A. James Moser, M.D.

Professor of Surgery, Harvard Medical School Co-Director, Pancreas and Liver Institute Pancreas, Biliary, Liver, Minimally Invasive Surgery

We cannot begin to thank you, your loved ones, and your friends for your generous donations to <u>The Woiner</u> Foundation on behalf of pancreatic cancer patients everywhere.

Your generous donations have enabled a multidisciplinary team of researchers at Beth Israel Deaconess Medical Center (Boston, MA) and Harvard Medical School (Boston, MA) to make significant progress in our joint efforts to improve diagnosis and treatment for pancreatic cancer. Your vision of a world without pancreatic cancer has galvanized efforts spanning the United States, the Netherlands, Switzerland, Finland, Colombia, and Peruspanning the fields of surgery, radiology, radiation oncology, biostatistics, immune-oncology, decision analysis, epidemiology, and the Harvard School of Public Health. We are enormously in your debt.

In 2019 alone, we have published eight original research articles:

The Woiner Foundation funded a worldwide demonstration that minimally-invasive pancreas surgery reduces major complications compared to the traditional method, allowing many more patients to receive the benefits of improved recovery across the globe:

"International Validation of Reduced Major Morbidity After Minimally Invasive Distal Pancreatectomy Compared With Open Pancreatectomy, Annals of Surgery 2019."

Presented publicly at:

- The Pancreas Club Annual Meeting San Diego CA May 2019
- European AHPBA Amsterdam Netherlands 2019
- Alpine Liver and Pancreatic Surgery Meeting 2018, Madonna di Campiglio Italy

Novel techniques to reduce pain and hospitalization after surgery for pancreatic tumors:

"Transversus abdominis plane block reduces pain and narcotic consumption after robot-assisted distal pancreatectomy" HPB 2019

"Does surgical approach affect outcomes of enucleation for benign and low-grade pancreatic tumors? An ACS-NSQIP evaluation" HPB 2019

Methods to teach surgeons to perform these new surgical procedures safely and proficiently using a "coaching" program similar to the way airlines train new pilots

"Procedure-specific Training for Robot-assisted Distal Pancreatectomy" Annals of Surgery 2019 Presented at the Pancreas Club Annual Meeting San Diego CA May 2019

Improved early diagnosis of pancreatic cancer through novel imaging techniques to detect pancreatic cancer and its complications sooner:

"DWI of Pancreatic Ductal Adenocarcinoma: A Pilot Study to Estimate the Correlation With Metastatic Disease

Beth Israel Deaconess Medical Center



Potential and Overall Survival." Am J Roentgenology 2019.

"Incidental pulmonary embolism in pancreatic ductal adenocarcinoma: Impact of tumor and AJCC stages at initial staging CT." Pancreatology 2019

Proof that patients with pancreatic cancer play an enormous, and previously unrecognized, role in the eventual success or failure of efforts to invent new early diagnostic blood tests (biomarkers) for this awful disease: "The Importance of Altruism to Biomarker Development for Pancreatic Cancer."

This project was performed by a Lexington High School senior whose aunt died of pancreatic cancer. He received 4th place in the regional Intel Prize Competition for his work, that was subsequently presented at the annual American Society of Clinical Oncology meeting in Chicago IL June 2019.

The Woiner Foundation provides development funding for important three long-term projects:

- To develop a personalized dendritic cell vaccine for pancreatic cancer in collaboration with Dr. David Avigan, MD, an immune-oncology pioneer in vaccine treatment for leukemia, and
- To improve cure rates following chemotherapy, radiation, and surgery for pancreatic cancer (Dr. Hanna Sapaenen and her pancreatic cancer group at Helsinki University Hospital, Finland), and
- To discover novel MRI techniques to monitor treatment response for pancreatic cancer so that different treatments may be tried before it becomes too late (Drs. Koenraad Mortele and Khoschy Schawkat)

Your Harvard Medical School Pancreas and Liver Institute research team:

A. James Moser, MD: Professor of Surgery

Koenraad Mortele, MD: Associate Professor of

Radiology

Matthew Abrams, MD: Instructor in Radiation

Oncology

Khoschy Schawkat, Swiss Radiology Society

Research Fellow

Gabi Cervoni, MD: Surgery Research Fellow

Katie Stackhouse, MD: Surgery Research Fellow

Juanita Rodriguez, MD: Surgery Research Fellow

Ashlyn Whitlock, MD: Surgery Research Fellow

Betty Liu, MD: Surgery Research Fellow

Carlos Cordova, MD: Surgery Research Fellow