

MAYO CLINIC

March 14, 1951

Dr. Richard L. Meiling
Armed Forces Medical Policy Council
Department of Defense
Washington, D. C.

Dear Dr. Meiling:

In accordance with our conversation a few weeks ago, I am enclosing a list of research projects which are being, or can be, carried out here and which may be of some interest to the Department of Defense. This is by no means a complete list of the research projects which are currently being worked on here, but it is a selected list which indicates very briefly some of the fields of interest which we felt would be of greatest concern to you. In some instances part of all of the investigations in question could be prosecuted only by asking investigators to drop their current problems in favor of the new problem, but we are most desirous of following such a program if it will be of assistance to the Department of Defense. Not all the subjects listed could be investigated concurrently, as in some instances the same investigators would be involved in more than one problem, and, also, the facilities of the institution which can be diverted from the active care of the sick would not permit this to be done.

It is impossible to indicate in advance the extent to which and the speed with which any investigation may be furthered, but this could be decided by consultations between the investigator and those members of the Armed Forces who are primarily interested in the investigation under consideration.

The listing of subjects is prepared so as to indicate by implication fields of interest in which there are on our staff at present competent investigators with suitably equipped laboratories and clinical and surgical facilities and with adequate collaborative and technical assistance.

It should be noted that the investigations in aviation medicine involving the human centrifuge and the low pressure chambers could not be started before next fall. The building in which these facilities are housed is undergoing remodeling and addition. Also, some few parts of the equipment are in need of replacement, and materials for this are not now available without authorization from your office. Some conversations regarding the re-establishment here of this type of investigation have been held between Dr. E. J. Baldes and Dr. C. F. Code and representatives of the Air Materiel Command, the Office of the Air Surgeon, the Director of the Navy Centrifuge, and others, but no formal request or arrangement has yet been made.

Some projects of primary interest of the Atomic Energy Commission are noted. Informal conversations regarding some of them have been carried out with Dr. Shields Warren but, again, no specific request or arrangement has been made.

I believe you have indicated that it might be desirable for our representatives to meet with the Armed Forces Medical Policy Council, and in the event that you wish such a meeting to be held we will be glad to arrange for representatives of the Mayo Clinic to come to Washington, D. C., to elaborate on our abilities in furthering any of the projects in which you may be interested. Dr. Victor Johnson, Director of the Mayo Foundation, is also including a note regarding our facilities for training which may be of interest to you.

I assure you of our sincere interest in being of any possible assistance to the Department of Defense.

With kind personal regards, I am

Sincerely yours,

signed
Samuel F. Haines, M.D.
Vice-Chairman

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MAYO FOUNDATION
For Medical Education and Research
University of Minnesota Graduate School
Rochester, Minnesota

March 14, 1951

Dr. Richard L. Meiling
Department of Defense
Washington, D. C.

Dear Doctor Meiling:

At the time we discussed the question of possible re-
search projects of war-time significance which may be carried out
here, you also indicated it would be helpful if we were to indicate
to you what we would be prepared to do educationally for the services.

We are prepared to accept for regular fellowship training
such medical officers as you or the services may designate even
though this training period might be for considerably less than the
normal three year fellowship period. However, it would be prefer-
able that such assignments be for at least a year in most instances.

We could carry out such training in most of the special
fields of medicine, such as physical medicine, neurosurgery, plastic
surgery, orthopedic surgery and other special fields. You indicated
that there is a great need also for nurse operating room supervisors
and nurse anesthesia supervisors. It would be possible for us to
undertake the training of a number of such nurses.

We will be pleased to participate in these areas. In fact,
we are already engaged in the programs described for the various
services and are prepared for some extension of the program.

Yours sincerely,

signed
Victor Johnson, M.D.
Director

VJ:hr

LIST OF RESEARCH PROJECTS WHICH ARE BEING, OR CAN BE,
CARRIED OUT IN THE MAYO CLINIC AND THE MAYO FOUNDATION

Submitted to Dr. Richard L. Meiling, Armed Forces Medical Policy Council

- I. Shock - studies in animals and man
 - A. Surgical manipulation
 - B. Severe trauma
 - C. Burns

- II. Cold temperatures - studies of physiologic and pathologic changes
 - A. Frostbite and other vascular disturbances
 - 1. Effect of anticoagulants, hormones
 - 2. Effect of surgical procedures
 - a. Conservation of tissue
 - b. Sympathetic nerve block
 - c. Sympathetic ganglion excision
 - B. Effect of cold temperatures on the brain

- III. Blood plasma substitutes - clinical, physiological and pathological effects in animals and man

- IV. Plastics - use in surgery in animals
 - A. Use of sponge and tubular plastics in correction of surgical defects in tissue and vessels

- V. Effect of irradiation on tuberculosis in animals and effects of irradiation on parenchymatous organs

- VI. Blood coagulation
 - A. Effects of irradiation
 - B. Effects of anticoagulants in animals and man
 - C. Surgical studies in methods to prevent pulmonary embolism
 - 1. Anticoagulants
 - 2. Blood flow studies
 - 3. Bandaging, et cetera

- VII. A. Effect of I¹³¹ on thyroid in animals and man
 - 1. Effect on normal thyroid
 - 2. Effect on diseased thyroid, including cancer

- B. Isotopic localization of brain tumors

- VIII. Metabolic effects of adrenal hormones and ACTH in animals and man
- IX. Effect of trauma on lymph
 - A. Surgical management of trauma
 - B. Experimental studies of lymph during and after trauma
- X. Aviation medicine - study of various aspects on both animals and man
 - A. Physiologic changes at high altitudes
 - B. Anoxia
 - C. Physiologic adjustments to centrifugal force
 - D. Protection against centrifugal force

Note: These studies cannot be undertaken until the centrifuge is rebuilt and it is estimated that this will be completed about September 1951.
- XI. Experimental studies on
 - A. Healing of fractures (effect of microwaves)
 - B. Arteriovenous fistula (effect on bone growth)
 - C. Effects of ultrasound on bone
 - D. Vitallium cup arthroplasties in man
- XII. Surgical studies of grafts for peripheral nerve injuries
- XIII. Clinical studies of the gastro-intestinal tract
 - A. Hepatitis
 - B. Duodenal ulcer
 - C. Pancreatic function
 - D. Gastric motility
- XIV. Studies on paraplegics and others with injuries to head and spinal cord
 - A. Metabolic
 - B. Urologic
 - C. Neurosurgical
 - D. Orthopedic