G Street Washington DC 20550

Dear President's Committee:

I am honored to have the opportunity to add my support to the nomination of Professor Robert K. Merton for the National Medal of Science. Other letters will have documented Merton's magisterial standing in American social science. I will say a few words about the influence his thought and writings have had on my practice of natural science, and on my reflections about the meaning of a career in experimental investigation.

While I have read and sometimes closely studied most of Merton's writings on the sociology of science, I am also privileged to have been able to discuss many of the same issues at close hand, in the course of an acquaintanceship of some 20 years. In this field, yes, it is his philosophical and speculative writings that have counted most heavily.

The first thing I have learned is that we all practice sociology of science, whether we are licensed to or are consciously aware of it. Being so embedded in social process, almost everything we do in that sphere we take for granted. Hence I am constantly discovering principles that defy articulation precisely because they are so obvious -- and then I usually find that Bob Merton had covered that ground long before. An excellent example is his paper on "The ambivalence of scientists", which is probably the most insightful of any writing on the peculiar personality and character of the scientist (in social context). Another is his paper on "Singletons and multiples in science", and its companion on "Multiple discoveries as a strategic research site" -- here he has both illuminated the phenomenon, but also shown how the scientist is motivated by the scientific ethos to minimize wasteful duplication, and in turn how this is a window into those social structures.

For his discussion of the norms of science, Merton is sometimes criticized (especially by the "social-constructionist" school) of being unrealistically idealistic about scientists' behavior. Merton understands very well the difference between norm and practice; but I believe he has tapped the very core of the moral foundation of science as a vocation.

During my 12 years as president of this university, I often borrowed his thoughts to help in the day to day practice of university administration: I called my job the chair of applied sociology and philosophy of science! His delineation of the hierarchy of gatekeepers, and the paradoxical benefits and distortions that can arise from the accumulation of advantage (the "Matthew effect") were constant cautions in my efforts to find, encourage and reward the highest talents, in ways consonant with maintaining the integrity of the overarching institution.

Altogether, Merton has been extraordinarily helpful in teasing out the cabling that does bind the scientific community, and in inspiring the recognition of the special commitments whereby science has earned a special place in contributing to the weal of the republic.

Yours sincerety,

Joshua Lederberg