* Let me say that I am sure that good medical research men can be found who would be glad to hold such a professorship, in part because of their interest in pure science.

The Possibilities of Contributions of Non-medical Scientists to Medical Research.

CALIFORNIA INSTITUTE OF TECHNOLOGY
PASADENA 4

Mar 5, 1952

GATES AND CRELLIN LABORATORIES OF CHEMISTRY

A Proposal for Increased Utilization of Non-medical Scientists to Medical Research

~~A Way of Aiding Medical Research~~

Martin also made of plan of training some young MD's

The British EMRC research units could [illegible]

The university professors and ~~other~~ university research men in chemistry, biology, physics, and related fields constitute a source of fundamental contributions to medicine that is as yet in large part unexploited. These men are men of ideas, who could make ~~more~~ more discoveries important to medical progress than they are now making. Many of them are interested in medicine, and would like to devote part of their efforts, in the search for new basic knowledge, to the medical field; for them to do so would not interfere with their freedom, but simply ~~broaden~~ extend the ~~field~~ range of their efforts.

Their contributions to medicine are now in considerable extent limited by their lack of knowledge of medical problems, lack of opportunity for obtaining advice as to the originality and significance of their ~~medic~~ ideas in the medical field, lack of knowledge as to how to follow up their ideas, etc.

I propose that there be, on permanent appointment, a Professor of Medical Research in, say, the Chemistry Department of a university where several professors of chemistry are working. He would carry on his own work, in some ~~field~~ branch of basic medical research, would keep in touch with his colleagues, ~~and would~~ follow the progress of medicine, be available for discussion and collaboration, and in general strive to prevent the neglect of discoveries and ideas that might prove to be valuable.

I estimate that 10 or 20 chemistry departments could profitably be provided permanently with such a man + perhaps many more departments could use them later.

I have not estimated the numbers of physics & biology [illegible]

Minutes Panel on Research
President's Commission on Health Needs of the Nation.
901-16th ST. Mon. 26 May 1952.

(1)

Reading of proposed statement by Mr Barnard.
I suggest explicit mention of research
Keith Cannan suggested " " training for practice & research.

Keynote talk. Duckett Jones. Not only med. sci. but nat. sci. + soc. sci. involved.
Is knowledge being acquired at the optimal rate?
How can the rate be increased?
Research is the quality (?) of acquiring knowledge.
Limitation of rate - supply of men, equipment, environment.
Examples of great progress: 1. Infectious disease, well known
Trends is diagnosis etc → 2. Insulin 5. Antibiotics
physiology → chemistry 3. Liver 6 New hormones ACTH chem. balance + equilibrium.
4. Nutrition. Vitamins 7.
Use of more basic chemical methods. Str., biol. uses, etc of proteins

Breathtaking opportunities in proteins, hormone field, arteries + fatty deposits.
Also social aspects of medicine.
Education - Hopkins experience, Abraham Flexner's report
We must be aware of the danger of diverting to applied levels on target research those individuals who are capable of contributing at the basic level. We are in danger of exhausting our storehouse of fundamental knowledge.
Quality of the scientist. Faith by someone in him.
Personnel - now 200 tenure vacancies in med. schools. Why not study this?
Certification of MDs is problem - 5 yrs after MD - economic problem.
PhD in basic sciences not sufficiently recognized.
Economic plight of our universities.
Now 10000 foundations in US (9000 less than 10 yrs old).
Projects - the mere committing to paper of a detailed plan may so influence the scientist subconciously as to lead to failure because of a later wrong decision.
We must have multiple sources of funds.

Agenda. III Importance of research.
IV Basic concepts

Replies by Waterman, May, Gregg, Pauling, Fenn, Capt. Shilling, Allen, Cannan

Cannan said research may lead to new discoveries faster than they can be assimilated. I objected.

I do not think that special inter-field permanent job opportunities such as that which I propose would have the effect of forcing able men into fields in which they do not have great interest. There are many men interested in intermediate fields who however, have to settle into a conventional job.

I raised the point of increasing no. of tenure posts (professorships)