

The Lustgarten Foundation Announces 2023 Innovation and Collaboration Program Grants Kacper Rogala, DPhil, MRes, Stanford University School of Medicine & David Kashatus, PhD, University of Virginia School of Medicine, Awarded 2023 Innovation and Collaboration Program Grants

WOODBURY, N.Y., July 24, 2023 -- The Lustgarten Foundation announced today that the 2023 Innovation and Collaboration Program grants will be awarded to <u>Kacper Rogala</u>, DPhil, MRes, Assistant Professor of Structural Biology and of Chemical and Systems Biology, Stanford University School of Medicine, for his study "Establishing Choline Transport as Selective Vulnerability of Pancreatic Cancers," and <u>David Kashatus</u>, PhD, Associate Professor, Microbiology, Immunology, and Cancer Biology, University of Virginia School of Medicine, for his study "The Role of Lipid Droplets in Pancreatic Cancer Metastasis."



"The Lustgarten Foundation's generosity will allow my team to unravel 3D microscopic mechanisms that control the opening and closing of nutrient gates inside cellular stomachs, disabling the release of digested food and the generation of new cancer cells," said Dr. Rogala. "We are committed to finding innovative solutions and ideas that are critically needed to combat pancreatic cancer."

After chemotherapy or radiation treatment, some cancer cells can survive and cause the cancer to return. Rogala's study will investigate a new way to fight cancer that will stop cancer cells from releasing digested "food," effectively cutting off nutrients they need to grow. These cancer cells have tiny gates that let the digested nutrients out of their cellular stomachs. By developing drugs that block the release of "food," cancer cells will have no way to regenerate and will eventually die off. This approach is different from chemotherapy because it only affects the cancer cells, leaving normal cells unharmed, and aims to manage cancers that don't respond to traditional chemotherapy.

The Lustgarten Foundation's Innovation and Collaboration Program provides seed funding for investigators who have highly innovative research with significant potential to accelerate the mission to transform pancreatic cancer into a curable disease. Each recipient is awarded a one-year, \$110,000 grant for their pancreatic cancer research.



"I want to thank the Lustgarten Foundation for their support," said Dr. Kashatus. "This funding will allow us to examine the issue of pancreatic cancer metastasis to better understand how cancer cells adapt to challenges, providing the opportunity to develop therapies to target the metastatic process and improve patient outcomes."

Most cases of pancreatic cancer recur after surgery and treatment, contributing to a 5-year survival rate of just 12%. There are different factors of the metastatic process, the way in which cancer spreads from a primary site to a secondary site

within the body, that have distinct challenges, and some pathways can have various roles throughout the process. Kashatus' study will explore how understudied cellular structures, called lipid droplets, contribute to different steps in the metastatic process. Lipid droplets help cells respond to stress by storing energy and sequestering toxic molecules. Dr. Kashatus's team hypothesizes that they play a vital role in the metastatic spread as they change in response to stress and can help tumor cells adapt to different environments. If successful, this research will potentially identify novel therapeutic opportunities to target metastasis.

"We believe research is fundamental to realizing the Lustgarten Foundation's vision of a future with pancreatic cancer cures," said Linda Tantawi, Lustgarten Foundation CEO, "Dr. Rogala's and Dr. Kashatus' projects are tackling pancreatic cancer from a different perspective than what we typically see and reflect a promising shift in how we understand, prevent, and treat this devastating disease."