Grant Awarded to Better Define Gastric Cancer Risks of the Hereditary Diffuse Gastric Cancer Gene CTNNA1

(NEW YORK, Sept. 29, 2021) – The DeGregorio Family Foundation has awarded $250,000 to Bryson Katona, MD, PhD, Assistant Professor of Medicine and Director of the Gastrointestinal Cancer Genetics Program at the University of Pennsylvania Perelman School of Medicine. Dr. Katona is a physician-scientist who seeks to better define the gastric cancer risks associated with the CTNNA1 gene in order to aid both patients and medical professionals in their abilities to manage the cancer risks associated with the gene.

Hereditary diffuse gastric cancer syndrome (HDGC), the most common cause of familial diffuse gastric cancer, leads to substantially increased gastric cancer risk that often necessitates the prophylactic removal of the stomach for cancer prevention. The CDH1 gene was the first gene found to be associated with HDGC and remains the most common and best characterized gene associated with this condition. More recently, the CTNNA1 gene has also been shown to be associated with HDGC; however, given limitations in the amount of available data, the true gastric cancer risk for carriers of an abnormal CTNNA1 gene remain uncertain.

With support from the DeGregorio Family Foundation Grant Award, Dr. Katona’s lab plans to conduct an international study to allow collection of cancer information from families who carry a CTNNA1 gene variant, which will allow him and his team to calculate the cancer risks associated with this gene. Secondly, they will utilize gastric organoids, which are novel three-dimensional models of gastric tissue that are derived directly from biopsies of the stomach, to study how different changes in the CTNNA1 gene may contribute to gastric cancer growth.

"This award will help inform future clinical care as well as cancer risk reduction strategies for CTNNA1 carriers."

-Dr. Bryson Katona

In 2020, gastric and esophageal cancers combined to kill over 1.3 million people worldwide—making it the second-leading cause of cancer-related death. Patients continue to face poor prognoses following gastric and esophageal cancer diagnoses due to their chemo-resistant behavior and ability to metastasize.
The DeGregorio Family Foundation, founded in 2006 after a 10th member of the DeGregorio family died of stomach cancer, has raised more than $5 million to fund innovative research focused on curing gastric and esophageal cancers. Lynn DeGregorio, President and Founder, stated, “We are so thankful for the support we have received and honored to award grants to projects that have the capacity to change the paradigm for those impacted by these diseases.”

Commenting on his award, Dr. Katona said, “I am absolutely thrilled to be selected as a recipient of the DeGregorio Family Foundation Grant Award. This award will be instrumental in advancing our understanding of the hereditary diffuse gastric cancer syndrome risk gene CTNNA1, which will help inform future clinical care as well as cancer risk reduction strategies for CTNNA1 carriers.”

The DeGregorio Family Foundation funds innovative research focused on curing gastric and esophageal cancers—click here to donate and...

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