

letter from London



Germ lab will open to public

Scientists there can boast
of humanitarian discoveries—
and some that seem less so

Under considerable pressure, the British Government has at last decided to open its Microbiological Research Establishment—the so-called germ warfare factory—to the public. Open-days are to be held there next year.

This is a considerable victory for those who have insisted that the veil of secrecy should be lifted from this type of research. The repeated assurances of the director, Dr. Gordon Smith, that only basic and defensive research is undertaken has carried little conviction, mainly because no one has been allowed to visit the establishment.

The problem that scientists and others now face, as they await the formal opening of the doors, is how they are to judge any information that is presented.

It would be easy for the administration to fob them off with half-truths, to display an impressive but meaningless array of technical detail. Fortunately there is a yardstick to measure the information with. By assiduously combing the scientific literature it is possible to gain a glimpse of what goes on at Porton Down, in Wiltshire.

This glimpse suggests that the establishment's researchers may have much of which to be proud. They can justly claim, for example, to have pioneered a method now widely used in industry for continuously growing bacteria.

This method, used extensively in the synthesis of organic acids and in making antibiotics, allows the physical and chemical conditions to be so standardized that bacterial mixtures of unvarying composition can be produced indefinitely and at a constant rate. This was not so with the previous batch methods which produced a mixed bag of bacteria, some old, some young, and allowed mutants continuously to reproduce.

A major part of the research seems to be an attempt to understand how germs produce disease. Included in this is an attempt to explain why some strains of bacteria (such as those responsible for plague and anthrax) are more virulent than others.

Similarly there is the question of why certain organisms attack only selected hosts. A most significant discovery here has been that of determining the biochemical basis of contagious abortion in cattle. The researchers have shown that certain tissues in the fetus, but not in the adult, contain the substance erythritol, which stimulates the growth of the organism *Brucella abortus*. Knowing the causative agent of the disease, pathologists should be able to develop a way of countering it.

These are just a few of the topics—the more humanitarian ones—that can be found in open publications.

But there are others. There are those, for example, that deal with the way in which the causative organisms of many diseases can be spread by aerosols. Viewed in a humanitarian light this could mean finding out more about the way in which coughs and sneezes spread diseases.

But it could also mean discovering how best to disable an enemy by spraying his troops with a solution from the air. Since much of the research in this field deals with methods of promoting the survival of bacteria by adding protective mixtures to the suspending fluid, it is difficult to show that it is not offense-oriented.

Similarly, scrutiny shows that Prof. Harry Smith at Birmingham University is investigating (under contract to Porton Down) the question of why influenza attacks respiratory tissues but not other tissues. This, too, could have a double meaning.

It is the double meaning that disturbs the British. This has not been helped by snatches of news in the daily press that scientists at the Microbiological Research Establishment are collaborating closely with their American colleagues at Fort Detrick, Md. It is openly admitted that the work at Fort Detrick is conducted for offensive purposes. Then again, there are rumors that the tear gas used in the recent Paris riots and in Vietnam started life at Porton Down.

This may, in fact, be no more than rumor, but it is clear that the basic and defensive research, if such it is, can readily be applied for offensive purposes. Three thousand miles across the Atlantic there are, so to speak, facilities readily available for growing vast quantities of highly infectious and virulent bacteria—and if information can flow one way, supplies can obviously flow the other. These are the unpalatable facts that the British public hopes will be aired next year.

At present the Microbiological Research Establishment comes under the Ministry of Defense—with all the secrecy that this entails. But it is argued that if its purpose is to prevent the spread of epidemics (man-made or otherwise) then many believe it should come under the Ministry of Health. Some Members of Parliament have urged the Prime Minister to make this change. It could be this movement that has caused the Ministry of Defense to promise to open its doors.

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