News Releases

August 24, 2011

UH Cancer Center and the Queen's Medical Center Receive Major Grant for Liver Cancer Research
Scientists Aim to Tackle Hawaii’s Liver Cancer Problem With Improved Detection

HONOLULU – Two scientists from the University of Hawaii Cancer Center and The Queen’s Medical Center have received a five-year $2.3 million grant from the National Cancer Institute to develop novel methods that can better detect liver cancer through the joint analysis of gene expression and imaging data of the liver. Co-leaders of the study are Gordon Okimoto, Ph.D., a research scientist at the UH Cancer Center, and Sandi Kwee, M.D., director of positron emission tomography (PET) research at The Queen’s Medical Center.

Researchers will utilize positron emission tomography, or PET, to measure the levels of specific molecules in the body that have the potential to detect the presence of liver cancer. Additionally, they will profile global gene expression patterns in cancer-prone and normal tissue samples obtained from the imaged liver and create a catalog of novel cancer-related molecules that may aid in the early detection of liver cancer and serve as drug targets for the personalized treatment of the disease. "By improving our ability to detect liver disease and cancer at an earlier stage, we can greatly reduce deaths and improve patient outcomes," said Kwee.

Liver cancer is the third leading cause of cancer deaths in the world. Its incidence is rising in the U.S., particularly in Hawaii where incidence and death rates are the highest nationally. People infected with hepatitis viruses are more prone to developing liver cancer than the rest of the population, and some of the highest hepatitis rates in the world exist in Asia. Consequently, Asian immigrants who move to Hawaii are more likely to be carriers of the virus.

States Okimoto, "Competition for federal funding of cancer research is intense, and we are fortunate to receive this award. This grant represents collaborative research at its best and showcases the high level of science that we are conducting here in Hawaii." Fellow study investigators include Linda Wong, M.D., Brenda Hernandez, Ph.D., Naoky Tsai, M.D. and Owen Chan, M.D., Ph.D. , from the UH Cancer Center. This is the first funded research project of the Hawaii Cancer Consortium, an entity formed last year to promote collaboration among state partners engaged in translational cancer research. A primary goal of the Hawaii Cancer Consortium is to accelerate the translation of new findings in cancer research to the clinics for the benefit of patients in Hawaii, the Pacific Basin and beyond.