

**US ARMY MEDICAL RESEARCH AND DEVELOPMENT COMMAND (USAMRDC)  
CONGRESSIONALLY DIRECTED MEDICAL RESEARCH PROGRAMS (CDMRP)  
FISCAL YEAR 2022 (FY22) MULTIPLE SCLEROSIS RESEARCH PROGRAM (MSRP)**

**DESCRIPTION OF REVIEW PROCEDURES**

The programmatic strategy implemented by the FY22 MSRP called for applications in response to program announcements (PAs) for four award mechanisms released in April 2022:

- Clinical Trial Award (CTA)
- Early Investigator Research Award (EIRA)
- Exploration - Hypothesis Development Award (EHDA)
- Investigator-Initiated Research Award (IIRA)

Pre-applications were received for these CTA, EHDA, and IIRA PAs in June 2022 and screened in July 2022 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. Letters of Intent (LOI) were received for the EIRA in September 2022.

Applications were received for these four PAs in October 2022 and peer reviewed in December 2022. Programmatic review was conducted in February 2023.

In response to the CTA PA, 34 pre-applications were received and the Principal Investigators (PIs) of 20 of these were invited to submit a full application. Seventeen (17) compliant applications were received and 2 (11.8%) were recommended for funding for a total of \$6.1 million (M).

In response to the EIRA PA, 19 LOIs were received. Twelve (12) compliant applications were received and 5 (41.7%) were recommended for funding for a total of \$1.4M.

In response to the EHDA PA, 48 pre-applications were received and the PIs of 28 of these were invited to submit a full application. Twenty-five (25) compliant applications were received and 7 (28.0%) were recommended for funding for a total of \$1.7M.

In response to the IIRA PA, 61 pre-applications were received and the PIs of 38 of these were invited to submit a full application. Thirty-five (35) compliant applications were received and 9 (25.7%) were recommended for funding for a total of \$8.6M.

Submission and award data for the FY22 MSRP are summarized in the tables below.

**Table 1. Submission/Award Data for the FY22 MSRP\***

<b>Mechanism</b>	<b>Pre-Applications Received</b>	<b>Pre-Applications Invited (%)</b>	<b>Compliant Applications Received</b>	<b>Applications Recommended for Funding (%)</b>	<b>Total Funds</b>
CTA	34	20 (58.9%)	17	2 (11.8%)	\$6.1M
EIRA**	19	NA	12	5 (41.7%)	\$1.4M
EHDA	48	28 (58.3%)	25	7 (28.0%)	\$1.7M
IIRA	61	38 (62.3%)	35	9 (25.7%)	8.6M
<b>Total</b>	<b>162</b>	<b>86 (60.1%)</b>	<b>89</b>	<b>23 (25.8%)</b>	<b>\$17.8M</b>

\*These data reflect funding recommendations only. Pending FY22 award negotiations, final numbers will be available after September 30, 2023.

\*\*Pre-applications in the form of LOI invitations were not applicable (NA).

**Table 2. Submission/Award Data for the FY22 MSRP\***

<b>Topic Area</b>	<b>Compliant Applications Received</b>	<b>Applications Recommended for Funding (%)</b>	<b>Total Funds</b>
Central Nervous System Regenerative Potential in Demyelinating Conditions	29	8 (27.6%)	\$2.8M
Correlates of Disease Activity and Progression in MS	19	6 (31.6%)	\$4.0M
Factors Contributing to or Associated with MS Etiology, Prodrome, Onset, and Disease Course	18	7 (38.9%)	\$4.9M
Biology and Measurement of MS Symptoms	6	0 (0.0%)	\$0.0M
Promoting Repair, Neuroprotection, and Remyelination in MS	6	0 (0.0%)	\$0.0M
Treatment of MS Symptoms	11	2 (18.2%)	\$6.1M
<b>Totals</b>	<b>89</b>	<b>23</b>	<b>\$17.8M</b>

## **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**

CTA, EIRA, EHDA, and IIRA applications were peer reviewed in December 2022 by six panels of researchers, clinicians, and consumer advocates based on the evaluation criteria specified in the PAs. All panels conducted peer review via virtual meetings.

Two panels conducted peer review for the Activity and Progression Focus Area.

One panel conducted peer review for the CTA - Remyelination and Regeneration Focus Area.

One panel conducted peer review for the CTA - Symptoms and Treatment Focus Area.

One panel conducted peer review for the Exploratory and Early Investigator Focus Area.

One panel conducted peer review for the Remyelination and Regeneration Focus Area.

Each peer review panel included a Chair, an average of 9 scientific reviewers, an average of 2 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 February 2022 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 multiple sclerosis. 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 scientific peer review panels; adherence to the intent of the award mechanism; program portfolio composition; relative impact and innovation<sup>1</sup>; programmatic relevance to at least one of the MSRP FY22 CTA Focus Areas<sup>2</sup>. After programmatic review, the applications recommended for funding were sent to the Commanding General, USAMRDC, for approval.

---

<sup>1</sup> Innovation is a criterion of the EHDA only.

<sup>2</sup> Programmatic relevance to at least one of the MSRP FY22 CTA Focus Areas is a criterion of the CTA only.