IBT Receives Grant from John S. Dunn Foundation for Treatment of Human Disease

The John S. Dunn Foundation is donating funds to the Albert B. Alkek Institute of Biosciences and Technology, a component of The Texas A&M University System Health Science Center, to support a significant expansion in research for the development, use and validation of mouse models of human diseases. A five-year commitment, the $500,000 grant will help IBT better understand the causes and treatments for human diseases, especially cancer.

Often mice and other laboratory animals do not precisely mimic human diseases. IBT scientists are working to build new mice strains through genetic engineering. By this approach, the mouse can be altered genetically to acquire human disease, to simulate specifically the course of the human disease and to respond to prevention and treatment similar to the way humans do.

Basically, the mouse can be engineered to behave like a human in respect to the particular property of interest. Scientists at IBT have already developed a new mouse model for abnormalities in cholesterol and bile acid metabolism and a particular stage of prostate cancer.

"The advantages of using 'humanized' mice for our research are enormous," says Wallace L. McKeehan, Ph.D., director of the Center for Cancer Biology and Nutrition and holder of the John S. Dunn Chair at IBT. "Using these precisely designed models, we learn the maximum about the disease, its treatment and prevention prior to application to people which has severe limitations due to ethical and cost considerations. The John S. Dunn Research Foundation has been instrumental in the development of our research programs through its generous gifts since they began in 1992. This new grant support will strengthen our future research activities."

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