June 5, 1957

Mr. Stanley E. Henwood
International Poliomyelitis Congress
Hotel du Rhone
Geneva, Switzerland

Dear Mr. Henwood:

In going over my file on the forthcoming International Poliomyelitis Conference I noticed that abstracts or summaries will be required for EXGERPTA MEDICA. I would like to suggest that the enclosed abstract of my paper be used.

Sincerely yours,

Albert B. Sabin, M. D.

ABS: meh

Encl.
Properties and Behavior of Orally Administered Attenuated Poliovirus Vaccine by Albert B. Sabin.

Approximately 25 liter lots of monkey kidney culture fluid of specially selected, highly attenuated, strains of each of the 3 types of poliovirus derived from single triply-purified plaques were prepared and tested for residual neurotropism in monkeys and chimpanzees, and then fed in doses of 0.01 ml to 110 individuals. Extensive tests on the neurotropism of the viruses excreted in the stools indicated that a variable increase in neurotropism could often be demonstrated especially by spinal inoculation in monkeys. The excreted viruses were still in the highly attenuated range of the neurotropic spectrum as measured by intracerebral inoculation in monkeys. Since viruses exhibiting this degree of residual neurotropism in monkeys are harmless when very large doses are injected directly in the spinal cord of chimpanzees, there is reason to believe that ingestion of such viruses would prove harmless for man. Intracerebral tests in monkeys with polioviruses disseminated by healthy children during nonepidemic periods indicated that the majority of these strains are more highly neurotropic than the modified viruses excreted after ingestion of the highly attenuated single-plaque strains. A single feeding of attenuated virus was shown to produce resistance to reinfection of the alimentary tract comparable to that found in naturally immune individuals, while no such resistance was found in people immunized by killed-virus vaccine.
The factors influencing decisions regarding further trials of orally administered live-virus vaccine in progressively increasing numbers of individuals are discussed in the light of the above findings.