TENTATIVE PROGRAM

First Year

FILE IE	E. C.		
	First Quarter -	Survey of Physiology	100
		Survey of Anatomy	100
		Survey of Pathology	50
		Survey of Bio-chemistry	25
		Survey of Pharmacology	25
		Survey of Bacteriology	<u>25</u> 325
	Second Quarter -	Medicine	150
		Anatomy	150
		Pathology	<u>50</u> 350
	Third Quarter	Medicine	150
		Physiology	<u>200</u> 350
Second Y	'ear		
	First Quarter	Medicine	150
		Pathology	200 350
	Second Quarter	Medicine	150
		Biochemistry	<u>200</u> 350
	Third Quarter	Medicine	150
		Pharmacology	<u>200</u> 350

Third Year

First Quarter - Medicine 100
Pediatrics 75
Bacteriology 175
350

Second Quarter Clinical Subjects only.

Third Quarter Clinical Subjects only.

The medical school has a dual task. It has to educate the many who will become general practitioners and who cannot be expected to contribute to the progress of the art. And it has to educate a very important and very small minority on whom the future progress will depend. It seems to me that this small minority can be best taken care of by sorting them out early from the mass of the students and giving them individual attention. Some sort of informal tutoring would meet their needs best.

As to the great majority, the school has two tasks. It has to give them the factual knowledge which they need in order to do their job and in addition it has to give them an "education." Being educated consists, according to Ellen Kay, in what remains when you have forgotten everything that you have learned and in order that something should remain when the student has forgotten everything that he has learned in the pre-medical subjects, one has to lead him deeper into these pre-medical subjects than would otherwise be necessary.

Somehow or other, the school must accomplish to produce doctors who are not too conservative. "I do not know what makes a man more conservative," wrote J. M. Kanes, "to know nothing but the past, or to know nothing but the present." To me it seems it would be desirable to lead the student at the very outset to the right concept of medicine - i.e. the concept of an edifice which is perennially "under reconstruction." This could, perhaps, be best accomplished by giving him a survey in his freshman year of the pro-

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gress of medicine in the last fifty years. The point of view well presented leads me tentatively to the following schedule.

The situation of microbiology in a medical school is a rather peculiar one right now. On the one hand from a point of view of biology, the importance of microbiology has tremendously increaded in the last fifteen years. But during the same period the importance of infectuous diseases had decreased. It is almost a foregone conclusion that infectuous diseases will virtually disappear as an important subject in medicine and that bacteriology and virology will ultimately be taught within the frame of preventive medicine in our schools where they will probably belong. Research in microbiology, on the other hand, is likely to increase in importance. But the time is not far away when its contribution to infectuous diseases will be a thing of the past and, if we look to microbiology expecting it to contribute to medicine, we will look to it in the hope that it might lead us to a cure for cancer, rather than fo contributing to the cure or prevention of infectuous diseases.

MEMORANDUM I

International Conference on Science and Public Affairs

- l. When "atomic scientists" first undertook their educational activities in 1945, American monopoly in atomic energy made it impossible—at at least, impolitical—to seek understanding and concerted action with scientists of other countries, particularly western Europe. There has been no discussion or close contact, except on occasional and personal basis, even with the British Association of Atomic Scientists, despite the community of interests and similarity of general attitude.
- 2. The failure of American scientists to promote international understanding between scientists on the grave questions raised by the advent of nuclear energy, has been co-responsible for widespread misunderstanding among scientists in Europe and Asia of the attitudes of American scientists.
- 3. The successful development of thermonuclear weapons makes the role of science in human affairs an even more urgent subject for scientists to consider than it was before, and calls for a new stock-taking and, of possible, concerted educational activity of scientists of good will everywhere.
- thermonuclear weapons is not restricted to America any more, the original reason for not discussing these matters on an international basis are not valid now. The misunderstanding of American attitudes—including those of American scientists—toward atomic and hydrogen weapons, is rife in Emma Europe and Asia. Already the claim for "prohibition" of the H-bomb is widely raised, without questioning

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what "prohibition" without adequate control could mean.

- 5. It has been suggested that an international conference of scientists concerned with these questions, should be called. It could consider questions such as the following:
- a. Present and future extent of destruction which can be produced by a war with atomic and thermonuclear weapons, and its probably consequences for mankind.
- b. Possible extent and consequences of radioactive contamination of the atmosphere and the oceans, including short-time dangers to life and long-range genetic effects.
- c. Technical feasibility and minimum requirements of effective international control of weapons of mass destruction, revised in the light of the development of thermonuclear weapons, and mass production of fissionable materials.

This part of the conference could perhaps lead to some agreed "statement of facts as scientists see them," directed to all nations and governments.

The conference could also devote itself to other important aspects of the role of science in public affairs, such as:

d. Natural resources, population trends, and possibilities of lifting the standards of life in underdeveloped countries by the application of science.

Finally, the conference could consider the questions of the scientists standing in the present world, such as:

- e. Responsibility of scientists toward society, either for the application of their own researches, or for the general way in which scientific discoveries are handled by society;
- f. International cooperation of scientists, regardless of political boundaries. Shall it be reasserted, and if so, how can

it be justified in a politically and ideologically divided world?

g. What the basic xxx spiritual values and foundations of science are--and what are its relation to freedom, dogmar and philosophical systems?

This letter has been directed to a number of scientists in order to obtain their reaction as to the desirability and possibility of a conference of the above-outlined type. It would be of great help if you would answer the questions listed on the following page and return them to

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MEMORANDUM II

International Conference on Science and Public Affairs

The suggestion (outlined in Memoran dum I) of an international conference on the role of science in the world today, has sime been discussed with a few scientists here and in Europe, with the following reactions.

1. In the <u>United States</u>, the suggestion has met with a mixed reception. Some (e.i., Drs. Urey, Weisskopf, and Shils) were unconditionally in favor of it. Others were strongly opposed (Drs. Bethe, Franck); others were skeptical about either feasibility or usefulness of a conference, but not fundamentally opposed to it.

Among the objections were a. That the position of scientists in America is at present so insecure that it is inappropriate for them to undertake any action which may provoke new attacks, and even endanger the <u>Bulletin</u>, which—it was suggested—is the most useful activity those of us who are interested in science and public affairs can maintain; 2. That scientists as such have nothing special to contribute now, since, in contrast to 1945, all the relevant facts are familiar to the public; and 3. That scientists have drifted so far apart in their views that a conference will lead not to an agreement, but to a demonstration of disunity, which will damage whatever makenikhete influence scientists may still have in public affairs.

Criticisms concerning the <u>desirability</u> of the conference were, however, less categorical and general than those concerning its <u>feasibility</u> in the present political climate.

2. In England, the executive committee of the British Atomic Scientists Association expressed approval and readiness to

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cooperate. (Misgivings about its political difficulties are much less pronounced in England than in the United States.)

In France, the plan was mentioned in talks with Auger, LeLionnais, and Wendt at the UNESCO. They expressed strong interest in the conference as a means to improve the exchange of ideas between American and European scientists concerning the role of science in public affairs rather than as an attempt to work out solutions of the atomic weapons impasse. It was, however, doubted that UNESCO can play an active part in arranging the conference because of its official status.

If the idea of the proposed conference is to be pursued farther, there was a consensus that the most promising way would be to organize study groups on the different topics in several countries, to prepare reports which could be ultimately submitted to the conference. This raised the question of the sponsorship and financing of such preliminary studies. Several suggestions have been made:

- a. A group of internationally prominent scientists could be asked to sponsor the studies as individuals, and to approach a Foundation with a request for financing of the preliminary work. Niels Bohr and Albert Einstein were mentioned.
- Advancement of Science and the American Association for the Advancement of Science, (or appropriate sections of these organizations) could accept a common spensorship. An inquiry with the section on Social Function of Science of the British Association was gas to be made by members of the British Atomic Scientists Association.

A suggestion was made by some that if sponsorship by national organizations is attempted, an effort should be made to

secure co-sponsorship of some organization in the Soviet Union.

Perhaps then, it was suggested, a neutral country such as India should issue the invitations.

c. The Federation of the American Scientists (perhaps together with the <u>Bulletin</u>) and the British Association of Atomic Scientists could act as sponsors (or, at least, as actual organizers) of the study.

It seems that if the idea is to be pursued, the next step is to inquire with the Foundations, which might possible be interested in the projected studies and Conference, whether they are inclined to support the project, and if so, what form of sponsorship would appear appropriate to them.

Your reaction to this memorandum will be appreciated.
Please address replies to

Bulletin of the Atomic Scientists 5734 University Avenue Chicago 37, Illinois

Blukett 8 Der Hell 6 Der Hell 3 Diroc Powell (Blochett?) Blinley Urersej my lindler Mutt Hi? hundle Kerenls landsdale Hers enlig. Desblatt Weigsächer finon How Kninge Now Aroun Cherwell Cachroft Olif hant Winhard Auger Jenj Wiesner Burgers Purcell Beshe Wiels Bohn Perin fusnin Teller Goldselmid Uney Aragat) Yukania molet Freshin lanon Phil Servan Lether Hudson