US ARMY MEDICAL RESEARCH AND DEVELOPMENT COMMAND (USAMRDC)
CONGRESSIONALLY DIRECTED MEDICAL RESEARCH PROGRAMS (CDMRP)
FISCAL YEAR 2020 (FY20) OVARIAN CANCER RESEARCH PROGRAM (OCRP)

DESCRIPTION OF REVIEW PROCEDURES

The programmatic strategy implemented by the FY20 OCRP called for applications in response to program announcements (PAs) for six award mechanisms released in February 2020:

- Investigator-Initiated Research Award
- Pilot Award
- Clinical Translational Research Award
- Ovarian Cancer Academy Award – Early-Career Investigator
- Teal Expansion Award
- Proteogenomics Research Award

Pre-applications were received for the Investigator-Initiated Research Award, Pilot Award, Clinical Translational Research Award, Ovarian Cancer Academy Award – Early-Career Investigator and Teal Expansion Award in April 2020 and screened in May 2020 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.

Pre-applications were received for the Proteogenomics Research Award PA in July 2020. These applications were not screened.

Applications were received for all six PAs in July 2020. The PAs were peer reviewed in September 2020 and Programmatic review was conducted in November 2020.

In response to the Investigator-Initiated Research Award PA, 157 pre-applications were received, and the Principal Investigators (PIs) of 93 of these were invited to submit a full application. 87 compliant applications were received, and 15 (17.2%) were recommended for funding, for a total of $13.86 million (M).

In response to the Pilot Award PA, 183 pre-applications were received, and the PIs of 85 of these were invited to submit a full application. 78 compliant applications were received, and 16 (20.5%) were recommended for funding, for a total of $6.12M.

In response to the Clinical Translational Research Award PA, 21 pre-applications were received, and the PIs of 17 of these were invited to submit a full application. 15 compliant applications were received, and 6 (40%) were recommended for funding, for a total of $3.87M.

In response to the Ovarian Cancer Academy Award – Early-Career Investigator PA, 14 pre-applications were received, and the PIs of 12 of these were invited to submit a full application. 12 compliant applications were received, and 3 (25%) were recommended, for funding for a total of $3.50M.

In response to the Teal Expansion Award PA, 31 pre-applications were received, and the PIs of 25 of these were invited to submit a full application. 25 compliant applications were received, and 5 (20%) were recommended for funding, for a total of $3.28M.

In response to the Proteogenomics Research Award PA, 18 pre-applications were received. 15 compliant applications were received, and 2 (13.3%) were recommended for funding, for a total of $0.63M.

Submission and award data for the FY20 OCRP are summarized in the table(s) below.

Table 1. Submission/Award Data for the FY20 OCRP*

Mechanism	Pre-Applications Received	Pre-Applications Invited (%)	Compliant Applications Received	Applications Recommended for Funding (%)	Total Funds
Investigator-Initiated Research Award	157	93 (59%)	87	15 (17%)	$13.86
Pilot Award	183	85 (46%)	78	16 (20%)	$6.12
Clinical Translational Research Award	21	17 (81%)	15	6 (40%)	$3.87
Ovarian Cancer Academy Award – Early-Career Investigator	14	12 (86%)	12	3 (25%)	$3.50
Teal Expansion Award	31	25 (81)%	25	5 (20%)	$3.28
Proteogenomics Research Award	18	18 (100%)**	15	2 (13%)	$0.63
Total	**424**	**250 (60%)**	**232**	**47 (20%)**	**$31.26**

*These data reflect funding recommendations only. Pending FY20 award negotiations, final numbers will be available after September 30, 2021.

**The Proteogenomics Research Award pre-applications were not screened, all applications were invited to submit.

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

Each peer review panel included a Chair, scientific reviewers, 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.

Investigator Initiated Research Award, Pilot Award, Clinical Translational Award, Ovarian Cancer Academy Award – Early-Career Investigator, Teal Expansion Award and Proteogenomics Research Award applications were peer reviewed virtually in September 2020 by 12 panels of researchers, clinicians, and consumer advocates, based on the evaluation criteria specified in the PAs. Across these 12 panels were 101 scientists and 22 consumer reviewers.

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 virtually in November 2020 by the FY20 Programmatic Panel, which was comprised of a diverse group of basic and clinical scientists and consumer advocates, each contributing special expertise or interest in ovarian cancer. 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; programmatic relevance; relative impact; program portfolio composition; and adherence to the intent of the award mechanism. After programmatic review, the Commanding General, USAMRDC approved funding for the applications recommended during programmatic review.