## BW Panel Planning Meeting Rockefeller University March 16, 1988

## Draft Summary Minutes

The BW panel of the National Academy of Sciences' Committee on International Security and Arms Control met on March 16, 1988, at Rockefeller University. Present were: Dr. Joshua Lederberg, chairman; Robert Chanock, Paul Marks, Matt Meselson, John Steinbruner; Frank Vandiver; Theodore Woodward; and Lynn Rusten.

The purpose of the meeting was to plan for the upcoming US/Soviet bilateral meeting on BW to be hosted by the NAS group May 9-11 in Washington. Everyone introduced themselves. Rusten then reviewed the general schedule for the May meeting. She suggested that the first day, Monday May 9, be devoted to the thorough discussion of the agreed upon agenda items and that there be a dinner/reception that evening at the NAS to which outside individuals and government officials be invited. On Tuesday May 9, the plan is for both delegations to spend the day at Fort Detrick. A cultural event (jazz, or Kennedy Center event) will be planned for Tuesday evening. Wednesday a.m. will allow a few hours of discussion in the morning to follow up on the Fort Detrick visit and discuss future steps for the bilateral delegations. Rusten suggested the formal meeting adjourn before lunch on Wednesday.

At Lederberg's request, Woodward reviewed the state of plans to take both delegations to Fort Detrick. He reviewed steps taken to gain approval for the visit and expressed optimism that the visit would go off as planned. Woodward suggested that the groups would plan to arrive around 10:00 a.m. on May 10. suggested that he, Lederberg, and some invited members of the Army Science Board would make some introductory remarks. General Russell and Colonel Huxsoll would make some remarks providing an overview of the research program at Fort Detrick. This would be followed by a tour of the facility. Following a lunch break, the groups would reconvene for a scientific seminar on infectious diseases. Woodward suggested that we ask the Soviets to come prepared to make two 30-minute presentations on designated topics. The session would conclude with a general discussion of the entire day at Fort Detrick, allowing for informal discussion and questions. The groups would then return to Washington.

Lederberg emphasized that on the third day of the meeting it would be appropriate to stress the importance of reciprocity to lay the groundwork for a visit to an analogous Soviet facility. He also suggested we invite Col. Huxsoll to be a guest observer at our discussions on Monday and Wednesday.

Chanock suggested that Alex Shelokov might be a good person to add to the American delegation. He is a virologist in charge of the Swiftwater Army vaccine facility, and is also a native Russian language speaker. Lederberg agreed to consider this recommendation.

Lederberg then turned to the substantive items to be discussed with the Soviets, starting with the nature of the U.S. BW defense research program. Lederberg observed that, reading the previously distributed DoD Annual Report on Biological Defense Research Program Obligations, he did get the impression that we had entered into a BW arms race. He emphasized that the research was legal under the Biological Weapons Convention, but it nevertheless raised the question of how to cope with the situation. He observed that the acceleration of the US program had in part been provoked by Soviet obtuseness. Lederberg reiterated that the problem was the maintenance of a program that could be broken out of for offensive purposes, and raised for discussion the question of what could be done about that. He said the only idea he had was for greater openness about each side's program, and even that was only a partial solution.

Vandiver reiterated the importance of confidence-building measures regarding each side's program, which he noted was a major theme of the first bilateral CISAC BW meeting. Steinbruner agreed, noting that confidence between individuals and between the Academies was part of the purpose of this activity. He added that the assumption underlying these discussions was that neither side as yet has a massive militarily organized offensive capability.

Woodward said the relationship with the Soviets had to be developed gradually and in stages. First, there would be greater openness of discussion, then perhaps programs of scientific cooperation, and finally, confidence building steps such as stopping the practice of vaccinating US and Soviet military troops against smallpox.

Chanock agreed that the fact that the US and Soviet armies are still vaccinating against smallpox shows a lack of confidence. He said the only existing stocks of smallpox are in the USSR and the CDC in the U.S. However, he said that agreeing to eradicate all smallpox vaccination was not a good idea because it was useful as a vehicle for enhancing the effectiveness of other kinds of vaccines. Lederberg said we could use smallpox as an example of a problem of confidence that has a technical aspect. Chanock noted that smallpox would not be a useful BW agent. Lederberg said that was universally agreed, although there was same question about its effect in aerosol form. Steinbruner suggested that this kind of issue would be useful to discuss with the Soviets, without necessarily coming to a concensus. He said it would be useful to discuss what is the utility and feasibility of stopping the vaccination of armies.

Lederberg said it would be useful to have some prepared discussion papers for the May meeting. He asked Chanock to prepare something on the vaccination issue, and Chanock later agreed to do so.

Lederberg then raised another item for discussion, which was the impact of the changing political climate in the Soviet Union. He noted the Soviet acceptance of more intrusive verification measures in the INF Treaty. Steinbruner predicted that glasnost would affect the BW area too, and that there may indeed be substantial opening of these facilities. Steinbruner said it was his impression that the Soviets had done a lot of research in this area but that they had not widely developed a military capability. He observed that scientific collaboration was an overriding Soviet objective, and he predicted that we would be surprised by Soviet opening up in this area too. Lederberg said he would try to impress upon Sagdeev the importance of greater openness in this area as they have opened up in other areas.

Lederberg said these groups could usefully provide a technical basis for arriving at cooperative measures. Steinbruner agreed we should focus on the most constructive suggestions for first steps.

Chanock said he did not find the DoD report that threatening because it was obvious that the US program was aimed at producing vaccines against public health threats. Vandiver said he thought the report could appear threatening from the Soviets' perspective.

Meselson then spent some time discussing the visit of three Soviet scientists whom he is hosting in April. Two are doctors who were involved in treating and studying the victims of the 1979 anthrax outbreak in Sverdlovsk. Meselson reviewed the history of his acquaintance with these individuals and the questions surrounding the Sverdlovsk incident. This was followed by a lengthy discussion of arrangements for their visit and of anthrax in general.

Chanock noted that one point to make was that the Soviets should routinely publish data about this sort of event, and that medical surveillance in the USSR is not very good. He said they have nothing analogous to the CDC's weekly morbidity and mortality report. He said it would be excellent to send Soviet epidemiologists to the CDC for several months or a year to see how it's done here.

Lederberg returned the discussion to the structure and content of the May meeting. He asked Chanock if he would talk about the issue of smallpox vaccination. Woodward suggested there be a workshop on recombinant vaccines sometime in the future.

Steinbruner said it would be useful to introduce the subject at a detailed level so the Soviets could think about it and respond at a future meeting. Lederberg suggested the topic be enlarged to include the disclosure and exchange of samples for major vaccine programs. Chanock noted that the USAMRIID openly discusses vaccines under development. Lederberg said there were two issues to raise: more open publication and stringent reporting of vaccine development. Steinbruner agreed we should raise the question of whether both sides should undertake more stringent reporting.

Chanock agreed to be the lead discussant on major efforts on defensive vaccines at USAMRIID. Lederberg said the point was to discuss the foundations for mutual disclosure of vaccines to be produced in some quantity. Chanock agreed and said he could supply the Soviets with a FDA list of all vaccines in use in the US and could then ask for the same information from the Soviets. Woodward said Dr. Jordan, whom he would invite to the seminar at Fort Detrick, could have a packet of this information prepared.

Lederberg concluded that a discussion of monitoring vaccination programs could take about a ½ hour on the agenda. He said a subset of that could be the question of why are both sides' militaries vaccinating against smallpox? He said we could raise the possibility of stopping comprehensive smallpox vaccination, while allowing the use of the vaccine as a vehicle for other vaccines and requiring both sides to disclose when they are so doing. Lederberg stressed the importance of having on the agenda detailed issues with technical content such as this one.

Meselson cautioned against making it sound that it was very important to stop smallpox vaccination. Lederberg observed that the fact that it wasn't that important meant that the risks of cheating were relatively small.

Lederberg said that on the final day, Wed. May 11, it would be appropriate to discuss the structure of the next meeting in the USSR.

Meselson listed other suggestions he had for bilateral discussion: 1) vaccines; 2) medical surveillance and reporting domestically and to international organizations; 3) epizootics, because animals are important indicators of diseases such as anthrax. Lederberg suggested for the second item the wording "structural frameworks for national epidemiology," which he agreed would be a good agenda item whereby each side could explain its epidemiology/surveillance network.

Woodward said it would be important to stress the importance of continuity of membership on each delegation. Lederberg noted that Sagdeev was very conscious of this in the CISAC interaction.

Meselson mentioned the importance of reciprocal visits to sites. He also expressed his interest in getting younger scientists thinking about these issues.

Returning to the agenda, Lederberg asked Vandiver if he would be willing to make a 20 minute opening presentation on the US BW defense program. Vandiver agreed. Lederberg reiterated that the closing discussion Wednesday a.m. would be devoted to discussing reciprocity of visits and future activities. Steinbruner suggested that reciprocity be broached in terms of general openness, as opposed to demanding strict reciprocity.

Lederberg suggested we keep on the agenda the issue of the danger of proliferation and use by third parties.

Meselson noted that the House of Representatives was currently considering legislation to make illegal the creation of biological weapon agents by private individuals. This apparently would fulfil an obligation of the Biological Weapons Convention. He said the Soviets already had similar legislation and that we could asked to see theirs.

Lederberg asked how to approach discussion of the information exchanged on PIV facilities in conjunction with the biological weapons convention experts conference. Meselson suggested the staff write a short comparison/analysis of the US and Soviet submissions. Rusten agreed to try to enlist the help of someone at the Institute of Medicine to prepare the paper.

Lederberg noted the suggestion of Robert Mikulak in the Arms Control and Disarmament Agency that the Koltsovo facility in Novosibirsk or the facility no. 19 in Sverdlovsk would be the sites most analogous to Fort Detrick for a reciprocal visit.

Vandiver offered to host some of the Soviets at Texas A&M following the meeting. He agreed to inform Rusten what kind of scientific program he could arrange so she can convey the invitation to the Soviets.

Returning to the subject of evening entertainment, it was agreed that there would be a dinner/reception at the NAS Monday night, and a cultural activity (jazz concert) Tuesday night. Rusten collected everyone's suggestions for outside individuals to invite to the dinner Monday night - additional names should be conveyed to Rusten.

The meeting adjourned at 3:00 p.m.

Lynn Rusten