

Harvard, Merck to discover new immuno-oncology targets

13 August 2019 | News

Harvard, Merck to collaborate on research led by Harvard immunologist Arlene Sharpe, seeking to identify new pathways for the treatment of cancer



Harvard University and Merck are launching a collaboration that will provide significant research funding for up to four years to support immuno-oncology research led by Arlene Sharpe, MD, PhD, at Harvard Medical School (HMS). Sharpe, the George Fabyan Professor of Comparative Pathology and chair of the HMS Department of Immunology, will collaborate with researchers at Merck on a major project aiming to discover novel aspects of the immune system that may be targeted in future treatments for cancer.

“This collaborative project aims to discover and validate novel regulators of immune responses,” said Dr. Sharpe. “Immunotherapies such as checkpoint inhibitors have revolutionized the treatment of cancer, but my lab is deeply interested in understanding why some patients do not respond or develop resistance to those interventions. My hope is that by defining mechanisms that inhibit immune responses to tumors, we will identify very important druggable targets and new approaches to improve cancer immunotherapy.”

The funding will support the work of scientists in the lab of Dr. Sharpe, who is a renowned leader in the field of tumor immunology. She is a member of the National Academy of Sciences and the National Academy of Medicine, and the recipient of numerous awards including the Warren Alpert Foundation Prize in 2017 for her contributions to the discovery of the PD-1 pathway.

“Crucial insights into patient responses and outcomes may be gained through the study of fundamental biological mechanisms,” said Isaac Kohlberg, Harvard’s Chief Technology Development Officer and Senior Associate Provost. “The complexity and promise of immuno-oncology presents a prime opportunity for Harvard’s top scientists to advance discovery through an academic-industry collaboration. Through this project, the Sharpe Lab is setting its sight on innovations that may contribute to dramatic improvements in patient care.”

Under the agreement spearheaded by Harvard’s Office of Technology Development, Merck will have the option to negotiate an exclusive license to innovations arising from the research collaboration to develop these discoveries toward potential treatments for patients.

“Collaboration with leading scientific groups is an integral part of Merck’s discovery strategy,” said Dr. Nick Haining, vice

president for oncology discovery at Merck Research Laboratories. “We look forward to working with Dr. Sharpe’s team to investigate new ways to harness the immune system for therapeutic advances.”