



2018 Research Announcement

FOR IMMEDIATE RELEASE

Washington, DC

Casey Eye Institute Researcher Awarded \$150,000 to Study Circulating Hybrid Tumor Cells as a Prognostic Biomarker for Ocular Melanoma

The Ocular Melanoma Foundation (OMF), in collaboration with the American Association for Cancer Research (AACR), announced at the 2018 AACR Annual Meeting in Chicago the recipient of the \$150,000 AACR-Ocular Melanoma Foundation Career Development Award. The award was funded by OMF with support from the Kammerman Family of Binghamton, New York.

For her proposal entitled, "Circulating Hybrid Cells as a Prognostic Biomarker for Uveal Melanoma," Alison H. Skalet, M.D., Ph.D. of Oregon Health & Science University's Casey Eye Institute received the two year research grant to deepen her team's work on ocular melanoma (OM), a rare cancer of the eye associated with high rates of metastatic disease, and the predictive power of derivative circulating tumor cells in predicting patient outcomes.

Following the discovery of a novel population of previously unrecognized circulating tumor cell – so-called circulating hybrid cells, or CHCs – Dr. Skalet's goal is to leverage these CHCs to find more effective and less risky prognostic indicators than the current practice of molecular testing conducted from tissue collected via fine needle biopsy. CHCs retain behavior of the parent cells, resulting in tumor cells with the ability to invade and seed a metastatic site, which for OM patients is typically the liver. After detecting CHCs in a variety of human cancers and finding that they significantly outnumber conventionally-detected CTCs and have predictive power for other cancers, Dr. Skalet and her basic science collaborator, Dr. Melissa Wong, are interested in learning whether ocular melanoma patients can benefit from the predictive power of CHCs as seen in pancreatic cancer patients.

The study being funded will investigate CHCs as a prognostic biomarker in OM by evaluating the levels of CHCs across AJCC staging and gene expression profile (GEP) classification. CHCs will be quantified from peripheral blood using immunohistochemistry and digital scanning or flow cytometry in patients undergoing primary treatment for UM. CHC levels will then be correlated to AJCC staging and GEP class. Additionally, Dr. Skalet will determine if CHCs provide sufficient cells for molecular prognostic testing.

Successful completion of the proposed study should provide a new, non-invasive approach to assess metastatic risk in OM patients and open the door to longitudinal monitoring to assist in early detection of metastatic disease and evaluation of treatment response. OMF also hopes that Dr. Skalet's work will validate CHCs as a novel source for OM genetic information which can be obtained non-invasively and serially over time—a liquid biopsy. In the future, investigation of tumor cells could be generated by this novel cellular mechanism, with the potential to open a new conceptual area in UM research, providing biologic insights into the metastatic process and enabling discovery of novel therapeutic targets.





Dr. Skalet, who graciously accepted upon learning of the award and will begin her funded work in July, is currently an Assistant Professor at Casey Eye Institute in Portland, Oregon. She has a bachelor degree from Tulane and received both her Ph.D. and M.D. degrees from the University of Pennsylvania. She was certified in 2012 by the American Board of Ophthalmology and was nominated for the OMF-AACR grant by David Wilson, Chairman of Ophthalmology.

This is the 5th research grant OMF has provided in partnership with the AACR and the 8th grant since its founding 14 years ago by Dr. Robert Allen, bringing the total research commitment from OMF to over \$550,000. To date, OMF has raised over a million dollars to support OM patients and provided needed funding for OM awareness and research. OMF's research initiative has two goals: first, continue to research innovative ways to improve diagnosis and treatment options for OM patients and 2) support and encourage a doctor to choose OM as their specialty field.

About OMF

The Ocular Melanoma Foundation (OMF) is the leading research and patient support organization focused on eye cancer. OMF was established by Dr. Robert Allen, a renowned eye surgeon who was diagnosed with ocular melanoma (OM), a rare eye cancer diagnosed in 2,000 adults in the U.S. annually. Today, OMF is the #1 destination for uveal melanoma information online and a leading provider of patient education and support programs, including novel assistance programs for patient travel and ocular prosthetics. The 'Eye Am Not Alone' patient retreat is the largest gathering of OM patients and caregivers in the world and OMF has raised over a million dollars towards the fight against eye cancer while partnering closely with the American Association for Cancer Research (AACR) and the Rare Cancer Research Foundation (RCRF) to fund groundbreaking cancer research.

Learn more at ocularmelanoma.org.

##

General inquiries: Miriam Counts, miriam@ocularmelanoma.org

