



Research Funded by the Melanoma Research Foundation's (MRF) CURE OM Initiative Published in *Nature Genetics*

WASHINGTON, DC – New research offers potential therapeutic points of intervention for a difficult to treat rare form of melanoma—uveal melanoma. Uveal melanoma is a form of ocular melanoma (OM), a rare subtype that affects melanocytes (pigment cells) in the eye. This research, funded in part through the Melanoma Research Foundation's (MRF) CURE Ocular Melanoma (CURE OM) initiative, was recently published in *Nature Genetics*, an internationally recognized peer-reviewed academic journal. Following a rigorous peer-review process overseen by the MRF's [Scientific Advisory Committee](#), Hunter Shain, PhD received a Career Development Award in 2017 for his proposal entitled "The genetic evolution of uveal melanoma." Dr. Shain is an Assistant Professor of Dermatology at the University of California, San Francisco School of Medicine and has previously published research in cutaneous (skin) melanoma.

Dr. Shain's study is the first of its kind in that it analyzed primary uveal melanoma tumors in the eye with patient-matched metastases. While primary tumors have been previously sequenced, very few studies of this kind have focused on patient-matched metastases due to the challenges of acquiring tissues from the later phases of uveal melanoma progression. A comprehensive study has never been accomplished until now and this research will help to overcome a large barrier to progress in OM science, which has not kept pace with the significant breakthroughs and greatly improved outcomes seen in cutaneous melanoma.

"In furtherance of our mission to support the most innovative melanoma science, especially that which drives critically needed progress for rare subtypes like ocular melanoma, the MRF is proud to support Dr. Shain's research efforts," said Kyleigh LiPira, MRF CEO. "Publication in a highly prestigious journal like *Nature Genetics* reflects the magnitude of this groundbreaking research project and the positive impact it will have on the scientific community."

By observing previously unknown mutations that reveal more about the disease progression of metastatic uveal melanoma, a process that is currently poorly understood, this research lays the foundation for future therapeutic studies in disease staging and prognosis. Gaining this critical knowledge is a necessary step in the development of more effective therapies for patients. Currently, there are no approved treatments for metastatic uveal melanoma.

"While we have learned a lot about the unique genetic features of uveal melanoma in the past 10 years, the analysis performed by Hunter and colleagues provides much needed insight into the sequential steps that uveal melanoma takes in leaving the eye and establishing metastases in the liver. Since treating or even preventing liver metastases is our ultimate goal, this paper gives us a blueprint for targeting the molecular features that define the life-threatening manifestations of this disease," said Keith Flaherty, MD, Director of Developmental Therapeutics at Massachusetts General Hospital Cancer Center and founding Co-Chair of the CURE OM Scientific Steering Committee.

The MRF commends Dr. Shain on this accomplishment and is proud to support his work to bring life-saving advances to the OM community. Since 1998, the MRF has funded over \$17 million in melanoma research, including more than \$1.5 million specifically for OM, in addition to

leading groundbreaking scientific initiatives working towards to a better understanding, more effective treatments and, one day, a cure for melanoma.

###

About Melanoma

Melanoma is a cancer of melanocytes, or pigment cells, in the body. The majority of melanomas occur on the skin; but melanoma can also occur in the eye (ocular, or uveal melanoma), in mucous membranes (mucosal melanoma), or even beneath fingernails or toenails. Ocular melanoma (OM) is the most common form of eye cancer in adults, diagnosed in approximately 2,000 Americans each year. In 50% of cases OM will spread to other areas of the body, most often the liver. There are currently no approved treatments for metastatic OM and the prognosis is generally poor, making new research and clinical trials a critical priority.

About the MRF and its CURE OM Initiative

The Melanoma Research Foundation (MRF) is the largest independent organization devoted to melanoma. Committed to the support of medical research in finding effective treatments and eventually a cure for all forms of melanoma, the MRF also educates patients and physicians about prevention, diagnosis and the treatment of melanoma. The CURE Ocular Melanoma (CURE OM) initiative was founded in 2011 to increase awareness, education and research funding for ocular melanoma. To date, the MRF's CURE OM initiative has funded over \$1.5 million in ocular melanoma research and pioneered international collaborations, groundbreaking scientific initiatives and innovative patient support resources. The MRF's website is the premier source for melanoma information seekers. More information is available at www.melanoma.org and www.cureom.org. Follow CURE OM on [Facebook](#) and [Twitter](#).