March 30, 1955

Dr. A. P. Goffe
Central Public Health Laboratory
Colindale Avenue
London, N. W. 9, England

Dear Dr. Goffe:

In reply to your letter of March 22, which just reached me, I should like to say that I shall be very glad to send you a number of attenuated strains of poliomyelitis virus which are under investigation in this laboratory. I have made no studies of the behavior of formaldehyde treated preparations of these attenuated strains but, on November 20, 1954, I sent Dr. Sven Gard some of the Mahoney, Y-SK and Leon strains which were described in my paper in the Journal of Experimental Medicine, June 1954, and in subsequent publications. Dr. Gard wrote me that he intended to test these strains for their antigenic potency using his guinea pig method of assay. I have not heard from him thus far and do not know the results that he might have obtained. I am sending him a copy of this letter with a request for any information that he might have, suggesting also that you might be interested in the results.

I entirely agree with you that the least virulent strains should be employed for the preparation of formalin treated vaccine, provided they yield satisfactory antigenic potency. The strains that I am sending you under separate cover are first of all the three that I had previously sent to Dr. Sven Gard, as well as three additional ones which you may care to study:

<table>
<thead>
<tr>
<th>Type</th>
<th>Strain Description</th>
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</thead>
<tbody>
<tr>
<td>Type 1</td>
<td>Mahoney KP 34 of 3/27/54</td>
<td>$10^{7.2}$TCD$_{50}$ per ml</td>
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<tr>
<td>Type 2</td>
<td>Y-SK KP 52 of 3/27/54</td>
<td>$10^{7.5}$TCD$_{50}$ per ml</td>
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<tr>
<td>Type 3</td>
<td>Leon KP 35 of 3/27/54</td>
<td>$10^{7.2}$TCD$_{50}$ per ml</td>
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<tr>
<td>Type 1</td>
<td>Brunhilde (chimpanzee) KP 4 of 3/20/54</td>
<td>$10^{6.5}$TCD$_{50}$ per ml</td>
</tr>
</tbody>
</table>

This strain has a somewhat complex history but, briefly, it was first cultivated in human tissue by Enders et al. after which it was fed to chimpanzees in this laboratory and the virus which had multiplied in the alimentary tract of one of these chimpanzees was then passaged in cynomolgus kidney tissue cultures. This strain is avirulent for cynomolgus monkeys and chimpanzees when given by the intracerebral, intramuscular and oral routes. It produces paralysis in monkeys after spinal inoculation but has not been tested by this route in chimpanzees.
Type 2, "FAF-117" KP 27 of 3/26/55
This strain was obtained from a rectal swab of a healthy child in Cincinnati and was found to be intracerebrally avirulent for cynomolgus monkeys on first isolation. It was then submitted to 20 rapid passages with large inocula and three terminal dilution purifications. The properties of this virus are being more extensively investigated at the present time.

Type 3, "Glenn" KP 27 of 3/26/55
Same history as above. Both of these strains are described in the December 1954 paper in the PSEBM.

We are now studying a number of additional Type 1 strains which were recovered from healthy children who had no known contact with recognized cases of poliomyelitis. Some of these strains we have already found to be intracerebrally avirulent for cynomolgus monkeys. If you should like to have additional Type 1 strains for your study, I should be glad to send you some. I regret that the reprints of the paper from the Journal of Experimental Medicine have now been exhausted. Under separate cover I am sending you a reprint of the paper on poliomyelitis and other enteric viruses recovered from healthy children.

With all good wishes and kindest regards,

Sincerely yours,

Albert B. Sabin, M.D.

cc: Dr. Sven Gard
Department of Virus Research
Karolinska Institutet
Box 764, Stockholm 1
SWEDEN

P.S.: The viruses are being sent to you without refrigeration and they should, therefore, be passaged as soon as possible after you receive them.