Marsha Rivkin Center for Ovarian Cancer Research™

# PILOT STUDY PROGRAM
# 2000-2002 FUNDING

**Mechanism of Decrease of p110-sErbB1/EGFR in the serum of Ovarian Cancer Patients**
University of Puerto Rico, San Juan, Puerto Rico
Elsa M. Cora, PhD

The purpose of this study is to investigate why levels of p110-sErbB1/EGFR (an epidermal growth factor receptor molecule shown to be amplified or overexpressed in ovarian cancer) vary significantly between early stage (I/II) and late stage (III/IV) ovarian cancer. The findings could be translated into detecting ovarian cancer earlier than current techniques.

**Development of a Murine Model for Ovarian Cancer**
Virginia Mason Research Center, Seattle, Washington
Brad Nelson, PhD

Despite great success with mouse models of breast, prostate, and colorectal cancer, a similar model has yet to be developed for ovarian cancer, which greatly limits basic research on this disease. Pilot funding was awarded to Dr. Nelson to develop a mouse model for ovarian cancer. In the future, such an animal model is expected to facilitate a wide variety of studies relevant to ovarian cancer, including investigations into the basic biology and natural history of the disease, screening and early detection, diagnosis, chemotherapy, immunotherapy, the role of angiogenic factors, and mechanisms of metastasis.

*The work achieved with Marsha Rivkin Center funding allowed Dr. Nelson to successfully apply for an Idea Grant from the Department of Defense to increase the scope of this work.*

**Oncogene Modulation of Beta-Tubulin Expression: A Mechanism for Resistance to Taxane Chemotherapy**
University of Washington, Seattle, Washington
R. Bruce Montgomery, MD

Dr. Montgomery used pilot study funds to begin collecting data on the expression of HER-2/neu and EGFRvIII, antibodies found in serum of women with ovarian cancer, and their importance in causing drug resistance in ovarian cancer patients. Funds provided by the Marsha Rivkin Center helped poise this work to move forward to phase I clinical trials.

**Ovary-Specific Cell Death Regulator, Boo/Diva in Ovarian Cancer**
Fred Hutchinson Cancer Research Center, Seattle, Washington
Ruey-min (Raymond) Lee, MD

Dr. Raymond Lee used pilot funds to begin investigating a relatively new mouse gene (Boo/Diva), a cell death regulator. Dr. Lee explored this gene's expression and its correlation with enhanced or reduced sensitivity of ovarian cancer cell lines to chemotherapeutic agents.