

**US ARMY MEDICAL RESEARCH AND DEVELOPMENT COMMAND (USAMRDC)
CONGRESSIONALLY DIRECTED MEDICAL RESEARCH PROGRAMS (CDMRP)
FISCAL YEAR 2023 (FY23) PEER REVIEWED MEDICAL RESEARCH PROGRAM
(PRMRP)**

DESCRIPTION OF REVIEW PROCEDURES

The programmatic strategy implemented by the FY23 PRMRP called for applications in response to the Discovery Award program announcement (PA) released in January 2023.

Applications were received for this PA in April 2023 and peer reviewed in June 2023. Programmatic review was conducted in August 2023.

In response to the FY23 PRMRP Discovery Award PA, 309 compliant applications were received and 52 (16.8%) were recommended for funding for a total of \$16.0 million (M).

Submission and award data for the FY23 PRMRP Discovery Award are summarized in Tables 1 and 2.

Table 1. Submission/Award Data for the FY23 PRMRP Discovery Award*

Mechanism	Compliant Applications Received	Applications Recommended for Funding (%)	Total Funds
Discovery Award	309	52 (16.8%)	\$15,975,857

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

Table 2. FY23 PRMRP Discovery Award Application Data by Topic Area

Topic Area	Compliant Applications Received	Applications Recommended for Funding (%)	Total Funds
Arthritis	15	2 (13.3%)	\$621,129
Celiac Disease	1	0 (0.0%)	-
Dystonia	5	1 (20.0%)	\$308,000
Eating Disorders	2	0 (0.0%)	-
Eczema	2	0 (0.0%)	-
Ehlers-Danlos Syndrome	1	0 (0.0%)	-
Endometriosis	8	1 (12.5%)	\$313,000
Epidermolysis Bullosa	0	-	-
Familial Hypercholesterolemia	0	-	-
Fibrous Dysplasia/ McCune-Albright Syndrome	0	-	-
Focal Segmental Glomerulosclerosis	3	0 (0.0%)	-
Food Allergies	1	0 (0.0%)	-
Fragile X	3	1 (33.3%)	\$312,000
Frontotemporal Degeneration	1	0 (0.0%)	-

Topic Area	Compliant Applications Received	Applications Recommended for Funding (%)	Total Funds
Guillain-Barré Syndrome	0	-	-
Hemorrhage Control	9	0 (0.0%)	-
Hepatitis B	3	0 (0.0%)	-
Hereditary Ataxia	9	4 (44.4%)	\$1,232,678
Hydrocephalus	4	2 (50.0%)	\$592,885
Hypercholesterolemia	8	0 (0.0%)	-
Inflammatory Bowel Disease	14	2 (14.3%)	\$573,568
Interstitial Cystitis	0	-	-
Lymphatic Disease	4	1 (25.0%)	\$325,000
Lymphedema	4	2 (50.0%)	\$590,500
Malaria	11	2 (18.2%)	\$677,800
Maternal Mental Health	4	2 (50.0%)	\$635,412
Mitochondrial Disease	7	2 (28.6%)	\$712,000
Myalgic Encephalomyelitis/ Chronic Fatigue Syndrome	1	0 (0.0%)	-
Myotonic Dystrophy	4	1 (25.0%)	\$323,000
Nephrotic Syndrome	1	0 (0.0%)	-
Neuroactive Steroids	0	-	-
Neuroinflammatory Responses to Emerging Viral Diseases	6	3 (50.0%)	\$827,000
Non-Opioid Therapy for Pain Management	5	2 (40.0%)	\$591,000
Orthopaedics	20	2 (10.0%)	\$638,500
Pancreatitis	10	3 (30.0%)	\$995,750
Peripheral Neuropathy	9	1 (11.1%)	\$319,151
Polycystic Kidney Disease	7	3 (42.9%)	\$951,158
Pressure Ulcers	6	1 (16.7%)	\$316,036
Proteomics	14	1 (7.1%)	\$327,029
Pulmonary Fibrosis	16	3 (18.8%)	\$962,717
Respiratory Health	25	1 (4.0%)	\$355,260
Rheumatoid Arthritis	3	0 (0.0%)	-
Scleroderma	2	0 (0.0%)	-
Sickle-Cell Disease	2	1 (50.0%)	\$317,001
Sleep Disorders and Restriction	6	1 (16.7%)	\$310,829
Suicide Prevention	4	2 (50.0%)	\$565,719
Trauma	38	2 (5.3%)	\$626,663
Tuberculosis	7	2 (28.6%)	\$455,164
Vascular Malformations	3	0 (0.0%)	-
Von Hippel-Lindau Syndrome Benign Manifestations	1	1 (100%)	\$199,908
Totals	309	52 (16.8%)	\$15,975,857

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

FY23 PRMRP Discovery Award applications were peer reviewed via videoconference in June 2023 by 29 panels comprised of researchers, clinicians, and consumer advocates based on the evaluation criteria specified in the PA.

Each peer review panel included a Chair, an average of 7 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 Discovery Award 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 Discovery Award 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 Discovery Award 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 August 2023 by the FY23 Programmatic Panel and ad hoc reviewers comprised of a diverse group of basic and clinical scientists from each branch of the military Services, the Defense Health Agency, the Department of Veterans Affairs, the Department of Health and Human Services, academic institutions, and private industry. 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 PA were as follows: ratings and evaluations of the scientific peer review panels; adherence to the intent of the award mechanism; relative innovation; relative impact; relevance to the FY23 PRMRP Topic Areas; relevance to the FY23 PRMRP Strategic Goals; relevance to military health; and program portfolio composition. After programmatic review, the applications recommended for funding were sent to the Commanding General, USAMRDC, for approval.