Dear Joshua,

My search for safe and effective medications for the treatment of blinding amoeba keratitis and Pneumocystis pneumonia, responsible for 35% of AIDS related mortality, has led to the synthesis of several compounds, highly active in vitro - and more so than pentamidine, the drug currently used in amoeba and Pneumocystis infections. This - in vitro (in cultures of the parasite) - is the first step. The next step is the evaluation of activity found in vitro, in living animals.

To this effect, animal models of the human infections will be generated on which the curative effect of the experimental compounds is investigated. For this purpose I have organized three cooperative groups:

With leading Ophthalmologists, including a corneal specialist, of Lenox Hill Hospital, Acanthamoeba keratitis is induced in rats and treated topically and systemically with the test compounds. Effects of the treatment are monitored with specific ophthalmological methods, using, for example, the ophthalmological microscope (slit lamp).

With a group led by Dr. Peter Walzer, Chief Infectious Diseases Section, Professor of Medicine, University of Cincinnati College of Medicine, Pneumocystis carinii pneumonia is induced in rats on which the curative effect of the experimental compounds is investigated.

The group led by Dr. M.S. Bartlett, Department of Pathology, Division of Clinical Microbiology, Indiana University Medical Center, is investigating additional new compounds for Pneumocystis in cultures.

At Rockefeller University, I am investigating the protective effect of the test compounds against Pneumocystis infections in rats.

All these investigations are time consuming - 2 to 3 months per compound - and require a large number of animals to be statistically valid - up to 80 rats per compound.

Progress is made - slowly, while funds are running out, foreseeably in March 1988.

Funds from current grant applications, to N.I.H. for $180,000 (direct costs) and to the American Foundation for AIDS Research for $50,000, if
allowed, will not become available before July 1988. This places the pursuit of the project to valid results in jeopardy. The stakes are high: the cure of blinding eye and lethal AIDS related conditions.

The extensive preliminary findings are uniformly favorable and appear to justify all out efforts to see the project through. This is expected to take to the end of 1988 and in to 1989.

In this situation may I ask for your help?

Sincerely yours,