

LUSTGARTEN – EDRN COOPERATION IN ESTABLISHING ANTIBODIES TO PANCREATIC CANCER BIOMARKERS

The National Cancer Institute Early Detection Research Network (EDRN) is collaborating with the Lustgarten Foundation for Pancreatic Cancer Research (Lustgarten Foundation), a non-profit corporation dedicated to advancing research related to the diagnosis, treatment, cure, and prevention of pancreatic cancer. The Lustgarten Foundation has initiated The Pancreatic Cancer Biomarker Development Program to create mouse monoclonal antibodies against promising biomarker targets for pancreatic cancer. Sixty previously identified biomarker targets were selected from a variety of sources.

Under this program, the Lustgarten Foundation will fund four leading cancer research organizations including the Dana-Farber Cancer Institute, the University of California at San Francisco, the Van Andel Research Institute, and the Canary Foundation (collectively referred to as the Consortium). The Consortium members will generate at least two mouse monoclonal antibodies to different epitopes on each target. Each monoclonal antibody is produced by a hybridoma cell line which allows for a renewable source of the antibody. The program initiated by the Lustgarten Foundation will result in a large collection of monoclonal antibodies to pancreatic cancer biomarkers that will be useful for the development of novel diagnostic tests for this disease. In particular, the antibodies may be part of an enzyme-linked immunosorbent assay (ELISA) for the detection of pancreatic cancer. The antibodies may be used for detecting proteins released in sera or they may be used for immunohistochemistry of tumor samples.

The Lustgarten Foundation is making a significant investment to generate this large collection of monoclonal antibodies against pancreatic cancer biomarker targets. The value of this collection of antibodies to public health cannot be fully realized without 1) a common storage site for the hybridoma cell lines and 2) a uniform system for depositing and accessing the hybridomas. The NCI is uniquely qualified to provide 1) the capacity for storage of the large collection of hybridoma cell lines and 2) the experience and expertise needed for effective distribution of the hybridomas. The NCI EDRN has previously established organizational schemes for reviewing proposals for access to research materials and has a broad network of researchers with interests in developing diagnostic assays for cancer. NCI will assume the responsibility for sharing and distributing the antibody resources to extramural investigators who meet the goals of EDRN.