

**US ARMY MEDICAL RESEARCH AND DEVELOPMENT COMMAND (USAMRDC)
CONGRESSIONALLY DIRECTED MEDICAL RESEARCH PROGRAMS
FISCAL YEAR 2023 (FY23) MELANOMA RESEARCH PROGRAM (MRP)**

DESCRIPTION OF REVIEW PROCEDURES

The programmatic strategy implemented by the FY23 MRP called for applications in response to program announcements (PAs) for five award mechanisms released in May 2023:

- Idea Award (IA)
- Focused Program Award – Rare Melanomas (FPA-RM)
- Melanoma Academy Scholar Award (MASA)
- Mid-Career Accelerator Award (MCAA)
- Team Science Award (TSA)

Pre-applications were received for the IA PAs in July 2023 and screened in July 2023 to determine which investigators would be invited to submit a full application. Pre-applications were screened based on the evaluation criteria specified in the PA.

Letters of Intent were received for the FPA-RM, MASA, MCAA, and TSA PAs in August 2023.

Full applications were received for all PAs in September 2023 and peer reviewed in November 2023. Programmatic review was conducted in January 2024.

In response to the IA PA, 139 pre-applications were received and the Principal Investigators (PIs) of 108 of these were invited to submit a full application. 93 compliant applications were received and 13 (14.0%) were recommended for funding for a total of \$9.9 million (M).

In response to the FPA-RM PA, 10 compliant applications were received and 2 (20.0%) were recommended for funding for a total of \$4.5M.

In response to the MASA PA, 14 compliant applications were received and 3 (21.4%) were recommended for funding for a total of \$2.6M.

In response to the MCAA PA, 16 compliant applications were received and 3 (18.8%) were recommended for funding for a total of \$3.7M.

In response to the TSA PA, 31 compliant applications were received and 7 (22.6%) were recommended for funding for a total of \$14.6M.

Submission and award data for the FY23 MRP are summarized in the tables below.

Table 1. Submission/Award Data for the FY23 MRP*

Mechanism	Pre-Applications Received	Pre-Applications Invited (%)	Compliant Applications Received	Applications Recommended for Funding (%)	Total Funds
IA	139	108 (78%)	93	13 (14.0%)	\$9,912,154

*These data reflect funding recommendations only. Pending FY23 award negotiations, final numbers will be available after September 30, 2024.

Table 2. Submission/Award Data for the FY23 MRP*

Mechanism	Compliant Applications Received	Applications Recommended for Funding (%)	Total Funds
FPA-RM	10	2 (20.0%)	\$4,511,405
MASA	14	3 (21.4%)	\$2,560,693
MCAA	16	3 (18.8%)	\$3,647,594
TSA	31 [†]	7 [‡] (22.6%)	\$14,561,199
Totals	71	15 (21.1%)	\$25,280,891

*These data reflect funding recommendations only. Pending FY23 award negotiations, final numbers will be available after September 30, 2024.

[†]31 applications representing 81 potential awards

[‡]7 applications representing 18 potential awards

THE TWO-TIER REVIEW SYSTEM

The USAMRDC developed a review model based on recommendations of the 1993 Institute of Medicine (IOM) (now called the National Academy of Medicine) of the National Academy of Sciences report, *Strategies for Managing the Breast Cancer Research Program: A Report to the Army Medical Research and Development Command*. The IOM report recommended a two-tier review process and concluded that the best course would be to establish a peer review system that reflects not only the traditional strengths of existing peer review systems, but also is tailored to accommodate program goals. The Command has adhered to this proven approach for evaluating competitive applications. An application must be favorably reviewed by both levels of the two-tier review system to be funded.

THE FIRST TIER—Scientific Peer Review

Peer review was conducted virtually for IA, FPA-RM, MASA, MCAA, and TSA applications in November 2023 by 14 panels of researchers, clinicians, and consumer advocates.

Each peer review panel included a Chair, an average of eight scientific reviewers, an average of two consumer reviewers, and a nonvoting Scientific Review Officer. The primary responsibility of the panelists was to review the technical merit of each application based upon the evaluation criteria specified in the relevant PA.

Individual Peer Review Panels

The Chair for each panel presided over the deliberations. Applications were discussed individually. The Chair called upon the assigned reviewers for an assessment of the merits of each application using the evaluation criteria published in the appropriate PA. Following a panel discussion, the Chair summarized the strengths and weaknesses of each application, and panel members then rated the applications confidentially.

Application Scoring

Evaluation Criteria Scores: Panel members were asked to rate each peer review evaluation criterion as published in the appropriate PA. A scale of 1 to 10 was used, with 1 representing the lowest merit and 10 the highest merit, using whole numbers only. The main reasons for obtaining the criteria ratings were to (1) place emphasis on the published evaluation criteria and provide guidance to reviewers in determining an appropriate overall score, and (2) provide the applicant, the Programmatic Panel, and the Command with an informed measure of the quality regarding the strengths and weaknesses of each application. The evaluation criteria scores were not averaged or mathematically manipulated in any manner to connect them to the global or percentile scores.

Overall Score: To obtain an overall score, a range of 1.0 to 5.0 was used (1.0 representing the highest merit and 5.0 the lowest merit). Reviewer scoring was permitted in 0.1 increments. Panel member scores were averaged and rounded to arrive at a two-digit number (1.2, 1.9, 2.7, etc.). The following adjectival equivalents were used to guide reviewers: Outstanding (1.0–1.5), Excellent (1.6–2.0), Good (2.1–2.5), Fair (2.6–3.5), and Deficient (3.6–5.0).

Summary Statements: The Scientific Review Officer on each panel was responsible for preparing a Summary Statement reporting the results of the peer review for each application. The Summary Statements included the evaluation criteria and overall scores, peer reviewers' written comments, and the essence of panel discussions. This document was used to report the peer review results to the Programmatic Panel. It is the policy of the USAMRDC to make Summary Statements available to each applicant when the review process has been completed.

THE SECOND TIER—Programmatic Review

Programmatic review was conducted in January 2024 by the FY23 Programmatic Panel that was comprised of a diverse group of basic and clinical scientists and consumer advocates, each contributing special expertise or interest in melanoma. Programmatic review is a comparison-based process that considers scientific evaluations across all disciplines and specialty areas. Programmatic Panel members do not automatically recommend funding applications that were highly rated in the technical merit review process (i.e., Peer review); rather, they carefully scrutinize applications according to the published Programmatic review criteria to allocate the limited funds available to support each of the award mechanisms as wisely as possible.

Programmatic review criteria published in the Idea Award PA were as follows: ratings and evaluations of the peer reviewers; adherence to the intent of the award mechanism; program portfolio composition; relevance to military health; relevance to at least one of the FY23 MRP Focus Areas; relative innovation; and relative impact.

Programmatic review criteria published in the Focused Program Award – Rare Melanomas PA were as follows: ratings and evaluations of the peer reviewers; adherence to the intent of the award mechanism; program portfolio composition; relevance to military health; and relative impact.

Programmatic review criteria published in the Melanoma Academy Scholar Award PA were as follows: ratings and evaluations of the peer reviewers; adherence to the intent of the award mechanism; program portfolio composition; relevance to military health; relevance to at least one of the FY23 MRP Focus Areas; relative impact; and relative career potential of the Scholar in the melanoma field.

Programmatic review criteria published in the Mid-Career Accelerator Award PA were as follows: ratings and evaluations of the peer reviewers; adherence to the intent of the award mechanism; program portfolio composition; relevance to military health; relevance to at least one of the FY23 MRP Focus Areas; relative impact; and relative potential for the PI to establish themselves as a leader in the melanoma field.

Programmatic review criteria published in the Team Science Award PA were as follows: ratings and evaluations of the peer reviewers; adherence to the intent of the award mechanism; program portfolio composition; relevance to military health; relevance to at least one of the FY23 MRP Focus Areas; relative synergistic potential of the collaboration; and relative impact.

After programmatic review, the applications recommended for funding were sent to the Commanding General, USAMRDC, for approval.