

## THE NOBLE FOUNDATION

The Samuel Roberts Noble Foundation, Inc. was founded as an irrevocable trust September 19, 1945, in Ardmore, Oklahoma, by the late Lloyd Noble. It was named for his father, who ran a successful hardware business in Ardmore.

Lloyd Noble was born in Ardmore, Indian Territory, on November 30, 1896, worked in his father's store as a boy and taught in country schools from 1916 to 1918. In 1918 he entered the University of Oklahoma, which he later served as chairman of its Board of Regents. In 1921 he began a search for oil in a partnership which was dissolved in 1930 when he formed Samedan Oil Corporation and the Noble Drilling Company.

It was during the later years that he saw the abandoned farms as he flew in and out of Ardmore to manage his expanding business. The farm lands had been depleted by overproduction of cotton. Mr. Noble formed the Foundation to encourage farm families to conserve and improve their cultivated land, increase the grazing value of their pastures, and produce more and better food in home gardens.

The Foundation employed a technical staff, and a series of contests were started in 1946 to stimulate interest in the program. A well-equipped chemical laboratory was set up to analyze soils. The results were gratifying. In the first three years 45,000 analyses were performed on 6,000 composite soil samples. Ninety-three percent of the samples were deficient in phosphorous, 70% in calcium and 60% in potassium.

Interest in the laboratory of the effects of fertilizers on the nutritional value of crops led to studies using cell culture. In 1952 the Biomedical Division was established. The first publication from this group was entitled "A Simple Assay Procedure for Materials and Conditions in Tissue Culture" printed in *Experimental Cell Research*. The Foundation is now considered one of the pioneers in tissue culture as evidenced by: the development in 1956 of a nutrient medium, called McCoy 5a, which is sold commercially and is in world-wide use; the development of a roller-bottle perfusion system now sold commercially; the production of some of the first Interferon in the perfusion system; being the first to establish a difference in a nutritional requirement between normal and malignant cells that led to the development of a drug being used today to treat childhood leukemia; working with the developer of the cell perfusion system that NASA put on Sky Lab II; and the publication of a book, *Tissue Culture; Methods and Applications* by two of its staff members.

Current intramural programs include studies on cellular aging, control of cell proliferation, carcinogenesis and immunology, all providing basic information on the malignant and degenerative disease processes. Most recently, one of its staff members had been honored at an international meeting for his pioneering role in the discovery of interleukin.

Recently the Foundation has expanded its commitment to agriculture by establishing a Division of Plant Cell Biology. This Division will be applying modern molecular biology techniques to the problems of endogenous plants.

The Noble Foundation has provided more than 181 million dollars in support of its intramural programs and of state projects such as the Oklahoma University Energy Center, the Oklahoma State University Noble Research Center for Agriculture and Renewable Resources, the Oklahoma Medical Research Molecular Biology Laboratory, equipment purchases for Tulsa University, and numerous others.

The Noble Foundation is indeed a unique organization. It is a private operating Foundation. Its programs are supported entirely from monies derived from private enterprise; no funds have been received from outside sources. No academic or hospital affiliations are maintained and it is located in a small community. Its only product is information - information derived solely to improve the well-being of mankind.