US ARMY MEDICAL RESEARCH AND DEVELOPMENT COMMAND (USAMRDC)
CONGRESSIONALLY DIRECTED MEDICAL RESEARCH PROGRAMS (CDMRP)
FISCAL YEAR 2020 (FY20) NEUROFIBROMATOSIS RESEARCH PROGRAM (NFRP)

DESCRIPTION OF REVIEW PROCEDURES

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

- Clinical Trial Award
- Early Investigator Research Award
- Exploration – Hypothesis Research Award
- Investigator-Initiated Research Award
- New Investigator Award
- Synergistic Idea Award

Pre-applications (letters of intent) were received for these six PAs in June 2020.

Applications were received for these six PAs in July 2020 and peer reviewed in August 2020. Programmatic review was conducted in January 2021.

In response to the Clinical Trial Award PA, three compliant applications were received, and one (33.3%) was recommended for funding for a total of $1.18 million (M).

In response to the Early Investigator Research Award PA, three compliant applications were received, and one (33.3%) was recommended for funding for a total of $0.29M.

In response to the Exploration – Hypothesis Research Award PA, 16 compliant applications were received, and 5 (31.25%) were recommended for funding for a total of $0.84M.

In response to the Investigator-Initiated Research Award PA, 25 compliant applications were received, and 7 (28%) were recommended for funding for a total of $5.53M.

In response to the New Investigator Award PA, 23 compliant applications were received, and 5 (21.74%) were recommended for funding for a total of $3.41M.

In response to the Synergistic Idea Award PA, 14 compliant applications (including 9 partner applications) were received, and 2 (14.3%) were recommended for funding for a total of $2.23M.

Submission and award data for the FY20 NFRP are summarized in the table below.

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

Mechanism	Compliant Applications Received	Applications Recommended for Funding (%)	Total Funds
Clinical Trial Award	3	1 (33.3%)	$1.18M
Early Investigator Research Award	4	1 (33.3%)	$0.29M
Exploration – Hypothesis Research Award	16	5 (31.25%)	$0.84M
Investigator-Initiated Research Award	25	7 (28%)	$5.53M
New Investigator Award	23	5 (21.74%)	$3.41M
Synergistic Idea Award (including partners)	14	2 (14.3%)	$2.23M
Total	**85**	**21 (25%)**	**$13.48M**

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

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 both reflects the traditional strengths of existing peer review systems and 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

Clinical Trial Award, Early Investigator Research Award, Exploration – Hypothesis Development Award, Investigator-Initiated Research Award, New Investigator Award and Synergistic Idea Award applications were peer reviewed in August – September 2020 by six panel(s) of researchers, clinicians, and consumer advocates based on the evaluation criteria specified in the PAs.

Peer review was conducted via a virtual teleconference for the Clinical Trial Award, Early Investigator Research Award, Exploration – Hypothesis Development Award, Investigator-Initiated Research Award, New Investigator Award and Synergistic Idea Award applications by six panels consisting of 51 scientists and 6 consumer reviewers.

Each peer review panel included a Chair, an average of eight 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 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 January 2021 by the FY20 Programmatic Panel, which is comprised of a diverse group of basic and clinical scientists and consumer advocates, each contributing special expertise or interest in neurofibromatosis. 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.