

MELANOMA RESEARCH PROGRAM



MISSION: Support development of earlier interventions to enhance mission readiness, diminish melanoma burden and improve quality of life for Service Members and their Families, Veterans and the American public

Congressional Appropriations

FY19–FY24:

\$180M total



“I was completely unfamiliar with medical terminology and biological research principles, so I was

somewhat apprehensive on how well I might do [as a consumer reviewer]. My fears were soon alleviated, and I found the experience to be extremely rewarding. I believe being part of a group with top medical clinicians and researchers evaluating proposals that might be the key to ending uveal and other melanomas is an opportunity unlike any other, and it is a chance to turn an unfortunate diagnosis into a cause for good.”

*Capt. Jon Davis,
U.S. Air Force Veteran, FY19-FY20 and
FY22-FY24 Consumer Peer Reviewer*



SCOPE OF THE PROBLEM

In 2024 in the U.S.: ^{1,2}



Estimated new cases:
100,640



Estimated deaths:
8,290



Invasive melanoma accounted for ~1% of skin cancers, but resulted in the most **skin cancer deaths**

RELEVANCE TO MILITARY HEALTH

5th most common cancer among Veterans³

The incidence of melanoma is **87% higher** among active-duty U.S. military aviators compared to a demographically similar U.S. population⁴

2013-2022 Military Health System Medical Encounters for Melanoma⁵

	Average Patients per Year	Total Outpatient Encounters	Total Hospital Bed Days
Service Members	401	14,859	821
Other DOD Beneficiaries	11,261	391,480	13,249

PROGRAM PRIORITIES

- **Prevention and Interception:** Improve detection and monitoring capabilities, and inhibit melanoma initiation, early dissemination, emergence from tumor dormancy and metastasis.
- **Rare Melanomas:** Support research across the entire cancer research spectrum to address unmet needs and knowledge gaps associated with rare melanomas.
- **Survivorship and Patient Wellness:** Address the physical and/or psychosocial issues related to melanoma diagnosis, treatment and survivorship for melanoma survivors, their families and/or their caregivers.

¹ <https://www.cancer.net/cancer-types/melanoma/statistics>

² <https://seer.cancer.gov/statfacts/html/melan.html>

³ Zullig LL, et al. *Mil Med* 182, no.7, 2017:e1883-e1891.

⁴ Webber BJ, et al. *J Occup Environ Med* 64, no.1, 2022:71-78.

⁵ Defense Medical Surveillance System. The Armed Forces Health Surveillance Branch, Defense Health Agency, Silver Spring, Maryland, 2013-2022, January 2024.



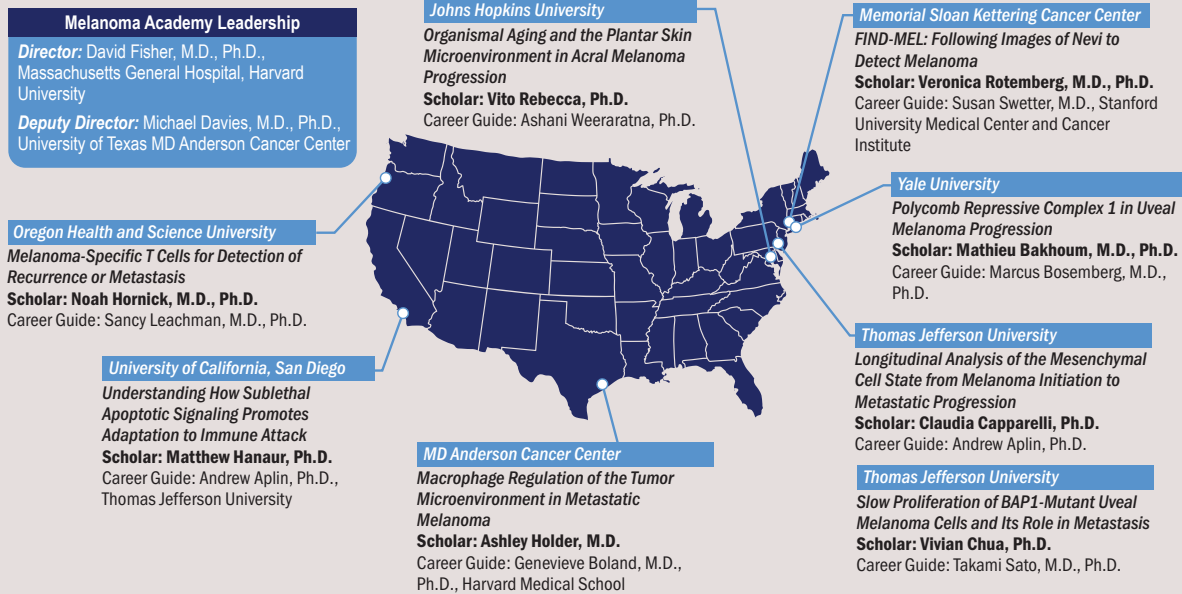
For more information, visit: <https://cdmrp.health.mil/mrp/>

PROGRAM IMPACT AND OUTCOMES

Melanoma Academy: Transforming Melanoma Prevention Research

A virtual, interactive network fostering collaboration and mentorship among independent, early-career investigators and clinicians at the forefront of melanoma research

2 Melanoma Academy Leadership Awards funded in FY21
8 Melanoma Scholar Awards funded FY21-FY23. Each Scholar names an experienced melanoma researcher as their Career Guide to provide guidance on their project.



Ongoing academy research includes:

- **Regulating the Tumor Microenvironment to Prevent Metastatic Melanoma:** Understanding how macrophages, a type of white blood cell, that migrate from the primary tumor to the lymph nodes alter gene expression of immune cells could lead to new treatments to prevent metastases and increase survival.
- **FIND-MEL to Aid in the Prevention of Progression:** An artificial intelligence-based surveillance tool to remotely monitor skin lesions, expanding access to care for patients and aiding in the prevention of progression.

MRP Focused Program Award – Rare Melanomas

Supports a multidisciplinary research program consisting of distinct, but complementary projects that address a critical, unmet need relevant to rare melanomas.

Ongoing rare melanoma research programs include:

- Identifying genetic predispositions that underlie uveal and mucosal melanomas
- Developing small animal models for mucosal melanoma
- Conducting clinical trials to test new treatments for metastatic uveal melanoma

Did You Know?



A study showed that Veterans have an increased prevalence of rare melanoma subtypes.⁶

Subtypes of rare melanomas include:

- **Acral** – forms on the palms, soles of feet, or under finger- or toenails; the most common type of melanoma diagnosed in people of color⁷
- **Mucosal** – starts in the mucosa, the soft tissue that lines organs and other areas throughout the body
- **Uveal** – begins in cells of the eye that make the dark-colored pigment called melanin

⁶ Chang MS, et al. *J Am Acad Dermatol* 87, no. 1, 2022:72-79.

⁷ Qian Y et al. *J Am Acad Dermatol* 84, no.6, 2021:1585-1593.

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