LAMOS, NEW MEXICO 87544

OFFICE MEMORANDUM

TO : Louis Rosen, MP-DO DATE: May 12, 1972

712614

FROM : E. A. Knapp, MP-3 EK

SUBJECT: OPERATION, SCHEDULING AND PRIORITIES ON THE BIOMEDICAL BEAM LINE

SYMBOL : MP-3

I am a bit worried about how we will interact with the accelerator, the other experiments on line at LAMPF, and the Biomedical Users in the operation of the biomedical beam line. It is not clear in my mind how this interaction will take place so, before I write to Kligerman with our plan, I wish to write it all down and have you approve or modify as you see fit.

It seems to me that the biomedical beam line is unique compared to other experimental facilities at LAMPF, in that it is a facility which is dedicated to one particular programmatic effort for the bulk of its time. Because of this unique position in the scheme of things, scheduling, operation and maintenance should be done on it in a quite different manner than on most other lines. I would propose that the biomedical beam line be operated and scheduled by a separate section of people whose function is to provide service to the Radiobiological Users of the line - that is dosimetry, operating characteristics such as depth dose, scanning, energy variations, and beam monitoring are provided as a service to the user. The important experiments on the biomedical line will be the Radiobiological ones, not dosimetric measurements, although the dosimetry will be difficult. Whoever operates the biomedical line will, of course, have input into the overall scheduling of LAMPF and will be bound by the energy and intensity of the proton beam scheduled. The group which operates the biomedical line can either be part of the experimental operations group or part of the biomedical research group - I think the latter is preferable.

Scheduling of time on the biomedical line should be accomplished with several overall programmatic goals in mind. The channel was funded in order to give pi-mesons a good test as a possible radiation modality for the treatment of cancer. Thus highest priority must be given to the programmatic effort which will lead up to these clincal trials. A series of disconnected experiments using different dosimetry systems, different approaches to the radiobiology, and aimed at separate publishable works will, in my opinion, never achieve satisfactory convergance to allow clinical trials to even be contemplated. This is a very complex interlocking problem which will need all of our attention to resolve. Thus the following set of priorities is proposed.

1. First priority be given to the programmatic effort required to achieve clinical trials in a minimum time. This program should be outlined to the Program Advisory Committee but day to day discussions on the direction this program should take should be group decisions made within the task group carrying out the work. It seems that this first priority has already been agreed to by the Program Advisory Committee when the biomedical channel funding was accepted.

2. Second priority on the channel should be given to stand alone experiments in Radiobiology and dosimetry which have been approved by the Program Advisory Committee and are considered of programmatic interest in the work leading to clinical trials by the group doing this programmatic work.

3. Third priority should be given to experiments approved by the Program Advisory Committee but not considered relevant to the clinical trial program

4. If any time is left, some physics experiments might be accommodated on the channel.

Scheduling of the time on the channel should be accomplished by a committee charged with this task, and the chairman of this committee should represent the line as a user of proton beam time to the LAMPF Scheduling

Committee. A great point has been made to the NIH that this facility is almost independent of other LAMPF operations, and uses left over LAMPF beam as a sort of utility. This proposed arrangement emphasizes that feature.

The Program Advisory Committee should review the overall program at intervals and make recommendations to you as to the progress or lack thereof in the program. I see no other viable route of interaction.

EAK:km

cc: MP-3 File