females. Radiation and virus pretreatment clearly results in an accelerated mortality in the males when compared at 16 or 19 months of age. Some lung tumors have been observed, all of them being typical pulmonary adenomas and adenocarcinomas, the highest incidence so far being in the gasoline smog groups. The other most frequently observed pathologic lesions are leukemias polyarteritis, glomerulosclerosis, ovarian tumors and hepatomas.

Because of the increased longevity of the SPF mice, the coming fiscal year will be the critical year in the inhalation experiment, as the animals will have been exposed 2-3 years to the atmospheric pollutants. A few of the inhalation chambers will become empty in this period and additional experiments will be programmed for them based on an analysis of the experimental data obtained. The NCI considers this portion of the collaborative program to be a long-term activity, and continued use of the facilities is planned.

Relationships between the NCI and AEC have been most satisfactory from every point of view, and there have been no significant problems in the total

program or the aspect of it dealing with inhalation carcinogenesis.

Question 5. Some years ago the AEC transferred to the Public Health Service its former Minerals Beneficiation Laboratory in Winchester, Mass. The transfer occurred after AEC had shut down the laboratory, dismissed its staff and disposed of movable equipment. Since then PHS has restaffed and reequipped this laboratory to form its Northwestern Radiological Health Laboratory.

To what extent would it have been desirable to transfer the laboratory as a going concern with staff and equipment? If timing did not permit transfer of personnel, did PHS have an opportunity to review the equipment and reserve those items needed for its new function? What discussions were there between AEC and PHS about the fate of this laboratory before it was closed down?

Answer. Radiological health personnel of DHEW were made aware of the intention of the AEC to close down its laboratory in Winchester, Massachusetts, a short time before the laboratory was actually closed. This occurred fortuitously in connection with reporting of activities of the two agencies in an OST meeting. Upon hearing of the potential availability of this laboratory, negotiations were started with GSA for the transfer of the facility to DHEW. A significant part of the AEC staff was alerted to the probability of transferring the facility and many were offered positions with DHEW. Somewhat more than 20 people responded to these offers and were transferred. Most of them were technicians; a few were professionals. DHEW did not have an opportunity to determine what equipment would be useful in its program since AEC had apparently made a determination to distribute all movable equipment to other AEC facilities. However, hoods, benches and other fixed equipment were transferred to DHEW along with the facilities. Since the mission of the Winchester Laboratory under the Atomic Energy Commission's operations was considerably different from the mission of the DHEW operation, we doubt that it would have been particularly desirable to transfer the laboratory with the major part of its personnel and equipment. The professional personnel under AEC operation were involved primarily in a research mission, while the DHEW mission was essentially surveillance. These missions require significantly different staffing, especially the professional personnel.

Question 6. Dr. Weinberg has testified before this Subcommittee about arrangements between NIH and Oak Ridge for ultra-centrifuge development at Oak Ridge. How has this arrangement worked out from your standpoint? In particular, in what ways do the arrangements resemble and differ from those for contracting

for industrial research?

Answer. The National Institute for Allergy and Infectious Diseases and the National Cancer Institute have participated in joint centrifuge development

studies with the Oak Ridge National Laboratory for a number of years.

NIAID. For several years, the NIAID, jointly with the NCI and the National Institute of General Medical Sciences, has participated in a development program with the Oak Ridge National Laboratory (ORNL) of the AEC for the development and testing of a number of experimental centrifuge systems. This development was an outgrowth of the AEC "Plowshare Program" which is designed to apply nuclear technology for peaceful purposes. This Institute's interest in this program came as an extension of its Vaccine Development Program as continuousflow ultracentrifuge systems were needed to speed the development of new virus vaccines and to aid in the improvement of the existing virus vaccines. We continue to have a strong interest in the development of these systems, not only for improvement of virus vaccines but also for the isolation and purification of