October 14, 1955

Mrs. Eunice Thomas Miner
The New York Academy of Sciences
2 East Sixty-Third Street
New York 21, New York

Dear Mrs. Miner:

Enclosed herewith is an abstract of the communication entitled:
"The Significance of Viruses Recovered from the Intestinal Tract of Healthy
Infants and Children" that is scheduled for presentation at the Conference on
"Epidemic and Endemic Diarrheal Diseases of the Infant."

Sincerely yours,

Albert B. Sabin, M. D.

ABS: sls
Enclosure: Abstract
cc: Dr. James A. Baker

THE SIGNIFICANCE OF VIRUSES RECOVERED FROM THE INTESTINAL TRACT OF HEALTHY INFANTS AND CHILDREN

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The viruses which may be recovered from the intestinal tract of healthy infants and children vary with the method used for detection. The newborn mouse technique yields predominantly members of the Coxsackie group and less frequently also the herpes simplex virus. Monkey kidney tissue cultures yield predominantly poliomyelitis viruses and a new group of many antigenically distinct viruses which are not pathogenic for the ordinary laboratory animals and tentatively have been referred to either as "orphan" or HE ("human enteric") viruses. Certain members of the Coxsackie group and of the new APC (adenoido-pharyngo-conjunctival) group of viruses, as well as herpes simplex and possibly also mumps and influenza viruses may also be detected by monkey kidney cultures. Most of the APC viruses and certain types of Coxsackie virus, are more readily detected by HeLa cells, while many of the unclassified HE or orphan viruses may produce little or no cytopathogenic effect in HeLa cells. The significance of the new HE or "orphan" viruses in the intestinal tract is still largely a subject for future investigations. They are not comparable to the "normal" bacterial flora because they are most frequently
encountered during early infancy and childhood and only rarely in older individuals. Serologic surveys have demonstrated that antibodies for many of these viruses occur with increasing incidence in older individuals but many American adults of the middle income group lack antibody for many of the antigenically distinct viruses. Thirteen distinct antigenic types have already been identified by workers in 3 different laboratories and there are undoubtedly many more. Antigenic relatives of the Type 4 HE virus, originally found in healthy children in Cincinnati, have recently been found to be associated with a family outbreak of a syndrome tentatively designated as "acute steatorrheic enteritis" as well as with an epidemic of rhinitis in a colony of chimpanzees.