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$115,000 GRANT AT UT SOUTHWESTERN MED SCHOOL TO EXPLORE WORKINGS OF INNER EAR AND BALANCE

DALLAS--A new $115,000 grant in neurobiology and bioengineering may lead to greater understanding of and help for people with inner ear and balance problems.

So says Dr. Robert M. Lebovitz, assistant professor in the Department of Physiology at The University of Texas Health Science Center at Dallas and principal investigator of the grant from the National Institutes of Health's Food and Drug Administration.

The grant, "Vestibulo-Cochlear Effects of UHF-Microwave Radiation," is to study the effects of ultra high frequency microwaves on the inner ear and the body's system of balance. A new facility is to be equipped and staffed this summer to carry out the three-year investigative program.

According to Dr. Lebovitz, who is both neuro-physiologist and engineer himself, there have been reports that microwaves can effect the nervous system. "This means that in addition to being able to hear microwaves, individuals may have their hearing effected in other ways by the ultra high frequency radiation," he said. Therefore, by studying these relationships, we will be able to learn more about the basic physiology of the inner ear.

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"When a greater understanding of this basic physiology is reached, then we can perhaps begin to use microwaves to stimulate the nervous system directly." This will be of value in the study of direct brain stimulation in laboratory animals. It is hoped that in the future microwaves might be used to work with persons who have peripheral auditory damage, he said.

Another value, Dr. Lebovitz pointed out, will be the development of diagnostic tools for the examination of problems of hearing and/or balance. Microwave testing, he feels, would be more specific than current diagnostic procedures and help pinpoint particular diseases and/or conditions.

Dr. Lebovitz has also been involved with establishing a program leading to a Ph.D in bioengineering at the center, which has three component schools--one medical, one for graduate programs in the biomedical sciences and one for training allied health professionals. The new program will formally set underway in fall, 1974.

The researcher, who has both a bachelor's and a master's degree in engineering from the California Institute of Technology, earned his Ph.D from the University of California in 1967. The holder of several research grants from N.I.H., he has been on the UT Health Science Center faculty since 1970.

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