## STANFORD UNIVERSITY SCHOOL OF MEDICINE STANFORD, CALIFORNIA 94305

DEPARTMENT OF BIOCHEMISTRY

ARTHUR KORNBERG

Emma Pfeiffer Merner

Professor of Biochemistry

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Dr. John F. Herndon Medical-Scientific Director National Cystic Fibrosis Research Foundation 3379 Peachtree Road, N.E. Atlanta, Georgia 30326

Dear John,

I am responding to your request for my reactions to the Israeli Cystic Fibrosis Genetic World Conference in Rehovot last month. I am eager to do so and should have taken the initiative earlier.

To begin with I want to express my deep gratitude to you and to Mrs. Zaslow for all the work you did in raising the money, making the arrangements and generating enthusiasm for this meeting. I believe your efforts will be rewarded with an increased awareness on the part of the basic scientists of the specific problems of cystic fibrosis and of current questions in biochemistry and genetics on the part of the clinicians. How can we evaluate quantitatively whether the amount of "increased awareness" has paid for all the money and hours invested in the Conference? Of course we can't, but I would judge the investment will yield long-term dividends that we don't foresee or anticipate.

I came away from the Conference with the impression that the clinicians are doing a superb job in treating the patients. They are doing it with skill and compassion. Their investigative work has sharpened the diagnosis, reduced the confusion of secondary or unrelated symptoms and emphasized the need for learning the primary molecular defects. This is where the buck must stop!

I believe the Conference taught us the urgency for resolving the biochemical components of electrolyte passage through cell membranes and the sweat glands in particular. We must isolate and compare the membrane-bound Na<sup>+</sup>-dependent ATPase, for example, from different tissues of normal and diseased persons. If the defect is not in this enzyme it may prove to be in a related one. The very search, even if unsuccessful, will sharpen our techniques and our focus, for the next assault on the problem.

1/12

Dr. John F. Herndon Page Two August 17, 1972

The Conference generated some debate regarding priorities for research on Cystic Fibrosis. Such debate is inevitable among investigators who have compassion for the suffering of the victims and an awareness of how remote we seem to be from basic answers. Yet, our response must be firm. We must do both kinds of research vigorously. The more elusive the molecular understanding of the disease, the sooner and more vigorously we must work to acquire the information. We dare not gamble on windfalls and being "lucky".

A secondary aspect of the Conference in Rehovot deserves comment. It was inspirational to be at the Weizmann Institute and to see the dedication to science and human welfare. To those of us who know the Weizmann Institute, this feeling is reinforced. For those at the Conference who came to the Institute for the first time (Professor I. R. Lehman, for example), the impact was enormous.

The rather unstructured and unconventional organization of the details of the Conference may have made some people uneasy or unhappy. However, the basic purposes, which I am sure guided your decision to organize it, were amply fulfilled.

With kindest regards,

Sincerely,

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Arthur Kornberg

AK/i

bcc: J. Lederberg