[Dec 1974]

It is an extraordinary experience for me to write a 'report' about Leon Heppel. As the most influential teacher in my own career, I'm sure he has written about me often. But I have not previously been called upon to write about him. Some of my thoughts about Leon are put down here. They convince me that he should have the support of the Guggenheim Foundation. I am hopeful that the Committee of Selection will agree.

I suppose that the Committee is especially interested in why it should support an individual some years older than the specified age. For at least twenty years, Leon himself has jokingly complained about the effects of age and ageing on his ability to work. All the while, he has grown progressively younger, and worked progressively harder. The field of nucleic acid biochemistry had his attention for 15 years. During that time, he made fundamental contributions to the understanding of enzymes that function with nucleic acids as substrates and developed the methodologies which are still being used and amplified. It is important to realize that in the early 1950s, when he began working on nucleic acids, almost nothing was known about their structure, enzymology, or metabolism. Leon's lab drew a series of visitors anxious to learn techniques and ideas. The group included Marshall Nirenberg and H. Gobind Khorana.

In spite of the many remaining interesting problems, and in spite of his position as a senior, respected individual in the field, Leon moved to another 'undeveloped' area in the mid 1960s. This was the field of bacterial cell membranes and transport of metabolites across the membranes. Again, he made fundamental contributions both to methodology and to mechanisms. Again, other investigators have come to him to learn.

Now it seems that Leon is once more interested in a change in direction. Characteristically, his brief summary in the reports you sent to me goes, succinctly, to the heart of some very messy and confusing data. Also characteristically, he has set forth a straightforward and perceptive outline of how order might be made of the many observations. The heart of the outline is in the proposed experiments, not in a discussion.

Age, then, is an irrelevancy when considering Leon. His constant involvement in new ideas, his unfaltering belief that the strength of science is in experimentation, his unflagging ability to spend long hours at the bench -- all these speak to his youth. It is only those of us who try to take him as a model and keep up with him that are exhausted. The Guggenheim Foundation's money could not be better spent. Leon will surely accomplish important things, and the people in Stoker's laboratory will have an unequalled opportunity to find out what a scientist should be like.