# DEFENSE MEDICAL RESEARCH AND DEVELOPMENT PROGRAM (DMRDP) JOINT PROGRAM COMMITTEE 2 (JPC-2)/MILITARY INFECTIOUS DISEASE RESEARCH PROGRAM (MIDRP) AND JPC-6/COMBAT CASUALTY CARE RESEARCH PROGRAM (CCCRP) FISCAL YEAR 2022 (FY22) BATTLEFIELD WOUND MANAGEMENT AND INFECTION RESEARCH (BWMIR) AWARD

### DESCRIPTION OF REVIEW PROCEDURES

The programmatic strategy implemented by the FY22 DMRDP JPC-2/MIDRP and JPC-6/CCCRP called for applications in response to the funding opportunity announcements (FOAs) for the Battlefield Wound Management and Infection Research Award. An extramural program-specific broad agency announcement and an intramural program announcement were released in September 2022, each with three funding levels:

- Funding Level 1
- Funding Level 2
- Funding Level 2 Clinical Trial

Pre-applications were received for the BWMIR Award in October 2022 through a letter of intent.

Applications were received in November 2022 and peer reviewed online in January 2023. Programmatic review was conducted in April 2023.

In response to the BWMIR FOAs, 76 pre-applications were submitted, of which 53 compliant applications were received and peer reviewed; 11 (20.8%) were recommended for funding for a total of \$18.1 million (M).

Submission and award data for the FY22 DMRDP JPC-2/MIDRP and JPC-6 CCCRP are summarized in Table 1 and Table 2 below.

Table 1. Submission/Award Data for the FY22 DMRDP JPC-2/MIDRP and JPC-6/CCCRP  $^\dagger$ 

| Mechanism   | Compliant<br>Applications<br>Received | Applications Recommended for Funding (%) | Total<br>Funds |
|---|---------------------------------------|--|----------------|
| BWMIR Award Funding Level 1                                 | 35                                    | 5 (14.3%)                                | \$5.9M         |
| BWMIR Award Funding Level 1 -<br>Intramural                 | 6                                     | 0 (0%)                                   | \$0            |
| BWMIR Award Funding Level 2                                 | 7                                     | 4(57.1%)                                 | \$7.8M         |
| BWMIR Award Funding Level 2 - Clinical Trial                | 5                                     | 2 (40%)                                  | \$4.4M         |
| BWMIR Award Funding Level 2 – Intramural                    | 0                                     | 0 (0%)                                   | \$0            |
| BWMIR Award Funding Level 2 -<br>Clinical Trial- Intramural | 0                                     | 0 (0%)                                   | \$0            |
| Total   | 53                                    | 11 (20.8%)                               | \$18.1M        |

Table 2. FY22 DMRDP JPC-2/MIDRP and JPC-6/CCCRP Application Data by Focus Area

| Focus Area   | Compliant<br>Applications<br>Received | Applications<br>Recommended for<br>Funding (%) | Total<br>Funds |
|--|---------------------------------------|--|----------------|
| Development and analysis of decision support tools                       | 9                                     | 1 (11.1%)                                      | \$1.2M         |
| Optimizing prolonged care management of penetrating torso injury         | 8                                     | 2 (25%)  | \$2.3M         |
| Understanding appropriate wound prophylaxis/empiric treatment strategies | 24                                    | 4 (16.7%)                                      | \$7.8M         |
| Understanding combat traumatic wound physiology and wound progression    | 12                                    | 4 (33.3%)                                      | \$6.8M         |
| Totals   | 53                                    | 11 (20.8%)                                     | \$18.1M        |

### 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

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<sup>&</sup>lt;sup>†</sup> These data reflect funding recommendations only. Pending FY22 award negotiations, final numbers will be available after September 30, 2023.

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

The BWMIR Award applications were peer reviewed in January 2023 based on the evaluation criteria specified in the FOAs.

Peer review was conducted online by five panels with an average of seven scientists, four specialists, and one consumer per panel. Specialists included biostatisticians, bioethicists, and regulatory/compliance experts.

### **Individual Peer Review Panels**

The scientific peer review panel was conducted online, with each application reviewed by at least two scientists and one consumer. Moderated online discussions took place following individual reviewer score input when there were disparate scores between reviewers of more than 1.5 between any two overall adjectival scores [e.g., Outstanding score (1.0-1.5) and Fair (2.6-3.5)].

# **Application Scoring**

Evaluation Criteria Scores: Panel members were asked to rate each peer review evaluation criterion as published in the appropriate 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 essence of the 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 April 2023 by the FY23 Programmatic Panel and ad hoc panel members, which included a diverse group of basic and clinical scientists and consumer advocates, each contributing special expertise or interest in military infectious disease research or combat casualty care research. Programmatic review is a comparison-based process that considers scientific evaluations across all disciplines and specialty areas. The Programmatic Panel members do not automatically recommend funding applications that were highly rated in the technical merit review process; rather, they carefully scrutinize the applications to allocate the limited funds available to support each of the award mechanisms as wisely as possible. The programmatic review criteria published in the FOAs were as follows: the ratings and evaluations of the scientific peer review panels, as well as relevance to the mission of the Defense Health Program and FY22 DMRDP, as evidenced by adherence to the intent of the award mechanism, program portfolio composition, relevance to military health, and relative impact and translatability.

After programmatic review, the Commanding General, USAMRDC, approved funding for applications recommended during programmatic review.