DEPARTMENTS OF LABOR, HEALTH AND HUMAN SERVICES, EDUCATION, AND RELATED AGENCIES APPROPRIATIONS FOR 1996

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

HOUSE OF REPRESENTATIVES

ONE HUNDRED FOURTH CONGRESS

FIRST SESSION

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Ms. PELOSI. Thank you very much.

The committee notes your comments about Dr. Goodwin and joins you in commending him for his years of service and enabling you, in fact, to be here today at this point and making a very excellent presentation.

Next, we will hear from Dr. Snow.

OPENING STATEMENT

Dr. SNOW. Thank you, Madam Chairwoman. It is a pleasure to appear before the Committee to discuss the progress and programs of the National Institute on Deafness and Other Communication Disorders.

The NIDCD supports research that will benefit 46 million Americans that are challenged by communication disorders and will provide new basic knowledge about the processes of human communication.

Five years ago when the NIDCD was created, only a few genes causing deafness had been found and those genes were in the disease process in which deafness was only part of the problem. Now more than 20 genes causing hearing impairment have been found.

Among recent discoveries are an autosomal dominant gene, a mitochondrial gene and an X-linked dominant gene found by NIDCD intramural scientists. The next step in the study of hereditary hearing impairment will be to determine the structural and functional roles of genes expressed throughout the auditory system.

The difficulty in understanding conversation in background noise is the major problem in the use of hearing aids, and the collaboration of the NIDCD with the Department of the Veterans Affairs addresses this problem. This five-part collaboration, consisting of research project grants, contracts, clinical trials and biennial conferences, should provide tangible benefit to the 20 million Americans who could benefit from an improved hearing aid.

The NIDCD is supporting a number of studies on the regeneration of sensory cells. Most recently investigators have demonstrated hair cell regeneration in cultures of human inner-ear tissue. This first breakthrough in human hair cell regeneration must be exploited quickly for the benefit of millions of hearing-impaired Americans.

Similarly, Institute-supported studies of smell and tastes sensory cell regeneration may play a major role in research of the therapeutic repair of the central nervous system. Recent studies conducted by NIDCD-supported scientists of children with Williams syndrome, a disorder in which children are mentally challenged and language delayed, have brought into question the tenet that language is constrained or paced by cognitive skills. These studies are expanding our understanding of brain and behavior relations.

The NIDCD expends 83 percent of its budget on extramural grants; 3.2 percent on training; 3.5 percent on research and development contracts, principally of cochlear implants and hearing aids; 5.7 percent on intramural research; and 4.4 percent on research management and support.

As areas of opportunity for extraordinary progress become apparent, they are supported through research project grants ordinarily since there is usually sufficient investigator initiative. An example

is sensory cell regeneration. If there is not sufficient initiative, a decision is made by the staff and by the appropriate external advisory group to stimulate activity in the extramural research community through program announcements and requests for proposals, or if stronger direction is required, through requests for proposals for contracts, as in the development of new speech processing strategies and devices for cochlear implants and hearing aids.

For its intramural research program, the NIDCD chooses areas of emphasis in which the state of the science lend itself to rapid progress, there is inadequate activity in the extramural community and the payoff will benefit large numbers of people. For these reasons, the NIDCD Intramural Research Program is emphasizing molecular genetics of hearing impairment and development of vaccines against otitis medea.

The NIDCD has started its Partnership Program, a comprehensive minority research and training demonstration project with four academic centers which have large enrollments of minority persons underrepresented in biomedical and behavioral research. This program will exchange students, scientists, and administrators and maximize the opportunities to participate in fundamental and clinical research.

Now, that the NIDCD is five years old, there is a steady flow of important research findings in each of the seven program areas. NIDCD support has stimulated research training in basic laboratories and clinical settings. The NIDCD's fifth anniversary ceremony was a moving celebration of science. Investigators presented the newest and the best science and, importantly, gave force and direction for the future.

The NIDCD is fulfilling a promise to improve life for all Americans who have or will be challenged by disorders of hearing, balance, smell, taste, voice, speech, or language.

Madam Chairperson, the 1995 budget request is $167.129 million.

I would be pleased to try to answer any questions that you have.

[The prepared statement and biography of Dr. James Snow follows:]