US ARMY MEDICAL RESEARCH AND DEVELOPMENT COMMAND (USAMRDC)
CONGRESSIONALLY DIRECTED MEDICAL RESEARCH PROGRAMS (CDMRP)
FISCAL YEAR 2023 (FY23) EPILEPSY RESEARCH PROGRAM (ERP)

DESCRIPTION OF REVIEW PROCEDURES

The programmatic strategy implemented by the FY23 ERP called for applications in response to program announcements (PAs) for four award mechanisms released in February 2023:

- Idea Development Award (IDA) – Funding Level I and Funding Level II
- Leveraging Research Award (LRA)
- Research Partnership Award (RPA)
- Virtual Post-Traumatic Epilepsy Research Center Faculty Award (Virtual P-TERC-F)

Principal Investigators (PIs) were asked to submit a letter of intent (LOI) to submit a full application. Applications were received in June 2023 and peer reviewed in August 2023. Programmatic review was conducted in October 2023.

In response to the IDA PA, 35 compliant applications were received and 3 (8.6%) were recommended for funding for a total of $2.8 million (M).

In response to the LRA PA, 5 compliant applications were received and 1 (20.0%) was recommended for funding for a total of $0.4M.

In response to the RPA PA, 23 compliant applications (11 projects) were received and 3 (13.0%) were recommended for funding for a total of $5.5M.

In response to the Virtual P-TERC-F PA, 4 compliant applications were received and 2 (50.0%) were recommended for funding for a total of $1.6M.

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

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

Mechanism	Compliant Applications Received	Applications Recommended for Funding (%)	Total Funds
IDA Level I	5	1 (20.0%)	$0.7M
IDA Level II	30	2 (6.7%)	$2.1M
LRA	5	1 (20.0%)	$0.4M
RPA[†]	11	3 (27.0%)	$5.5M
Virtual P-TERC-F	4	2 (50.0%)	$1.6M
Total	**55**	**9 (16.4%)**	**$10.2M**

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

[†]The numbers 11 and 3 presented here for the RPA represent the number of individual projects, which account for 23, 6 awards respectively.

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

IDA, LRA, RPA, and Virtual P-TERC-F award applications were peer reviewed in August 2023 by five panels of researchers, clinicians, and consumer advocates based on the evaluation criteria specified in the PAs.

Each peer review panel included a Chair, an average of six scientific reviewers, an average of one consumer reviewer, 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 October 2023 by the FY22 Programmatic Panel that was comprised of a diverse group of basic and clinical scientists and consumer advocates, each contributing special expertise or interest in epilepsy. 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 PAs were as follows: ratings and evaluations of the peer reviewers; relevance to the mission of the Defense Health Program and FY23 ERP, as evidenced by the following: adherence to the intent of the award mechanism, relevance to military health, program portfolio composition, relative innovation, and impact. After programmatic review, the applications recommended for funding were sent to the Commanding General, USAMRDC, for approval.