

CHEMICAL LABORATORIES OF HARVARD UNIVERSITY

MEMORANDUM

To: Matt DATE: Dec 16
FROM: Paul 308-
SUBJECT: _____

I slipped in not getting to the Academy summary in time. I don't see any thing in serious need of change in my part. If you do in yours call Mrs. Oleson directly and give her my apologies and compliments.

Please read the Hurdler stuff ~~at~~ and tell me what you think. Let Grace know when she can pick it up.

Paul

Call back.

NATIONAL ACADEMY OF SCIENCES

Office of the Foreign Secretary


November 24, 1969

Dr. Paul Doty
Department of Chemistry
Harvard University
12 Oxford Street
Cambridge, Massachusetts 02138

Dear Paul,

After reading the attached, would you give me a call about it? I am trying to get some thoughts together for Dr. Handler.

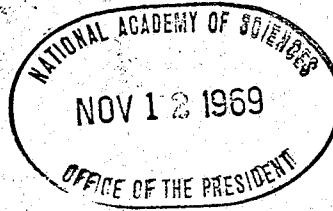
Cordially yours,


W. Murray Todd
Executive Secretary

Enclosure



BAKTERIOLOGISKA
INSTITUTIONEN



NOV 2 1969

KAROLINSKA INSTITUTET
STOCKHOLM 60

November 5, 1969

Dr. Philip Handler
President, National Academy of Sciences
2101 Constitution Avenue, Washington D.C. 20418

USA

Dear Dr. Handler,

At a dinner party on October 31st I had a long talk with Academician Keldys and followed it up by giving him a letter along the same lines as the one I gave you on the way to the airport. I enclose a copy which I hope you will treat with discretion. He listened very carefully and said that the points raised were very interesting indeed. I also got the impression that my suggestion that it might be useful to have an ad hoc Academy Committee consider possible areas for international cooperation in microbiology was well received. If one takes this fact together with the outcome of the Pugwash meeting in Sochi, where the russians came across officially with a positive attitude towards research into control- and inspection I think that there is some reason for optimism.

At the World Peace Congress organized by the World Peace Council in East Berlin (June 69) the following sentence was included in the summary report: "The Commission urges research into the problems of detection violations of the Geneva Protocol and of inspection techniques for non-production of B-weapons". The report from the recent Pugwash Conference in Sochi reads:

"The group then considered the two CBW-disarmamentrelated topics that SIPRI had undertaken on the recommendation of Pugwash. A progress report was heard on the BW inspection experiment. It was felt that this experiment had yielded fruitful results both as regards the technical problems of verifying observance of non-production agreements, and as regards arousing the interest and active participation of several countries, both East and West. The group recommended that Pugwash/SIPRI convene an international symposium to consider how the experiment might most usefully be extended (a) to include an evasion exercise, and (b) to explore the problems of verifying observance of agreements outlawing chemical weapons."

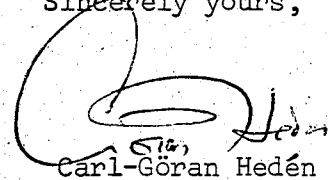
Even if there are obviously signs of some flexibility, the fundamental question is now if this flexibility is big enough to permit a sequential approach to B and C. I personally wonder if the russians fully appreciate how difficult the C-issue must be for the US as long as the Vietnam conflict remains unsolved. If they realized this and think that the comprehensive treaty approach is conducive to a conservation of the difficulties the progress towards a B-freeze will obviously be slow. Opposing a unilateral move towards international cooperation would on the other hand easily offset any political gains from such a policy so they would certainly have to be very careful.

As I mentioned when we met I will obviously have the ear of Mrs. Indra Gandhi and some of her cabinet colleagues in December, when I speak at the opening of the Conference on Global Impacts of Applied Microbiology in Bombay. Hoping that the active concern of a big developing country for the "constructive diversion" approach can then be stimulated, I will focus my talk on this matter. You will receive a copy of the address as soon as it is ready.

With reference to our chat about the science education of parliamentarians I enclose some notes on RIFO, where I was a vice-president for many years.

It was a great pleasure and privilege to meet you in Stockholm, but I hope that I will see you in Sweden during the summer months some other time.

Sincerely yours,



Carl-Göran Hedén

Oct. 31, 1969

Prof. M.V. Keldys
President, USSR Academy of Sciences
Leninsky Prospekt 14
MOSKVA 71

USSR

Dear Academician Keldys,

I am glad that meeting with you on the occasion of the Academy Celebration gave me an opportunity to discuss the CBW-problems with you. They have been in the focus of my attention for many years both as the Vice-president of the Int. Association of Microbiological Societies, as chairman of UNESCO's Microbiology Panel and within the framework of the Pugwash Movement. Particularly during the last year, when I have had a sabbatical in order to coordinate a CBW-study for the International Peace Research Institute in Stockholm (SIPRI) I have become convinced that the CBW-issue should be considered as an element of human ecology and global security rather than as a pure problem of disarmament. What I mean is that active rechannelling toward Man's major problems should be emphasized at the expense of the passive abolition of efforts which have involved so much specialized training and so large investments.

Such an approach offers unique possibilities for achieving a constructive impact on the developing countries which - in a sense - hold the issue of future wars in their hands. In this connection a switch of the personnel and equipment available within the various establishments for military microbiology might have a profound effect in many "diversion areas": biological control of insects and pests, development of vaccines etc. The current concern about environmental pollution, the focus on single cell protein research and the growth of enzyme technology add further arguments for a rapid coordinated effort. If this could be made internationally (for instance within the framework of an "International Organization for Applied Microbiology and Public Health") badly needed aid could be provided but also a platform would be available for building the confidence needed to guard against the later emergence of a significant BW-capability somewhere on the globe. The operation of such an international organization would need to be discussed both on the intergovernmental and on the non-governmental level, a suitable occasion for the latter being the International Congress for Microbiology in Mexico City next year in August (cf. enclosed plan). However some preliminary guidance from a few of the big countries before that occasion would be desirable so that the desired functions can be spelled out. Should for instance a hypothetical organization of the type mentioned not only function as a goal-oriented research body but also as a pool for BW-defense competence plus equipment? If the answer is yes one would have to consider if only such countries which signed a disarmament treaty would be granted membership etc. Being confident that we are now on the brink of a critically important disarmament development - the US being very nearly ripe to give up its entire BW-effort - I now feel that the preparation of a constructive response on the part of the USSR is urgently needed.

When I saw Academicians Timokov, Imshenetsky and Millionshikow in Moscow last autumn I mentioned this perspective stressing the need to consider how one might combine verification with the development of mutual confidence and trust. What then seemed like a possible change is now a very likely alteration in the disarmament climate which might well spread from B to C and on through the weapons alphabet, provided of course that a continuing sequence of moves can be maintained. It is quite likely that "diversion towards common goals" may be the key to this problems which brings me to a crucial question. Would you be prepared to support a joint research and development effort in a few selected areas like:

- biological control of insects and pests
- aerosol vaccination
- improvement of veterinary vaccines
- automated identification of pathogens
- large-scale tissue culture for vaccine production?

The best way to begin ought to be to seek to reach an arrangement whereby soviet scientists could join a multinational group of microbiologists working at Fort Detrick at the same time as American scientists joined with an international team at the Gamaleja Institute, the Saratov Institute etc. As you probably know my own Institute is already involved in a related exercise initiated by SIPRI: Dr. A. Sinyak from Moscow working on rapid identification of viruses at the same time as Dr. A. Ujunggren from Stockholm is working in Prague on fluorescent antibody techniques.

It seems to me that the USSR now has a unique possibility to make a creative and certainly popular move. I have so many friends both in the USSR and the USA that I can be a relatively good judge when I say that most microbiologists would welcome leadership with regard to an attack on Man's major problems. They are largely biological, even if for instance the building of agroindustrial complexes etc, of course all require a comprehensive planning where biology is only a part. The enclosures were selected to illustrate the place of microbiology in this context. Perhaps the establishments for military microbiology would not be the optimal location for working on some of the projects mentioned in the papers, but the symbolic value of International efforts based on the facilities available would be enormous. Also I am convinced that an emphasis on the social responsibility of scientists as well as the use of this opportunity to test the "constructive diversion" approach to disarmament would have considerable impact on that disturbingly large segment of the general public which is now basically disenchanted with science.

Sincerely yours,

Carl-Göran Hedén

Extract

At its meeting at UNESCO in Paris on June 5-6th, 1969 the Executive Committee of the International Association of Microbiological Societies (IAMS) the organizers of the Xth International Congress for Microbiology were present during one of the sessions:

"The Executive Committee and the Mexican organizers considered the BW-conference planned for the Congress in the light of Prof. Hedén's consultations as well as the recommendations made by the BW Study Group of the Pugwash Movement (Mariánské Lázně, May 22nd - 23rd, 1969). Prof. Hedén was asked to organize the activities along the lines indicated by the Appendix and to invite the Panel members who should introduce the subject at an open Colloquium under the chairmanship of Prof. A. Lwoff. Drs. Housewright, Zhdanov, Gordon-Smith, Franék and Hedén were named in this connection".

Appendix:

Plan for deescalation discussion in connection with the Xth International Congress for Microbiology (Mexico City, August 9-15, 1970).

1. During the summer of 1969 the member societies are asked by the Secretary General to appoint 1-2 delegates for the BW-talks in Mexico.
2. During the end of 1969 those members receive copies of the SIPRI BCW-review and of the UN Expert Group report. The former is a major (probably 500 pages) cooperative study now being performed at the Stockholm International Peace and Conflict Research Institute (SIPRI) and coordinated by IAMS' Vice-President, Professor C-G Hedén. The second is a report from a group of BCW experts appointed by U. Thant also background material from the Specialized Agencies (in particular WHO), SIPRI and the Pugwash Movement.
3. The two reports mentioned will be supplementary and should be studied by the national delegates mentioned who should, if possible, review ecological consequences etc. at some meeting of their microbiological society during the spring of 1970.
4. The Continuing Committee of the Pugwash Movement approaches ICSU with a report on the plans for BW-discussions in Mexico City and proposes that other professional groups (biochemists, pure- and applied chemists, physiologists, pharmacologists etc.) ought to consider similar moves. The matter is taken up at the ICSU Executive Committee meeting in Eravan (October 2nd and 3rd, 1969).
5. IAMS invites the Panel members mentioned under 6 to a round table discussion in Paris on December 1st in order to coordinate their presentations.

6. An open Colloquium on "BW Deescalation Perspectives" takes place between 10 AM and 7 PM on August 7th, 1969. Participants: a small group of experts (about 5) who make up a panel that will introduce the subject, the national BW-delegates, the Advisory Council (ACIAMS) and Executive Committee (ECIAMS) of the International Association plus interested microbiologists, making up a total of less than 200 people. First the Panel members will give brief talks (20-30 minutes). Then there will be a 10 minute intermission during which the chairman of the Panel (Prof. A. Lwoff) will receive written questions from the floor. He will arrange them in a suitable order and present them to those panel members he sees fit.
7. Between 3-6 PM on August 7th (and 7-10 PM if necessary) the national BW-delegates meet to discuss conceivable initiatives together with ECIAMS and ACIAMS. This would be a closed session with a maximum participation of 100.
8. It is expected that the section of the SIPRI-report which concerns the political future of CBW will list conceivable activities on the part of non-governmental bodies. Such activities might include:
 - A. Activities aimed at strengthening the sense of social responsibility among microbiologists.
 1. A "World Day of Concern" when normal education would be replaced by seminars on global issues (this, of course presupposing that a general ICSU policy can emerge).
 2. International guide-lines with regard to secrecy and contract research at university laboratories.
 3. A "Code of Conduct" for the individual microbiologists.
 4. Chapters for Social Responsibility of Microbiologists within the National Societies. Perhaps international memberships through ICSU could tie such groups together with other professional groups and with national associations for social responsibility of scientists.
 - B. Activities aimed at direct involvement of microbiological societies in BW research deescalation.
 1. Special committees charged with performing a civil review of national defense programmes.
 2. National control- and inspection programmes.
 3. Direct lobbying (governments, scientific advisors, UN, WHO, UNESCO and FAO delegations) as well as indirect pressure (symposia, teach-ins, mass-media etc.)
 - C. Activities aimed at international BW research deescalation.
 1. Voluntary control- and inspection programmes (bilateral, regional and global).
 2. Supranational advisory groups for referral when "free" scientists feel that they are progressing into a sensitive, potentially military field.
9. A drafting committee appointed by the meeting mentioned under 7 reports to a second closed session meeting on Wednesday, August 12th, 1969 between 9 AM and 1 PM. A recommendation to the Second General Assembly is formulated.
10. At the Second General Assembly, (which takes place on Friday, August

14th, 1969, between 4-6 PM) a brief report (15 min.) on the UN report is given by a suitable expert preferably the Mexican delegate on the UN committee: Dr. Soberon who should be invited to the function by the Mexican organizers. This is followed by voting on the recommendations proposed by the "BW Deescalation Perspectives" meetings.

11. A report on the actions taken is given to the Pugwash Plenary meeting which meets on the U.S. East coast after the Mexico Congress.