Lustgarten Foundation Opens Laboratory at Johns Hopkins Focused on Early Detection and Genetics of Pancreatic Cancer

WOODBURY, N.Y., January 23, 2019 —The Lustgarten Foundation announced today the opening of its fourth dedicated pancreatic cancer research laboratory at Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins in Baltimore, Maryland. The laboratory at Johns Hopkins University will join three other Lustgarten Foundation dedicated pancreatic cancer research laboratories, which include Cold Spring Harbor Laboratory, Dana-Farber Cancer Institute, and Massachusetts Institute of Technology.

Led by Dr. Bert Vogelstein, one of the most cited scientists and Director of the Ludwig Center, Clayton Professor of Oncology and Pathology and a Howard Hughes Medical Institute investigator at The Johns Hopkins Medical School and Sidney Kimmel Comprehensive Cancer Center, the Lustgarten Laboratory at Johns Hopkins will leverage its expertise in early detection to intercept pancreatic cancer at an earlier stage when patients may be surgical candidates and will develop novel therapeutic approaches to treat pancreatic cancer based on genetic alterations.

“Early detection is how we are going to change the statistics for pancreatic cancer patients and create more long-term survivors,” Dr. Vogelstein said. “We are hopeful that our research will mean that deaths from pancreatic cancer will be less common, thanks to the Lustgarten Foundation’s support.”

Dr. Vogelstein and his team developed CancerSEEK, a blood test for the detection of pancreatic cancer (and other cancers), that has been given “Fast-Track” status for pancreatic (and ovarian) cancers by the Food and Drug Administration (FDA), which will accelerate the approval process and may lead to a method to detect pancreatic cancer earlier for patients.

In parallel, Dr. Vogelstein’s team developed a Comprehensive Cyst (CompCyst) test, which combines clinical, radiological, genetic and protein marker information to distinguish if pancreatic cysts, which can be common amongst the general population, can develop into pancreatic cancer or remain as benign cysts.

Based on preliminary findings, the main objectives of the early detection studies for the Lustgarten Laboratory at Johns Hopkins will be:

- Increase the CancerSEEK sensitivity (the ability to correctly identify those with the disease) for the detection of pancreatic cancer by evaluating new protein biomarkers and improving the specificity (the ability to correctly identify those without the disease) through the evaluation of circulating tumor DNA (ctDNA) detection.
• Further develop the CompCyst test into a clinically approved test for many people harboring pancreatic cysts.

The second area of investigation for Dr. Vogelstein's dedicated laboratory will be the development of new therapeutic approaches that target the genetic alterations in pancreatic cancer, called MANAs (Mutation-Associated NeoAntigens). A newly developed method by Dr. Vogelstein's team, called MANAFESTA, can help monitor the effectiveness of immunotherapy in patients being treated for cancer by examining a patient’s MANA-specific T-cells.

To develop new treatment approaches for pancreatic cancer that target the genetic alterations, the Lustgarten Laboratory at Johns Hopkins will work to:

• Develop MANAs antibodies for KRAS and TP53, the most common genetic mutations found in pancreatic cancer patients.

• Identify T-cell receptors that can bind to mutant KRAS and TP53 peptides, leading to a new targeted therapy.

About the Lustgarten Foundation
The Lustgarten Foundation is America's largest private funder of pancreatic cancer research. Based in Woodbury, N.Y., the Foundation supports research to find a cure for pancreatic cancer, facilitates dialogue within the medical and scientific community, and educates the public about the disease through awareness campaigns and fundraising events. Since its inception, the Lustgarten Foundation has directed $165 million to research and assembled the best scientific minds with the hope that one day, a cure can be found. Thanks to separate funding to support administrative expenses, 100 percent of every donation goes directly to pancreatic cancer research. For more information, please visit www.lustgarten.org.

About Johns Hopkins Kimmel Cancer Center
The Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins, based in Baltimore, Maryland, is one of 49 centers designated by the National Cancer Institute as a comprehensive center. Learn more at www.hopkinscancer.org.