

MRA Announces \$12.6 Million Investment in Cutting Edge Melanoma Research

The Melanoma Research Alliance funds a diverse array of scientists working across the entire spectrum of melanoma research

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The Melanoma Research Alliance (MRA), the world's leading non-profit funder of melanoma research, announced its \$12.6 million commitment to fund melanoma research supporting more than 30 scientists at leading academic and medical institutions in the United States and across the globe. Melanoma, the deadliest form of skin cancer, remains a public health threat. This year, over 100,000 people in the United States will be diagnosed with melanoma and one person, every hour of every day will die from melanoma.

"MRA is a world leader in advancing transformational science that has caused paradigm shifts in what it means to be diagnosed with and treated for melanoma," said MRA's Chief Executive Officer Marc Hurlbert, PhD. "When MRA was founded in 2007, melanoma research was stagnant and treatment options were few. Today, a person with advanced melanoma has access to 17 FDA-approved treatments. MRA's progress is not just benefiting patients with melanoma, it is also transforming the field of oncology. We remain grateful to our supporters who made another groundbreaking year of research investments possible."

"Melanoma research has made tremendous progress over the last 15 years," said MRA Chief Science Officer Joan Levy, PhD. "Even as we've made significant, lifesaving advances in understanding and treating melanoma, nearly 50% of patients with advanced melanoma do not respond to current treatments. Our focused research agenda aims to improve treatment options, unravel the complexities of rare melanomas, understand why melanoma metastasizes so rapidly, and develop more tools and technologies for better early detection. At MRA, we remain committed to supporting a global brain trust of scientists who are leading the charge."

MRA funds a diverse array of scientists working across the entire spectrum of melanoma research, in the following high-priority focus areas:

Advancing Immunotherapy and Treatment Options

While half of advanced melanoma patients benefit from current treatments, MRA-funded researchers are actively exploring new therapies and novel immune interventions to bridge the gap for those whose melanomas are resistant to currently available therapies. MRA's funded research is investigating a better understanding of causes leading to the development of resistance and various types of immunotherapy strategies to fight melanoma and prevent recurrence.

Unraveling the Complexities of Rare Melanomas

Patients with rare melanomas – acral, mucosal, uveal, and pediatric – face unique challenges ranging from later diagnoses, poorer prognoses, and a lack of treatment options designed specifically to address the unique features of their tumors. Melanoma can be diagnosed in anyone, but rare melanomas, in particular acral and mucosal, are proportionally more common among people with darker skin tones, such as African Americans, Asians, and Hispanics. MRA's investments in rare melanoma research have begun to advance the field's understanding of the biology of these rare melanomas and their molecular differences from cutaneous (skin) melanoma. MRA is the largest non-profit funder of rare melanoma research in the world.

Tackling Brain Metastases

Melanoma has a high propensity to metastasize and spread to the brain and other central nervous system areas. Approximately 60% of patients with advanced melanoma develop brain metastases during their disease. MRA is seeking answers to why melanoma spreads to the brain and can go dormant, evading immune system detection, and what triggers melanomas out of that dormancy to initiate growth. MRA research funding is focused on having a better understanding and developing treatments for brain metastases and ensuring clinical trials are inclusive of these patients.

Harnessing the Power Artificial Intelligence and Machine Learning

With a shortage of dermatologists nationwide and many at-risk individuals lacking access to necessary care, innovative solutions are urgently needed. MRA-funded researchers are pioneering the development of AI and machine learning algorithms, enabling consumers to conveniently monitor suspicious moles using their smartphones. Additionally, MRA is dedicated to equipping primary care practitioners with advanced tools to swiftly identify potentially concerning lesions and streamline the patient referral process to dermatologists. MRA's Precision Detection and Diagnosis Initiative supports providing dermatologists and pathologists with AI and machine learning algorithms designed to enhance diagnostic accuracy, ensuring that patients receive optimal care and treatment.

The Microbiome's Role in Improving Melanoma Treatment Responses

MRA-funded investigators are focusing on research connecting nutrition, the microbiome, and the immune system axis as a significant contributor in a patient's response to immunotherapy. MRA's investment in microbiome research is exploring how lifestyle factors including diet, exercise, stress, and anxiety as well as the trillions of microorganisms living with the gut microbiome, can be modified to improve outcomes for patients with melanoma.

2024 Melanoma Research Alliance Grant Awards

Young Investigator Awardees

The MRA Young Investigator Awards empower the next generation of early career researchers. In addition to funding bold new ideas, MRA's Young Investigator Award program is also a training ground for researchers through the interaction with a senior melanoma investigator serving as a mentor as they prepare for the future of their science careers.

Delineating T-cell migratory patterns in immunotherapy-treated melanoma

Ressler-MRA Young Investigator Award

Katie Campbell, PhD, The Regents of the University of California, Los Angeles

The role of aging in immune-regulated reactivation from metastatic melanoma

Merck-MRA Young Investigator Award

Mitchell Fane, PhD, The Research Institute of Fox Chase Cancer Center

Elucidating metabolic modulators to enhance Treg-TME melanoma immunotherapy

Jill & Jay Bernstein-MRA Young Investigator Award

Ariella Glasner, PhD, Technion Israel Institute of Technology

Overcoming resistance to immune checkpoint blockade therapy with PSGL-1

Bristol Myers Squibb-MRA Young Investigator Award

Jennifer Hope, PhD, Drexel University

Spatial vascular patterns and immune exclusion mechanisms in melanoma

Wayne Stinchcomb Big Orange Foundation-MRA Young Investigator Award

Minah Kim, PhD, Columbia University Irving Medical Center

Targeting suppressive macrophages to overcome resistance to immunotherapy

Kline Hill Partners - MRA Young Investigator Award

Brian Miller, MD, PhD, The University of North Carolina at Chapel Hill

Harnessing tissue-resident lymphocytes as a melanoma biomarker

MRA Young Investigator Award

Joshua Moreau, PhD, Oregon Health & Science University – OHSU

Tumor-Reactive T Cells to Treat Melanoma Leptomeningeal Disease

Leveraged Finance Fights Melanoma (LFFM)-MRA Young Investigator Award

Yolanda Pina, MD, H. Lee Moffitt Cancer Center & Research Institute, Inc

Harnessing the tumor immune microenvironment of brain metastases

ASTRO-MRA Young Investigator Award in Radiation Oncology

Lisa Sudmeier, MD, PhD, Emory University

Targeting BRAF mutated melanoma with CD4+ T cells

MRA Young Investigator Award

Joshua Veatch, MD, PhD, Fred Hutchinson Cancer Center

Pilot Awardees

The MRA Pilot Awards provide early support for conceptually novel, exploratory, high risk and high impact projects with the potential to change the face of melanoma research and treatments.

A hyperactive heterodimeric histone methyl transferase in melanoma

MRA Pilot Award

Bassem Al-Sady, PhD, The Regents of the University of California, San Francisco

Targeting YAP1-TEAD in acral melanoma

The Black Family-MRA Pilot Award

Andrew Aplin, PhD, Thomas Jefferson University

Recombinant modified vaccinia virus Ankara for acral melanoma immunotherapy

The Black Family-MRA Pilot Award

Liang Deng, MD, PhD, Memorial Sloan Kettering Cancer Center (MSK)

Harnessing pDC-derived exosomes for enhanced melanoma immunotherapy

unWINE'd at Del Webb Riverlights - MRA Pilot Award

Aimin Jiang, PhD, Henry Ford Health System

CARkines: A path towards the next generation of T cell therapies

Ressler-MRA Uveal Melanoma Pilot Award

Cristina Puig Saus, PhD, The Regents of the University of California, Los Angeles

“Piloting” cellular therapy in uveal melanoma with Lifileucel

ACIS - MRA Pilot Award in Uveal Melanoma

Alexander Shoushtari, MD, Sloan-Kettering Institute for Cancer Research

Immunotherapeutic cytokine/antibody fusion protein to treat acral melanoma

The Black Family-MRA Pilot Award

Jamie Spangler, PhD, Johns Hopkins University School of Medicine

A molecular driver of exceptional response to immune checkpoint treatments

Leveraged Finance Fights Melanoma (LFFM)-MRA Pilot Award

Hans Widlund, PhD, Brigham and Women's Hospital, Inc.

Team Science Award

The MRA Team Science Awards utilize a multidisciplinary team science approach to foster collaborative research projects with the potential of rapid advancement to the clinic. This award also requires the inclusion of a Young Investigator to participate on the research team and interact with a melanoma mentor.

Molecular alterations and therapeutics for high-risk uveal melanoma

MRA Team Science Award

Anne Bowcock, PhD, Icahn School of Medicine at Mount Sinai

Characterize antigen-presenting astrocytes to inhibit melanoma brain metastasis

The Jane and Daniel Och Family Foundation—MRA Team Science Award

Neta Erez, PhD, Tel Aviv University

Enabling AI for early detection of melanoma in smartphone images

Anna-Maria & Stephen Kellen Foundation - MRA Team Science Award

Allan Halpern, MD, Memorial Sloan Kettering Cancer Center (MSK)

Interrogating the role of CD27-CD8+ T cells in immunotherapy responses

MRA Team Science Award

Frank Hodi, MD, Dana-Farber Cancer Institute

Dissecting neural-like cell states in melanoma brain metastasis

Tara Miller Melanoma Foundation - MRA Team Science Award

Benjamin Izar, MD, PhD, Columbia University Irving Medical Center

Studying acral & mucosal melanoma's cellular networks & immune resistance

MRA Team Science Award generously supported by the Black Family

Matthew Krummel, PhD, The Regents of the University of California, San Francisco

Organoid modeling of melanoma checkpoint inhibitor response and resistance

Leveraged Finance Fights Melanoma (LFFM) - MRA Team Science Award

Calvin Kuo, MD, PhD, The Board of Trustees of the Leland Stanford Junior University

A molecular glue to degrade tumor-surface PD-L1 and improve therapies

Ressler-MRA Team Science Award

Roger Lo, MD, PhD, The Regents of the University of California, Los Angeles

Optimizing the immune mediated-destruction of NRAS mutant melanoma
Mary Jo and Brian Rogers- MRA Team Science Award
Keiran Smalley, PhD, H. Lee Moffitt Cancer Center & Research Institute, Inc

Targeting CTLA-4 to optimize the management of melanoma brain metastasis
Leveraged Finance Fights Melanoma (LFFM) - MRA Team Science Award
Ryan Sullivan, MD, Massachusetts General Hospital (Mass General)

Dermatology Career Development Award

The MRA Dermatology Career Development Award supports early career scientists interested in the prevention, detection, diagnosis, and early intervention of melanoma.

The role of the microbiome and treatment response in rare melanoma subtypes
L'Oreal Dermatological Beauty Division - MRA Dermatology Career Development Award
Florentia Dimitriou, MD, PhD, University of Texas M.D. Anderson Cancer Center

Deep learning pathology image analysis of neoadjuvant treated melanoma
Anna-Maria & Stephen Kellen Foundation - MRA Dermatology Career Development Award
Nigel Maher, PhD, Melanoma Institute Australia

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