

Fiscal Year 2020 Melanoma Research Program Challenge Statement

The Melanoma Research Program (MRP) challenges the research community to *redefine* the concept of prevention. Melanomagenesis is a multi-step process initiating from normal melanocytes to dysplasia, through the development of melanoma and metastasis. A new paradigm of prevention may include detection, monitoring, and stopping the initiation of dysplasia, halting the progress to malignancy, blocking micro-metastases, or preventing emergence from tumor dormancy. The MRP acknowledges that each step along the disease process from initiation to metastasis is an opportunity to detect, monitor, and impede progression and to effect a cure. The MRP challenges the research community to prevent melanoma earlier in the disease cycle thus preventing metastasis. The melanoma clinical, research, and patient community traditionally view prevention as the use of sunscreen/blockers to protect the melanocyte from harmful ultraviolet (UV) radiation. The MRP recognizes the usefulness of this strategy while tasking the research community to redefine prevention to include the entire melanomagenesis process. This is especially critical in rare subtypes of melanoma where traditional sunscreen blockers are not applicable. Rare melanoma subtypes (i.e. acral, uveal, and mucosal) may not be initiated by exposure to ultraviolet radiation like cutaneous melanoma. Taken together, the MRP looks to shift the paradigm of prevention of all types of melanoma by investing in research studies focused on eliminating the progress of this deadly disease whether it is cutaneous melanoma or a rare subtype.

Melanomagenesis

