

**US ARMY MEDICAL RESEARCH AND DEVELOPMENT COMMAND (USAMRDC)
CONGRESSIONALLY DIRECTED MEDICAL RESEARCH PROGRAMS (CDMRP)
FISCAL YEAR 2023 (FY23) MILITARY BURN RESEARCH PROGRAM (MBRP)**

DESCRIPTION OF REVIEW PROCEDURES

The programmatic strategy implemented by the FY23 MBRP called for applications in response to program announcements (PAs) for two award mechanisms released in April 2023:

- Clinical Translational Research Award (CTRA)
- Technology/Therapeutic Development Award (TTDA)

Pre-applications were received for both PAs in May 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 PAs.

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

In response to the CTRA PA, 23 pre-applications were received and the Principal Investigators (PIs) of 18 of these were invited to submit a full application. Fourteen compliant applications were received and one (7.1%) was recommended for funding for a total of \$2.00 million (M).

In response to the TTDA PA, 63 pre-applications were received and the PIs of 39 of these were invited to submit a full application. Thirty-three compliant applications were received and three (9.1%) were recommended for funding for a total of \$6.06M.

Submission and award data for the FY23 MBRP are summarized in the table below.

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

Mechanism	Pre-Applications Received	Pre-Applications Invited (%)	Compliant Applications Received	Applications Recommended for Funding (%)	Total Funds
Clinical Translational Research Award	23	18 (78.3%)	14	1 (7.1%)	\$2.00M
Technology/Therapeutic Development Award	63	39 (61.9%)	33	3 (9.1%)	\$6.06M
Total	86	57 (66.3%)	47	4 (8.5%)	\$8.06M

*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

CTRA and TTDA applications were peer reviewed in November 2023 by four panels of researchers, clinicians, and consumer advocates based on the evaluation criteria specified in the PAs.

Peer review was conducted via teleconference for the CTRA by two panels (10 scientific reviewers and 2 consumer reviewers).

Peer review was conducted via teleconference for the TTDA by two panels (14 scientific reviewers and 4 consumer reviewers).

Each peer review panel included, a Chair, an average of five scientific reviewers, a minimum of one consumer reviewer, one technology transfer specialist, and a nonvoting Scientific Review Officer. In addition, each CTRA panel included one bioethicist and one biostatistician. 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, comprised of a diverse group of military and civilian translational and clinical scientists and consumer advocates, each contributing special expertise or interest in military burn research. Programmatic review is a comparison-based process that considers scientific evaluations from the FY23 MBRP peer review panels. Programmatic Panel members do not automatically recommend funding the highest rated applications as determined by the scientific peer reviewers; rather, they carefully scrutinize the highest rated applications for those that will best achieve program objectives and to allocate available funds to support each of the award mechanisms as wisely as possible. Programmatic review criteria published in the PAs were as follows: ratings and evaluations of the scientific peer review panels and programmatic relevance as evidenced by relative impact and military benefit, program portfolio composition, and adherence to the intent of the award mechanisms. After programmatic review, the applications recommended for funding were sent to the Commanding General, USAMRDC, for approval.