Medical Products Research

An example of the technical assistance provided industry and government clients by NASA's Industrial Applications Centers is research work performed for Ventrex Laboratories, Inc., Portland, Maine by the New England Research Application Center (NERAC) located at the University of Connecticut. Ventrex develops, manufactures and markets a line of medical diagnostic assays (right) based on biochemical techniques, in particular immunochemical techniques—those concerned with tests of the body's immune system, its first line of defense against disease. Ventrex products are sold worldwide to hospitals and medical laboratories for use in testing blood samples and other biological fluids; analysis of a patient's body fluids, compared with normal values, aids a physician in confirming or otherwise diagnosing a suspected disease condition.

Since Ventrex Laboratories' incorporation in 1976, the company's research and development group has benefited from the information search and retrieval service provided by NERAC. The company is continually looking for innovative test methods—ranging from drug detection to cancer testing—that have long range market potential for Ventrex products. NERAC helps by conducting computer searches for applicable data available from government agencies, medical conferences, pharmaceutical industries and other sources of chemical/biological information. NERAC's rapid information retrieval has proved invaluable, the company says, and permitted large scale savings. The NERAC service was particularly important in development of a new product in the company's Ventre/Sep line, which is used in radioimmunoassays—testing with radioactive tracers to measure body substances which are present in blood in minute concentrations yet have major influence on a patient's clinical status. Below, a technician is preparing a component substance to be used in a Ventre/Sep assay.