US ARMY MEDICAL RESEARCH AND DEVELOPMENT COMMAND (USAMRDC) CONGRESSIONALLY DIRECTED MEDICAL RESEARCH PROGRAMS (CDMRP) FISCAL YEAR 2023 (FY23) JOINT WARFIGHTER MEDICAL RESEARCH PROGRAM (JWMRP)

DESCRIPTION OF REVIEW PROCEDURES

The programmatic strategy implemented by the FY23 JWMRP called for applications in response to a Funding Opportunity Announcement (FOA) for one award mechanism released in April 2023:

Military Medical Research and Development Award

Pre-applications were received for this FOA in June 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 FOA.

Applications were received for this FOA in September 2023 and peer reviewed in November 2023. Programmatic review was conducted in January 2024.

In response to the Military Medical Research and Development Award FOA, 162 preapplications were received and the Principal Investigators (PIs) of 53 of these were invited to submit a full application. Forty-seven compliant applications were received and five (10.6%) were recommended for funding for a total of \$9.98 million (M).

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

Table 1. Submission/Award Data for the FY22 JWMRP*

Mechanism	Pre- Applications Received	Pre- Applications Invited (%)	Compliant Applications Received	Applications Recommended for Funding (%)	Total Funds
Military Medical Research and Development Award	162	53 (32.7%)	47	5 (10.6%)	\$9.98M
Total	162	53 (32.7%)	47	5 (10.6%)	\$9.98M

^{*}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 JWMRP*

Topic Area	Compliant Applications Received	Applications Recommended for Funding (%)	Total Funds
Endemic and Emerging Disease Threats	5	1 (20.0%)	\$2.30M
Operational Medicine and Readiness	18	0 (0.0%)	\$0.00M
Environmental Medicine	5	1 (20.0%)	\$1.17M
Combat Casualty Care	19	3 (15.8%)	\$6.51M
Totals	47	5 (10.6%)	\$9.98M

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

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

Military Medical Research and Development Award and Military Medical Research and Development Award – Clinical Research/Trial Option applications were peer reviewed in November 2023 by six panel(s) of researchers, clinicians, and consumer advocates based on the evaluation criteria specified in the FOA.

Each peer review panel included a Chair, an average of nine scientific 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 FOA.

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 FOA. 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 FOA. 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, Chairs from the Joint Program Committees, Program Managers from the product development community, and Service Representatives, each contributing special expertise in medical product development and health care solutions for military Service Members, Veterans, their families, other Military Health System beneficiaries and/or the American public. 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; rather, they carefully scrutinize applications to allocate the limited funds available to support each of the award mechanisms as wisely as possible. Programmatic review criteria published in the FOA were as follows: ratings and evaluations of the scientific peer review panels; programmatic relevance; military relevance and program portfolio composition, including alignment with the high-priority Department of Defense and Services medical research priorities and portfolios; relative potential of the research to augment and/or accelerate clinical, technical, or materiel/knowledge product development efforts that directly benefit military medicine; relative transition potential of the anticipated product/ outcome; and relative impact of the research on Service Members, Veterans, and their Families. After programmatic review, the applications recommended for funding were sent to the Commanding General, USAMRDC, for approval.