

the causation of myopia and other refractive errors; the effect of environment on visual behavior; and the objective evaluation of vision training and orthoptics.

The development of eye pathology banks is the first order of business in terms of research. Such eye banks would provide further insight into the factors of eye disease.

Other areas for advances in our understanding of visual physiology and pathology are the exploration of ultrasound in the diagnosis of eye pathology, photocoagulation and other therapy for histoplasmic choroiditis, and intensive emphasis on drug investigations. The latter would include pediatric effect of ocular drug therapy, steroids and glaucoma, systemic drugs and ocular pressure, problems in drug penetration, antibiotic problems in ophthalmology and developments in ophthalmic anesthesia.

FUNDING

It is estimated that approximately \$1,400,000 above the NINDB Appropriation for FY 1968 would be needed to expand into the new areas discussed.

Mr. ROGERS. Thank you, Mr. Chairman.

Mr. JARMAN. Mr. Nelsen.

Mr. NELSEN. Referring to another subject which might have some application, when we were considering the establishment of a liberal arts college and vocational educational facilities in the District of Columbia, the feeling was that they had to be separated. Otherwise the competition within a unit might damage one to the advantage of another. Is it possible that in the area of eye research and attention to eye problems that the competition within the total package might detract from the needed attention in one area or another?

Dr. STEWART. Mr. Nelsen, first we think there is no evidence that the competition is resulting in an adverse funding of the good research in the eye field at the present time.

Our major concern is that if we develop too narrow a categorization within the several Institutes, we will establish artificial barriers between scientists from various disciplines who need to be collaborating on research. The approach needs to be from a broad front rather than from a narrow front. We are afraid of this isolation and that categorization is too tight.

Mr. NELSEN. Referring to the competition for able people, in your grant program you reach out into all areas of the country. You might find it more difficult to bring those people into a single center than to leave them in a locale where they are perhaps at a little lower salary but perhaps where they want to be.

Wouldn't you find a greater problem in bringing them into a center and drafting them into a new activity?

Dr. STEWART. That is quite correct, Mr. Nelsen. Where we need to build eye research is in the university itself where we can draw upon all of the scientific disciplines within a particular setting.

That is why we put emphasis on our extramural program. We have an intramural program of our own which we think is excellent but we could not use that to expand the research in all the fields where we think it is necessary.

Dr. MASLAND. In that regard, we feel one of the most crucial things is to have a focal point for eye research in every university. There are good people in small universities just as there are good people in big ones. We think that our key problem for vision research is the recruitment of good people. This recruiting takes place in the early years of