



**DEPARTMENT OF DEFENSE**

**FISCAL YEAR 2001**

**NEUROFIBROMATOSIS RESEARCH PROGRAM**

**PROGRAM ANNOUNCEMENT**

*March 27, 2001*



Headquarters, U.S. Army Medical Research and Materiel Command  
MCMR-PLF, 1077 Patchel Street  
Fort Detrick, Maryland 21702-5024

# Table of Contents

Foreword .....	i
Driving Directions to Fort Detrick and Map of Fort Detrick .....	v
Overview of the Congressionally Directed Medical Research Programs .....	Section I
Department of Defense Neurofibromatosis Research Program .....	Section II
Reference Table of Award Mechanisms and Submission Requirements .....	Page II-4
Award Mechanisms:	
New Investigator Awards .....	Section III
Idea Awards .....	Section IV
Investigator-Initiated Research Awards .....	Section V
Therapeutic Development Awards .....	Section VI
Clinical Trial Awards .....	Section VII
Information Requested Prior to Proposal Submission:	
FY01 NFRP Letter of Intent .....	Appendix A
Information Required with Proposal Submission:	
Proposal Preparation .....	Appendix B
Electronic Proposal Cover Booklet Instructions .....	Appendix C
Sample Abstracts and Statements of Work .....	Appendix D
Biographical Sketches .....	Appendix E
Detailed Cost Estimate Form Instructions .....	Appendix F
Other Information:	
General Information .....	Appendix G
Acronym List .....	Appendix H
Information Required Only if Requested by CDMRP:	
Certificate of Environmental Compliance .....	Appendix I
Research Involving Human Subjects and/or Human Anatomical Substances ....	Appendix J
Research Involving Animals .....	Appendix K
Safety Program.....	Appendix L

## Foreword

The U.S. Army Medical Research and Materiel Command (USAMRMC) has been directed to continue the Department of Defense (DOD) Neurofibromatosis Research Program (NFRP). The deadline, format, and other criteria specified for proposals in this DOD Fiscal Year 2001 (FY01) NFRP Program Announcement are based on program objectives, public needs, and regulatory guidance.

General information on the USAMRMC can be obtained from the USAMRMC web site at <http://mrmc-www.army.mil>. Specific information on the DOD NFRP can be obtained from the Congressionally Directed Medical Research Programs (CDMRP) web site at <http://cdmrp.army.mil>. This program announcement and associated forms can be downloaded from the CDMRP web site at <http://cdmrp.army.mil/funding/default>. Information on other research programs offered by USAMRMC as well as the U.S. Army Medical Research Acquisition Activity can be obtained at <http://www-usamraa.army.mil>.

### 1. Highlights of Changes from the FY00 Program Announcement

- Applicants are **required to submit one electronic version of their proposal as a PDF (Portable Document Format) file through the Internet (electronic submission)** and one printed version of the electronic PDF file (paper submission); the electronic PDF file will serve as the official proposal submission.
- The Proposal Cover Booklet has been replaced by an Electronic Proposal Cover Booklet, which must accompany the electronic submission and the paper submission.
- A new award mechanism, the Therapeutic Development Award, is being offered.
- The Clinical Trial Award mechanism is now requesting proposals in three categories: Phase 1 clinical trials, Pilot clinical trials, and Phase 2 clinical trials. The period of performance for Clinical Trial Awards is up to 3 years for Phase 1 and Pilot clinical trials and up to 4 years for Phase 2 clinical trials.
- The period of performance for Idea Awards is up to 3 years rather than 2 years.
- A structured technical abstract using the headings in Appendix B, section 8, is required for all proposals.
- Institutional Review Board (IRB) documentation is no longer required to be approved before programmatic review; however, the forms should be submitted to your local IRB by the time of programmatic review.
- Appendices related to Regulatory Compliance and Quality (Environmental Compliance, Research Involving Human Subjects and/or Anatomical Substances, Research Involving Animals, and Safety Program Plan) have been extensively revised.

## 2. Who May Apply

Individuals, regardless of ethnicity, nationality, or citizenship status, may apply through an eligible institution. Eligible institutions include for-profit, nonprofit, public, and private organizations. Examples include universities, colleges, hospitals, laboratories, companies, and agencies of local, state, and federal governments. Please refer to sections on individual mechanisms for additional eligibility criteria.

## 3. Receipt Deadlines

The proposal receipt deadline is the same for all award mechanisms. An electronic PDF version of your proposal, which will serve as the official proposal submission, must be sent through the Internet by the sponsored programs office (or equivalent) of your organization by **4:00 p.m. (your local time) on July 25, 2001**. The electronic PDF version of your proposal must be accompanied by the Electronic Proposal Cover Booklet. In addition, one printed version of the electronic PDF file and one printed version of the Electronic Proposal Cover Booklet are to be received by **July 31, 2001**. See Appendix B, part 22, and Appendix C for additional details.

## 4. Timelines

The timeline for **all** FY01 awards is:

Requested Letter of Intent:	As soon as possible but no later than July 11, 2001
Proposal Receipt Deadlines:	<b>One electronic PDF version</b> of the proposal must be sent through the Internet by <b>4:00 p.m. (your local time) on July 25, 2001</b> ; this must be accompanied by an Electronic Proposal Cover Booklet <b>One printed version</b> of the electronic PDF file is to be received by <b>July 31, 2001</b> ; this must be accompanied by a printed version of the Electronic Proposal Cover Booklet
Peer Review:	October 2001
Request for RCQ <sup>1</sup> Documents:	As early as November 2001
Programmatic Review:	December 2001
Notification:	January 2002
Award Negotiations:	Between February 2002 and September 2002

---

<sup>1</sup> Regulatory Compliance and Quality

Applicants are reminded that DOD proposals involving human subjects, human anatomical substances, or privileged or protected health information must be reviewed and approved by both the applicant's local IRB and the U.S. Army's Human Subjects Research Review Board **before funded research can begin**. More information regarding these requirements can be found in Appendix J.

## 5. Inquiries

Questions concerning the preparation of proposals, formats, or required documentation can be addressed to the CDMRP at:

Phone: 301-619-7079  
Fax: 301-619-7792  
E-mail: [cdmrp.pa@det.amedd.army.mil](mailto:cdmrp.pa@det.amedd.army.mil)  
Mail: Commander  
U.S. Army Medical Research and Materiel Command  
ATTN: MCMR-PLF (NFRP01)  
1077 Patchel Street (Building 1077)  
Fort Detrick, MD 21702-5024

Applicants should submit questions regarding this program announcement via e-mail or in writing as early as possible. Every effort will be made to answer questions within 5 working days of receipt.

Information on electronic submissions will be available on the CDMRP web site (<http://cdmrp.army.mil>) no earlier than May 15, 2001 and no later than June 13, 2001. A help line will be available for questions regarding electronic submissions by June 13, 2001.

## 6. Proposal Submission

Applicants should refer to sections on individual award mechanisms and Appendix B for appropriate submission requirements. Effective with this program cycle, both electronic and paper submissions are required.

- a. Electronic Submission:** One electronic PDF version of your proposal is required and will count as the official proposal submission. The electronic PDF version must be submitted through the Internet by the sponsored programs office (or equivalent) of your organization and must be accompanied by the Electronic Proposal Cover Booklet. Instructions for electronic submissions will be available on the CDMRP web site (<http://cdmrp.army.mil>) no earlier than May 15, 2001 and no later than June 13, 2001.

- b. Paper Submission:** One printed version of the electronic PDF file is required and will be used to confirm that the electronic PDF version of your proposal has been successfully transmitted. The paper submission must be accompanied by a printed version of the Electronic Proposal Cover Booklet. Please submit the required documents in one package to:

Commander  
U.S. Army Medical Research and Materiel Command  
ATTN: MCMR-PLF (NFRP01)  
1076 Patchel Street (Building 1076)  
Fort Detrick, MD 21702-5024

## Driving Directions to Fort Detrick

### From Washington, DC

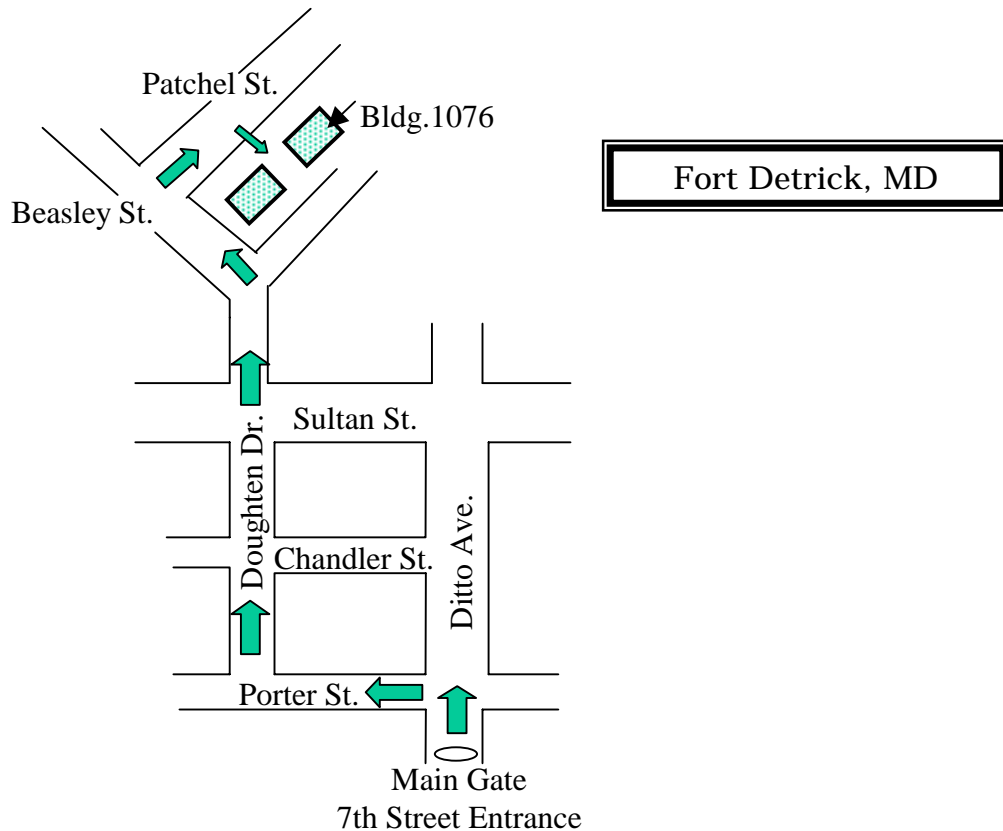
Take Interstate 495 to Interstate 270 North (exit 38) toward Rockville, Maryland. In Frederick, Interstate 270 ends and joins Route 15 North. Follow Route 15 North to the 7th Street exit. Turn right on 7th Street and proceed four blocks to Fort Detrick's Main Gate.

### From Baltimore, MD

Take Interstate 695 to Interstate 70 West. In Frederick, take exit 53, Route 15 North. Follow Route 15 North to the 7th Street exit. Turn right on 7th Street and proceed four blocks to Fort Detrick's Main Gate.

## Map of Fort Detrick

Packages must be delivered to building 1076 as shown on the map below. To gain entry to Fort Detrick, you will be required to show your driver's license at the Main Gate. Please allow at least 15 minutes to pass through the gate area.



## **I. Overview of the Congressionally Directed Medical Research Programs**

### **I-A. History of the Congressionally Directed Medical Research Programs**

Due to increased public awareness, the success of the Department of Defense (DOD) Congressionally Directed Medical Research Programs (CDMRP), and the work of grassroots advocacy organizations, Congress has appropriated monies for peer reviewed research directed toward specific diseases. Beginning in fiscal year 1992, the U.S. Congress has directed the DOD to manage these various extra- and intramural grant programs. The U.S. Army Medical Research and Materiel Command (USAMRMC) established the CDMRP to administer these funds. To date, the USAMRMC CDMRP has received almost \$2 billion targeted by Congress for peer reviewed research on breast cancer, prostate cancer, ovarian cancer, neurofibromatosis, Defense Women's Health, osteoporosis, and other specified areas.

The CDMRP exists to support research that will positively impact the health of all Americans. The CDMRP strives to identify gaps in funding and provide opportunities that will enhance program research objectives without duplicating existing funding. To meet these goals, the CDMRP has developed unique mechanisms to facilitate the funding of quality research that addresses individual program objectives.

### **I-B. Investment Strategy**

For each program, the CDMRP has developed and refined a flexible execution and management cycle that spans the development of an investment strategy through the completion of research. A Program Staff, composed of military and civilian scientists and clinicians, manages the CDMRP. For each program, an expert Integration Panel (IP) of scientists, clinicians, and consumer advocates is convened to deliberate issues and concerns unique to the program, establish an appropriate investment strategy, and perform programmatic review as described in [Section I-C.2](#). Based upon this investment strategy, each program then uses a variety of award mechanisms to address the most urgent needs of the research community.

### **I-C. Proposal Evaluation**

The CDMRP uses a two-tiered review process for proposal evaluation as recommended by the National Academy of Science's Institute of Medicine. The two tiers are fundamentally different. The first tier is a scientific peer review of proposals against established criteria for determination of scientific merit. The second tier is a programmatic review of proposals that compares submissions to each other and recommends proposals for funding based on program goals.



## **I-C.1. Scientific Peer Review**

Scientific peer review is conducted by panels organized by scientific discipline or specialty area. The primary responsibility of the scientific peer review panels is to provide unbiased, expert advice on the scientific and technical merit of proposals, based upon the review criteria published for each award mechanism.

Scientific peer review panels are composed of a chair, scientific reviewers, consumer reviewers, and a nonvoting executive secretary. Selection of individuals as scientific reviewers is predicated upon their expertise as well as their varied levels of experience with scientific peer review. For the breast, prostate, and ovarian cancer research programs, consumer reviewers are cancer survivors and representatives of consumer advocacy organizations. For the neurofibromatosis research program, consumer reviewers are individuals with neurofibromatosis or their family members and representatives of consumer advocacy organizations. Consumer reviewers are nominated by an advocacy organization and are selected on the basis of their leadership skills, commitment to advocacy, and interest in science. Consumers augment the scientific peer review by bringing the patient perspective to the assessment of science and to the relevance of research.

Panel members rate each proposal based on specific evaluation criteria developed for each award mechanism (see [Sections III-B, IV-B, V-B, VI-B, and VII-B](#)). Two types of ratings are used. First, each of the evaluation criteria, except for the budget, is rated on a scale of 1 (lowest merit) to 10 (highest merit). This criteria scoring ensures that each component is considered in peer review. Second, the overall proposal is given a global priority score using a scale of 1 (highest merit) to 5 (lowest merit). Criteria scores are neither averaged nor mathematically manipulated to determine the global priority score. Instead, reviewers are asked to use the criteria scores as a guide in determining the global priority score. In rare instances, a proposal may be disapproved at scientific peer review if gravely hazardous or unethical procedures are involved, or if the proposal is so seriously flawed as to make its completion implausible.

The peer review summary statement is a product of scientific peer review. Each statement includes the investigator's structured technical abstract and lay (nontechnical) abstract (verbatim), the peer review scores, and an evaluation of the project as assessed by the peer reviewers according to the evaluation criteria published in this program announcement. Summary statements are forwarded to the next stage of the review process, programmatic review.

## **I-C.2. Programmatic Review**

The second tier is programmatic review, which is accomplished by the IP. The members of the IP represent many diverse disciplines and specialty areas and are experienced with peer review procedures. Consumer advocates represent national advocacy constituencies and are full voting members of the IP. One of the functions of programmatic review is to select a broad portfolio of grants across all disciplines. Programmatic review is a comparison-based process in which

proposals from multiple research areas compete in a common pool. IP members use the peer review summary statements, which include the proposal abstracts, to review proposals. The Statement of Work may also be reviewed at this level. However, the full proposal is not forwarded to programmatic review.

The IP is committed to funding a broad-based research portfolio. The ratings and evaluations of scientific peer review panels are primary factors in programmatic review; the IP also must consider other criteria to establish this portfolio. The criteria the IP uses to make funding recommendations are:

- Ratings and evaluations of the scientific peer review panels;
- Programmatic relevance;
- Relative innovation;
- Program portfolio balance with respect to research disciplines or specialty areas; and
- Other equitable factors, e.g., adequate support for new investigators.

Scientifically sound proposals that best fulfill the above criteria and most effectively address the unique focus and goals of the program are selected by the IP and recommended to the Commanding General, USAMRMC, for funding.

## **I-D. Notification**

Following completion of the two-tiered evaluation process, every applicant will receive a letter indicating the funding status of his/her proposal, along with the peer review summary statement. Letters will be sent as official information becomes available. Thus, not all investigators will be notified at the same time.

## **I-E. Negotiation of the Award**

Award negotiation consists of discussions, reviews, and justifications of several critical issues, including those involving Regulatory Compliance and Quality (RCQ), budget, and Statement of Work. All documents related to RCQ (environmental compliance, human subjects/anatomical substance use, animal use, and safety plan documents) will be requested in the applicant's notification letter and reviewed by RCQ staff.

All proposals submitted with research involving human subjects and/or anatomical substances must be approved by the appropriate local review board. Proposals must also be approved by the U.S. Army Human Subjects Research Review Board (HSRRB). The HSRRB is mandated to comply with specific laws and directives governing all research involving human subjects that is

conducted or supported by the DOD. These laws and directives are rigorous and detailed and will require information in addition to that supplied to the local review board. Therefore, all investigators submitting such proposals must comply with the requirements detailed in the RCQ documents dealing with research involving laboratory animals, human subjects and/or anatomical substances **before funded research can begin.**

Concurrent with the RCQ review, a Contract Specialist from the U.S. Army Medical Research Acquisition Activity will contact the administrative representative who is authorized to negotiate contracts and grants at the applicant's institution. As part of the negotiation process, additional documentation and justifications relating to the proposed Statement of Work and associated budgets may be required.

**Please note that the award start date will be determined during the negotiation process.**

## **I-F. Annual and Final Reports**

All awards will require the timely delivery of several reports during the research effort. These reports are necessary for the CDMRP to monitor progress and evaluate program outcomes. The Principal Investigator (PI) should plan on a reporting requirement consisting of:

- An **annual** report (for each year of research except the final year) that presents a detailed summary of scientific issues and accomplishments; and
- A **final** report (submitted in the last year of the award period) that details the findings and issues for the entire project.

## **I-G. Publications and Patents**

All investigators are strongly encouraged to publish their results in the scientific literature. All publications, abstracts, and presentations must cite the DOD as the source of the research funding. For example, "This research, under Award Number DAMD..., was supported by the Department of Defense Neurofibromatosis Research Program, which is managed by the U.S. Army Medical Research and Materiel Command." A PI must submit to the CDMRP a copy of any manuscript or publication resulting from research funded under the award.

In accordance with the Bayh-Dole Act (35 USC<sup>1</sup> 200 et seq.), title to inventions and patents resulting from such federally funded research may be held by the grantee or its collaborator, but the U.S. Government shall, at a minimum, retain nonexclusive rights for the use of such inventions. An investigator must follow the instructions in the assistance agreement concerning license agreements and patents.

---

<sup>1</sup> United States Code

## II. Department of Defense Neurofibromatosis Research Program

### II-A. History of the Neurofibromatosis Research Program

The Department of Defense (DOD) Neurofibromatosis Research Program (NFRP) was established in fiscal year 1996 (FY96) to promote research directed toward decreasing the impact of neurofibromatosis (NF). The ultimate goal of the NFRP is to develop effective therapies for NF1 and NF2. The DOD used the model established through recommendations from the Institute of Medicine for the U.S. Army Medical Research and Materiel Command’s Breast Cancer Research Program (BCRP) to establish the NFRP. Like the BCRP, the NFRP employs a two-tiered scientific review process that funds meritorious research that will positively impact those living with NF1 or NF2. The program’s success has encouraged Congress to appropriate additional funds to the NFRP in subsequent years, culminating in a \$17M appropriation for the FY01 NFRP.

The program history for FY96-00 appropriations of the NFRP is shown in Table II-1.

**Table II-1: History of the DOD’s Peer Reviewed NFRP**

<b>Program History</b>	<b>FY96-99</b>	<b>FY00<sup>1</sup></b>
NFRP-Managed Appropriations for Peer Reviewed Research	\$37.3M	\$15M
Number of Proposals Received	134	41
Number of Proposals Funded	56	~20
Percentage of Applications Recommended for Funding	42%	~49%
Number of Research Awards	44	~20
Number of Infrastructure Awards	2	N/A <sup>2</sup>

<sup>1</sup>Award negotiations may not be finalized until September 2001.

<sup>2</sup>Not applicable.

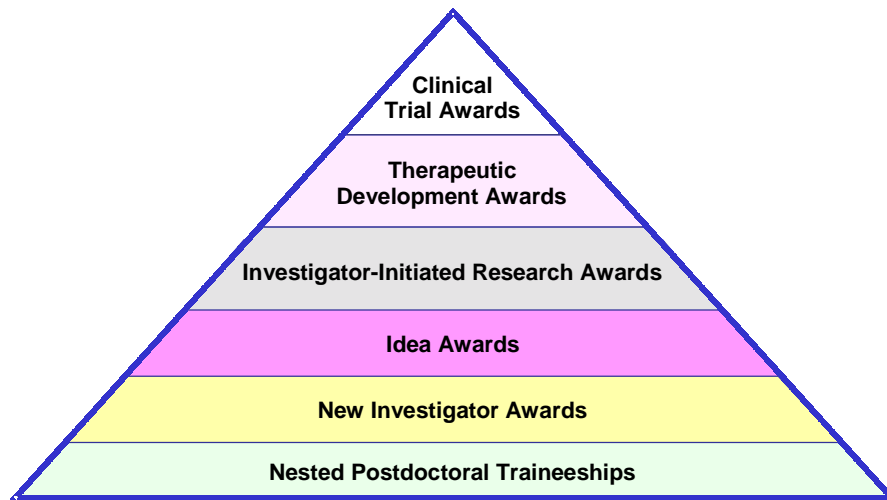
### II-B. Overview of the FY01 NFRP

This program announcement is requesting proposals in the following five award mechanisms: New Investigator Awards, Idea Awards, Investigator-Initiated Research Awards (with optional Nested Postdoctoral Traineeships), Therapeutic Development Awards, and Clinical Trial Awards. The Therapeutic Development Award is new in FY01; details on this award mechanism can be found in [Section VI](#). The Clinical Trial Award mechanism has been redesigned in FY01; this award mechanism now requests proposals in three categories: Phase 1 clinical trials, Pilot clinical trials, and Phase 2 clinical trials.

## II-C. NFRP Emphasis Areas

The NFRP adapts the types of award mechanisms it offers each year to meet the current needs in NF research and treatment. Mechanisms are developed based upon recommendations of the CDMRP staff and Integration Panel, an expert panel of scientists, clinicians, and consumer advocates (see [Section I-B](#)). Multiple factors are taken into consideration when designing and offering award mechanisms for each fiscal year. Award mechanisms offered each year complement and fill niches in research that are not offered/emphasized by other agencies. The overall funding philosophy of the NFRP is illustrated by the pyramid depicted in Figure II-1.

**Figure II-1: FY01 NFRP Philosophy**



At the first and second levels of the pyramid, the NFRP aims to establish a solid foundation for the future of NF research by funding postdoctoral trainees, as an optional part of Investigator-Initiated Research Awards, and junior investigators through New Investigator Awards. At the third level of the pyramid, the NFRP encourages the development of innovative, untested ideas with Idea Awards. At the fourth level of the pyramid, the NFRP funds both basic and clinically oriented NF research projects through Investigator-Initiated Research Awards. Approaching the summit of the pyramid are Therapeutic Development Awards, which support the development and evaluation of preclinical model systems for NF. At the pinnacle of the pyramid, the NFRP funds Phase 1, Pilot, and Phase 2 clinical trials with Clinical Trial Awards.

Support for the training of NF researchers, the encouragement of established scientists in the field, and the attraction of new scientific expertise from other fields are essential to the NF community. Proposals are sought across all areas of laboratory, clinical, behavioral, and epidemiological research including all disciplines within the basic, clinical, psychosocial, behavioral, sociocultural, and environmental sciences; nursing; occupational health; alternative therapies; public health and policy; and economics. Additionally, proposals that address the needs of minority, low-income, rural, and other underrepresented and/or medically underserved populations may be submitted from any eligible institutional source. Proposals are encouraged from investigators working at Historically Black Colleges and Universities and Minority Institutions.

## **II-D. FY01 NFRP Program Announcement Award Opportunities**

For the FY01 NFRP, an estimated \$14.3M will be available to fund competitive peer reviewed NF research. The programmatic strategy for the FY01 NFRP is to fund proposals in two categories: (1) Research Awards and (2) Training Awards.

**Prospective applicants who are familiar with the CDMRP program requirements from previous years are urged to review this program announcement carefully because revisions have been made.**

### **II-D.1. Research Awards**

The FY01 NFRP offers the following Research Awards: (1) New Investigator Awards (see [Section III](#)), (2) Idea Awards (see [Section IV](#)), (3) Investigator-Initiated Research Awards (see [Section V](#)), (4) Therapeutic Development Awards (see [Section VI](#)), and (5) Clinical Trial Awards (see [Section VII](#)).

The intent of the New Investigator Award is to help investigators in the early phases of their careers become established. The intent of the Idea Award is to encourage innovative ideas and technology in NF research. The intent of the Investigator-Initiated Research Award is to sponsor basic and clinically oriented NF research. The intent of the Therapeutic Development Award is to sponsor the development and evaluation of preclinical animal or cell-based model systems for NF. Finally, the intent of the Clinical Trial Award is to sponsor Phase 1, Pilot, or Phase 2 clinical trials that are likely to have a major impact on the treatment of NF.

### **II-D.2. Training Awards**

The FY01 NFRP offers Nested Postdoctoral Traineeships as an optional part of Investigator-Initiated Research Awards in FY01 (see [Section V](#)). The intent of the Nested Postdoctoral Traineeship is to enable doctoral degree graduates to either extend ongoing research related to NF or broaden the scope of their research to include work relevant to NF under the guidance of a designated mentor who is participating in the proposal.

## **II-E. Participation of Minors as Human Research Subjects**

For proposals intending to recruit minors, special attention must be paid to voluntary participation of minors as described in Appendix J, part 7-a.

## Reference Table of Award Mechanisms

Award Mechanism	Experience of Principal Investigator	Key Mechanism Elements	Dollars Available	Instructions for Proposal Preparation
New Investigator Awards	Independent investigators below the level of Associate Professor with access to appropriate research facilities	<ul style="list-style-type: none"> <li>Funds investigators in the early stages of their careers</li> <li>Preliminary data not required</li> </ul>	An average of \$100,000 per year in direct costs for a maximum of \$300,000 over 3 years, plus indirect costs as appropriate	<a href="#">Section III</a>
Idea Awards	Independent investigators	<ul style="list-style-type: none"> <li>Reward innovative ideas and technology related to NF</li> <li>Preliminary data not required</li> </ul>	An average of \$100,000 per year in direct costs for a maximum of \$300,000 over 3 years, plus indirect costs as appropriate	<a href="#">Section IV</a>
Investigator-Initiated Research Awards (with optional Nested Postdoctoral Traineeship[s])	Independent investigators at a level equivalent to or above that of Assistant Professor  Nested Postdoctoral Trainee: Recent doctoral graduates with 3 years or less of postdoctoral experience	<ul style="list-style-type: none"> <li>To sponsor basic and clinically oriented NF research</li> <li>Preliminary data required</li> </ul>	<ul style="list-style-type: none"> <li>No total dollar amount restrictions</li> <li>Funding can be requested for up to 3 years</li> <li>With Nested Postdoctoral Traineeship: a maximum of \$50,000 per year inclusive of direct and indirect costs for a maximum of \$150,000 per trainee over 3 years</li> <li>No limit to the number of postdoctoral trainees nested under a given proposal</li> </ul>	<a href="#">Section V</a>
Therapeutic Development Awards	Independent investigators	<ul style="list-style-type: none"> <li>To fund the development and evaluation of preclinical model systems for NF</li> <li>To fund goal-focused, synergistic consortia</li> </ul>	<ul style="list-style-type: none"> <li>No total dollar amount restrictions</li> <li>Funding can be requested for up to 3 years</li> </ul>	<a href="#">Section VI</a>
Clinical Trial Awards	Independent investigators	<ul style="list-style-type: none"> <li>To fund Phase 1, Pilot, or Phase 2 clinical trials</li> <li>Preclinical data required for all clinical trial proposals</li> <li>Phase 1 or Pilot clinical trial data required for Phase 2 clinical trial proposals</li> </ul>	<ul style="list-style-type: none"> <li>No total dollar amount restrictions</li> <li>Funding can be requested for up to 3 years for Phase 1 and Pilot clinical trials and for up to 4 years for Phase 2 clinical trials</li> </ul>	<a href="#">Section VII</a>

**Important note regarding duplicate submissions:** Submission of the same research project under different award mechanisms will **not** be allowed, and all such duplicate submissions may be administratively withdrawn. This includes submissions under different award mechanisms from different principal investigators. The Government reserves the right to reject any proposal.

### III. New Investigator Awards

#### III-A. New Investigator Awards

The intent of New Investigator Awards is to help investigators at the early stages of their careers become established neurofibromatosis (NF) researchers (see Table III-1). To be eligible for this award, the applicant must be an independent investigator below the level of Associate Professor (or equivalent) with access to appropriate research facilities. The applicant is required to submit a completed [Statement of Eligibility form](#) (see [Section III-E, item 17](#)). Although New Investigator Award proposals do not require preliminary data, they should be based on a sound scientific rationale established through a critical review and analysis of the literature and/or logical reasoning.

**Table III-1: Differences among New Investigator Award Proposals, Idea Award Proposals, and Traditional Research Proposals**

Type of Proposal	Preliminary Data	Mechanism Purpose
New Investigator Award Proposal	Not required (can be included if available)	To prepare new, independent investigators below the level of Associate Professor
Idea Award Proposal	Not required (can be included if available)	To fund novel, high risk research that challenges existing paradigms
Traditional Research Proposal	Required	To expand well-established avenues of research

Funding for New Investigator Awards can be requested for an average of \$100,000 per year in direct costs for a maximum of \$300,000 over 3 years, plus indirect costs as appropriate. Direct costs can cover salary, expenses including research supplies, equipment, and travel to scientific meetings.

For complete proposal requirements, please refer to [Section III-E](#). Additional guidance for proposal preparation may be gained by reviewing the peer and programmatic review criteria listed in [Sections III-B](#) and [III-C](#).



### **III-B. Scientific Peer Review Evaluation Criteria for New Investigator Award Proposals**

New Investigator Award proposals will be evaluated according to the following criteria:

- **Principal Investigator (PI):** How well does the PI meet the goal of this award mechanism (i.e., is the PI relatively new to the field of NF research and below the level of Associate Professor or equivalent)? Does the PI show potential for contributing to the NF research field? Is the PI an independent researcher? Is the proposed work appropriate to the experience level of the PI?
- **Relevance:** Does this study address a critical problem in NF research? To what extent will the project, if successful, make an original and important contribution to the goal of advancing research in the NF field? Does the proposal make a convincing case for the relevance of the research to NF?
- **Research Strategy:** Are the conceptual framework, hypotheses, design, methods, and analyses adequately developed and well integrated to the aims of the project? Are they based on sound scientific rationale and logical reasoning? Does the applicant acknowledge potential problem areas and consider alternative tactics? Preliminary data are not required but may be included. If included, do the preliminary data support the scientific rationale for the study?
- **Environment:** Is there evidence that the scientific environment is appropriate for the proposed research? Is there evidence that the research requirements are adequately supported by the scientific environment, necessary resources, and any collaborative arrangements proposed? Is there evidence of institutional support?
- **Budget:** Is the budget appropriate for the research proposed? Is there evidence that, where appropriate, arrangements have been made to compensate human subjects/participants for expenses they incur from participating in the project?

### **III-C. Programmatic Review Evaluation Criteria for New Investigator Award Proposals**

Funding recommendations at this second tier of review are based on a comparative process. Applicants are reminded of the importance of programmatic relevance and the importance of meeting the intent of the New Investigator Award mechanism. Additional details on programmatic review procedures and evaluation criteria are included in [Section I-C](#).

### **III-D. Letter of Intent**

All applicants considering submission of a proposal in response to this program announcement are requested to submit a Letter of Intent no later than July 11, 2001. This form can be found in Appendix A and submitted as directed, or completed and submitted via the CDMRP web site at <http://cdmrp.army.mil/funding/default>

### **III-E. Proposal Preparation**

Instructions for proposal preparation for all award mechanisms are found in Appendix B. The following supplemental information is specific for New Investigator Awards. Please note that the body of the proposal is limited to **10 pages**, inclusive of figures, tables, graphs, and photographs. **Proposals exceeding specified page limits may be administratively withdrawn prior to peer review.** Ensure that one electronic PDF (Portable Document Format) version of your proposal, which will serve as the official proposal submission, is sent by your organization's sponsored programs office (or equivalent) through the Internet by **4:00 p.m. (your local time) on July 25, 2001**. The electronic PDF version of your proposal must be accompanied by the Electronic Proposal Cover Booklet. In addition, one printed version of the electronic PDF file and one printed version of the Electronic Proposal Cover Booklet are to be received by **July 31, 2001**.

1. Who May Apply – See Appendix B, part 1.  
Eligible applicants must be independent investigators below the level of Associate Professor or equivalent with access to appropriate research facilities.
2. Proposal Acceptance Criteria – See Appendix B, part 2.
3. Resubmissions and Duplicate Submissions – See Appendix B, part 3.
4. Electronic Proposal Cover Booklet – See Appendix B, part 4 and Appendix C.
5. Title/Referral Page – See Appendix B, part 5.
6. Table of Contents – See Appendix B, part 6.  
Use the [table of contents](#) found at the end of this section in your proposal submission. This table of contents should be used as a guide for assembling all required components of the proposal. Number all pages consecutively at the bottom center, beginning with the Title/Referral Page. Provide a header on every page of the proposal that includes the PI name (last name, first name, middle initial).
7. Checklist for Proposal Submission – See Appendix B, part 7.
8. Proposal Abstracts – See Appendix B, part 8.

9. Statement of Work – See Appendix B, part 9 and Appendix D.

10. Proposal Relevance Statement – See Appendix B, part 10.

11. Proposal Body – See Appendix B, part 11.

The body of New Investigator Award proposals is limited to **10 pages**. Figures, tables, graphs, and photographs, if used, must be included in this section. The inclusion of preliminary data is **not** required, however, investigators must demonstrate a sound scientific rationale established through a critical review and analysis of the literature and/or logical reasoning.

Describe the proposed project using the general outline provided below:

- a. **Background:** Briefly describe the ideas behind the proposed work and cite relevant literature references. Describe previous experience most pertinent to this proposal.
- b. **Hypothesis/Rationale/Purpose:** State the hypothesis to be tested and the expected results.
- c. **Objectives:** State concisely the specific aims and the research strategy of the study.
- d. **Methods:** Describe the experimental design and methodology.

12. Abbreviations – See Appendix B, part 12.

13. References – See Appendix B, part 13.

14. Biographical Sketches – See Appendix B, part 14 and Appendix E.

15. Existing/Pending Support – See Appendix B, part 15.

16. Facilities/Equipment Description – See Appendix B, part 16.

17. Administrative Documentation – See Appendix B, part 17.

In addition to the documentation described in Appendix B, provide the following item in the Administrative Documentation section of the proposal submission.

- A form signed by the Department Chair, Dean, or equivalent official verifying that the applicant is an independent investigator below the level of Associate Professor or equivalent with access to appropriate research facilities and therefore is an eligible applicant for this award type. Use the [Statement of Eligibility form](#) at the end of this section. This form must be incorporated into the electronic PDF version of your proposal.

**Proposals lacking required administrative documentation may be considered noncompliant and thus may not be forwarded for review (see Appendix B, part 21).**

18. Detailed Cost Estimate – See Appendix B, part 18.  
Budget is a consideration in both peer and programmatic review, and applicants are cautioned to use discretion in budget requests. Please provide complete justification for expenses in all categories. The amount allotted for travel is \$1,800 per year per PI.
19. Instruments – See Appendix B, part 19.
20. Publications and Patent Abstracts – See Appendix B, part 20.
21. Proposal Submission – See Appendix B, part 21.
22. Receipt Deadlines – See Appendix B, part 22.  
Please note that one electronic PDF version of your proposal must be sent by your organization's sponsored programs office (or equivalent) through the Internet by **4:00 p.m. (your local time) on July 25, 2001**. In addition, one printed version of the electronic PDF file is to be received by **July 31, 2001**. **Receipt of a proposal after the deadline may be grounds for proposal rejection.**
23. Regulatory Compliance and Quality Requirements – See Appendix B, part 23.

**STATEMENT OF ELIGIBILITY**  
**FY01 NFRP New Investigator Award**

Applicant's Name: \_\_\_\_\_

Title of Proposal: \_\_\_\_\_

Applicant's Organization Name: \_\_\_\_\_

Applicant's Organization Location: \_\_\_\_\_

\_\_\_\_\_

Signature of Applicant: \_\_\_\_\_

I certify that the above-named investigator fulfills the requirements to be considered for a New Investigator Award and specifically meets all of the following criteria:

- Is an independent investigator;
- Is below the level of Associate Professor or equivalent; and
- Has access to appropriate research facilities.

Name of Official (*please print*): \_\_\_\_\_

Title: \_\_\_\_\_

Organization: \_\_\_\_\_

Signature of Official: \_\_\_\_\_ Date: \_\_\_\_\_

**Principal Investigator:** \_\_\_\_\_  
*Last Name* *First Name* *MI*

**Proposal Title:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

---

**New Investigator Award Proposal  
Table of Contents**

	<b>Page Number</b>
Electronic Proposal Cover Booklet	
Title/Referral Page (no page limit) .....	i
Table of Contents (1-page limit) .....	1
Checklist for Proposal Submission (1 page) .....	2
Technical Abstract (1-page limit) .....	3
Lay Abstract (1-page limit) .....	4
Statement of Work (2-page limit) .....	5
Proposal Relevance Statement (1-page limit) .....	___
Proposal Body (10-page limit) .....	___
Abbreviations (1-page limit) .....	___
References (no page limit) .....	___
Biographical Sketches (3-page limit each)	
Applicant .....	___
Collaborating Investigators .....	___
Existing/Pending Support (no page limit) .....	___
Facilities/Equipment Description (no page limit) .....	___
Administrative Documentation (no page limit) .....	___
List of items included in this section.....	___
Statement of Eligibility form .....	___
Letters of support from collaborating individuals and/or institutions.....	___
Detailed Cost Estimate (no page limit) .....	___
Instruments (no page limit) .....	___
Publications and Patent Abstracts (5-document limit) .....	___

## IV. Idea Awards

### IV-A. Idea Awards

The intent of Idea Awards is to encourage innovative ideas and technology relevant to neurofibromatosis (NF) research. These proposals may represent a new paradigm in the study of NF, challenge existing paradigms, or look at an existing problem from a new perspective. The proposed studies may be untested, but may present a high probability of revealing new avenues of investigation. Although this research is inherently risky in nature, the research plan must demonstrate solid scientific judgment and rationale. It is the responsibility of the investigator to clearly articulate how the proposed research is innovative.

Idea Award proposals are qualitatively different from traditional research proposals as outlined in Table IV-1. Although Idea Award proposals do not require preliminary data, they should be based on a sound scientific rationale established through a critical review and analysis of the literature and/or logical reasoning.

**Table IV-1: Differences among Idea Award Proposals, New Investigator Award Proposals, and Traditional Research Proposals**

<b>Type of Proposal</b>	<b>Preliminary Data</b>	<b>Mechanism Purpose</b>
Idea Award Proposal	Not required (can be included if available)	To fund novel, high risk research that challenges existing paradigms
New Investigator Award Proposal	Not required (can be included if available)	To prepare new, independent investigators below the level of Associate Professor
Traditional Research Proposal	Required	To expand well-established avenues of research

Funding for Idea Awards can be requested for an average of \$100,000 per year in direct costs for a maximum of \$300,000 over 3 years, plus indirect costs as appropriate. Direct costs can cover salary, expenses including research supplies, equipment, and travel to scientific meetings.

For complete proposal requirements, please refer to [Section IV-E](#). Additional guidance for proposal preparation may be gained by reviewing the peer and programmatic review criteria listed in [Sections IV-B](#) and [IV-C](#).

## **IV-B. Scientific Peer Review Evaluation Criteria for Idea Award Proposals**

Idea Award proposals will be evaluated according to the following criteria:

- **Research Strategy:** Are the conceptual framework, hypothesis, design, methods, and analyses adequately developed and well integrated to the aims of the project? Is a clear-cut rationale supporting the research strategy provided? Does the applicant acknowledge potential problem areas and consider alternative methods/tactics? Preliminary data are **not** required but may be included. If included, do the preliminary data support the scientific rationale for the study?
- **Innovation:** Does the research employ novel concepts, approaches, or methods? Are the aims original and innovative? Does the project challenge existing paradigms, develop new methodologies or technologies, or address underexplored or unexplored areas?
- **Relevance:** Does this study address a critical problem in NF research? If the aims of the research are achieved, will the results be of benefit to the field of NF research or persons affected by the disease? Does the application make a convincing case for the relevance of the research to NF?
- **Principal Investigator (PI):** Is the PI appropriately trained and well suited to carry out this study? Is the proposed work appropriate to the experience level of the PI? Is there representation from all the expertise areas needed to conduct the study successfully?
- **Environment:** Is there evidence that the scientific environment is an appropriate setting for the proposed research? Is there evidence that the research requirements are adequately supported by the scientific environment, necessary resources, and any collaborative arrangements proposed? Is there evidence of institutional support?
- **Budget:** Is the budget appropriate for the research proposed?

## **IV-C. Programmatic Review Evaluation Criteria for Idea Award Proposals**

Funding recommendations at this second tier of review are based on a comparative process. Applicants are reminded of the importance of programmatic relevance. For example, does the proposal meet the goals and intent of the Idea Award mechanism? Additional details on programmatic review procedures and evaluation criteria are included in [Section I-C](#).



#### IV-D. Letter of Intent

All applicants considering submission of a proposal in response to this program announcement are requested to submit a Letter of Intent no later than July 11, 2001. This form can be found in Appendix A and submitted as directed, or completed and submitted via the CDMRP web site at <http://cdmrp.army.mil/funding/default>

#### IV-E. Proposal Preparation

Instructions for proposal preparation for all award mechanisms are found in Appendix B. The following supplemental information is specific for Idea Awards. Please note that the body of the proposal is limited to **10 pages**, inclusive of figures, tables, graphs, and photographs. **Proposals exceeding specified page limits may be administratively withdrawn prior to peer review.** Ensure that one electronic PDF (Portable Document Format) version of your proposal, which will serve as the official proposal submission, is sent by your organization's sponsored programs office (or equivalent) through the Internet by **4:00 p.m. (your local time) on July 25, 2001**. The electronic PDF version of your proposal must be accompanied by the Electronic Proposal Cover Booklet. In addition, one printed version of the electronic PDF file and one printed version of the Electronic Proposal Cover Booklet are to be received by **July 31, 2001**.

1. Who May Apply – See Appendix B, part 1.
2. Proposal Acceptance Criteria – See Appendix B, part 2.
3. Resubmissions and Duplicate Submissions – See Appendix B, part 3.
4. Electronic Proposal Cover Booklet – See Appendix B, part 4 and Appendix C.
5. Title/Referral Page – See Appendix B, part 5.
6. Table of Contents – See Appendix B, part 6.  
Use the [table of contents](#) found at the end of this section in your proposal submission. This table of contents should be used as a guide for assembling all required components of the proposal. Number all pages consecutively at the bottom center, beginning with the Title/Referral Page. Provide a header on every page of the proposal that includes the PI name (last name, first name, middle initial).
7. Checklist for Proposal Submission – See Appendix B, part 7.
8. Proposal Abstracts – See Appendix B, part 8.
9. Statement of Work – See Appendix B, part 9 and Appendix D.
10. Proposal Relevance Statement – See Appendix B, part 10.

11. Proposal Body – See Appendix B, part 11.

The body of Idea Award proposals is limited to **10 pages**.

For Idea Award proposals, it is the responsibility of the applicant to clearly articulate how the proposed research is innovative. The inclusion of preliminary data is **not** required, however, investigators must demonstrate a sound scientific rationale established through a critical review and analysis of the literature and/or logical reasoning.

Describe the proposed project using the general outline provided below:

- a. **Background:** Briefly describe the ideas behind the proposed work and cite relevant literature references. Describe previous experience most pertinent to this proposal.
- b. **Hypothesis/Rationale/Purpose:** State the hypothesis to be tested and the expected results.
- c. **Objectives:** State concisely the specific aims and the research strategy of the study.
- d. **Methods:** Describe the experimental design and methodology. If the methodology is new or unusual, describe it in sufficient detail for evaluation.

12. Abbreviations – See Appendix B, part 12.

13. References – See Appendix B, part 13.

14. Biographical Sketches – See Appendix B, part 14 and Appendix E.

15. Existing/Pending Support – See Appendix B, part 15.

16. Facilities/Equipment Description – See Appendix B, part 16.

17. Administrative Documentation – See Appendix B, part 17.

18. Detailed Cost Estimate – See Appendix B, part 18.

Budget is a consideration in both peer and programmatic review, and applicants are cautioned to use discretion in budget requests. Please provide complete justification for expenses in all categories. Funding for Idea Awards can be requested for an average of \$100,000 per year in direct costs for a maximum of \$300,000 over 3 years, plus indirect costs as appropriate. Direct costs can cover salary, expenses including research supplies, equipment, and travel to scientific meetings. The amount allotted for travel is \$1,800 per year per PI.

19. Instruments – See Appendix B, part 19.

20. Publications and Patent Abstracts – See Appendix B, part 20.

21. Proposal Submission – See Appendix B, part 21.

22. Receipt Deadlines – See Appendix B, part 22.

Please note that one electronic PDF version of your proposal must be sent by your organization's sponsored programs office (or equivalent) through the Internet by **4:00 p.m. (your local time) on July 25, 2001**. In addition, one printed version of the electronic PDF file is to be received by **July 31, 2001**. **Receipt of a proposal after the deadline may be grounds for proposal rejection.**

23. Regulatory Compliance and Quality Requirements – See Appendix B, part 23.

**Principal Investigator:** \_\_\_\_\_  
*Last Name* *First Name* *MI*

**Proposal Title:** \_\_\_\_\_

---

**Idea Award Proposal  
Table of Contents**

	<b>Page Number</b>
Electronic Proposal Cover Booklet	
Title/Referral Page (no page limit) .....	i
Table of Contents (1-page limit) .....	1
Checklist for Proposal Submission (1 page) .....	2
Technical Abstract (1-page limit) .....	3
Public Abstract (1-page limit) .....	4
Statement of Work (2-page limit) .....	5
Proposal Relevance Statement (1-page limit) .....	___
Proposal Body (10-page limit) .....	___
Abbreviations (1-page limit) .....	___
References (no page limit) .....	___
Biographical Sketches (3-page limit each)	
PI .....	___
Collaborating Investigators .....	___
Existing/Pending Support (no page limit) .....	___
Facilities/Equipment Description (no page limit) .....	___
Administrative Documentation (no page limit) .....	___
List of all items included in this section.....	___
Letters of support from collaborating individuals and/or institutions.....	___
Detailed Cost Estimate (no page limit) .....	___
Instruments (no page limit) .....	___
Publications and Patent Abstracts (5-document limit) .....	___

---

## **V. Investigator-Initiated Research Awards (with optional Nested Postdoctoral Traineeship[s])**

### **V-A. Investigator-Initiated Research Awards**

The intent of Investigator-Initiated Research Awards (IIRAs) is to sponsor basic and clinically oriented research that will (1) provide insight into the molecular mechanisms underlying the development of neurofibromatosis (NF), (2) result in substantial improvement(s) over today's approach to the diagnosis and treatment of either NF1 or NF2, and (3) enhance the quality of life for persons with the disease. These grants are intended to fund independent investigators across a broad spectrum of disciplines. An IIRA investigator is defined as an independent investigator at a level equivalent to or above that of Assistant Professor. All IIRA proposals must include preliminary data relevant to NF research and the proposed project. **In addition, the proposal should include a clear statistical plan of analysis.**

The fiscal year 2001 NFRP encourages investigators to submit IIRA proposals that:

- Perform cellular and biochemical studies investigating how abnormal functioning and mutagenesis of the NF1 and NF2 genes lead to pathogenesis;
- Perform studies of normal functioning of the NF1 and NF2 proteins in a variety of cell types, not necessarily nor exclusively the disease target tissue;
- Expand the knowledge of the genes that contribute to NF beyond the GAP<sup>1</sup>-related domain in NF1;
- Attempt to define the genetic and nongenetic factors and modifiers that play a role in the manifestations of NF1 and NF2, including tumor formation, growth, and progression in NF1 and NF2 tumors;
- Study the effects of puberty, pregnancy, and aging on disease progression and tumor growth;
- Develop new methods of imaging and measurement of lesions including new approaches to quantitation of dermal neurofibromas;
- Study the pathogenesis of pseudoarthrosis, scoliosis, and other bone abnormalities in NF1;
- Address early childhood developmental and psychosocial aspects of NF1; and
- Focus on learning disabilities and other cognitive aspects of NF1.

---

<sup>1</sup> GTPase-activating protein

Although there are no total dollar amount restrictions to these awards, funding for IIRAs can only be requested for up to 3 years. Direct costs can cover salary, expenses including research supplies, equipment, and travel to scientific meetings.

For complete proposal requirements, please refer to [Section V-F](#). Additional guidance for proposal preparation may be gained by reviewing the peer and programmatic review criteria listed in [Sections V-C](#) and [V-D](#).

## **V-B. IIRAs with Nested Postdoctoral Traineeship(s)**

Nested Postdoctoral Traineeships are being offered as an optional part of IIRA proposals. The intent of the Nested Postdoctoral Traineeship is to enable doctoral degree graduates to either extend ongoing research related to NF or broaden the scope of their research to include work relevant to NF under the guidance of a designated mentor who is participating in the proposal. It is expected that the training will provide a valuable opportunity to further develop the experience necessary to advance the trainee's research career in NF.

A trainee is defined as a postdoctoral student with 3 years or less of postdoctoral experience at the time of proposal submission. Eligible postdoctoral candidates must have successfully defended a doctoral thesis and completed all academic requirements at the time of award negotiations.

There is no limit to the number of postdoctoral trainees that can be nested within a given IIRA proposal. However, these Nested Postdoctoral Traineeships can only be obtained as an optional part of the IIRA mechanism. Applicants must submit a biographical sketch of no more than three pages for each trainee and include it in the biographical sketch section (see Appendix B, part 14). "To be named" trainees are acceptable for the proposal submission. For those proposals approved for funding, the U.S. Army Medical Research Acquisition Activity must be provided with the name and biographical sketch of each applicant for review and approval.

For the Nested Postdoctoral Traineeship portion of IIRA proposals, funding can be requested for a maximum of \$50,000 per year inclusive of direct and indirect costs for a maximum of \$150,000 per trainee over 3 years. Direct costs can cover salary, stipends, seminars and courses, expenses including research supplies, equipment, and travel to scientific meetings. Expenses relevant to the traineeship should be listed under the "Other" category on the Detailed Cost Estimate form (see Appendix B, part 19).

For complete proposal requirements, please refer to [Section V-G](#). Additional guidance for proposal preparation may be gained by reviewing the peer and programmatic review criteria listed in [Sections V-D](#) and [V-E](#).

## **V-C. Scientific Peer Review Evaluation Criteria for All IIRA Proposals**

All IIRA proposals will be evaluated according to the following criteria:

- **Research Strategy:** Are the conceptual framework, hypotheses, design, methods, and analyses adequately developed and well integrated to the aims of the project? Does the applicant acknowledge potential problem areas and consider alternative tactics? Do the required preliminary data in NF research support the proposed project? Is the experimental design sound and sufficiently well developed with the required statistical power to lead to significant results?
- **Scientific Relevance:** To what extent will the project, if successful, make an original and important contribution to the goal of advancing research in the field? Does this study address a critical problem in NF research? Does the proposal make a convincing case for the relevance of the research to NF?
- **Principal Investigator (PI) and Personnel:** Is the PI appropriately trained and well suited to carry out this work? Does the PI show potential for contribution to the NF field? Is the proposed work appropriate to the experience level of the PI and other researchers (if any)? Is appropriate expertise available to conduct the study successfully? **For IIRAs with Nested Postdoctoral Traineeship(s)**, are the PI and other scientific personnel well qualified to conduct training for the trainee(s)? Is there a senior staff member who is identified and responsible for the trainee(s)?
- **Environment:** Is there evidence that the scientific environment is an appropriate setting for the proposed research? Is there evidence that the research requirements are adequately supported by the scientific environment, necessary resources, and any collaborative arrangements proposed? Is there evidence of institutional support? **For IIRAs with Nested Postdoctoral Traineeship(s)**, is the research training properly structured and balanced to ensure that the trainee(s) will acquire the knowledge and necessary skills relevant to the scientific area being studied?
- **Budget:** Is the budget appropriate for the research proposed? Is there evidence that, where appropriate, arrangements have been made to compensate human subjects/participants for expenses they incur from participating in the project?

## **V-D. Programmatic Review Evaluation Criteria for All IIRA Proposals**

Funding recommendations at this second tier of review are based on a comparative process. Applicants are reminded of the importance of programmatic relevance and the importance of meeting the intent of the IIRA mechanism. Additional details on programmatic review procedures and evaluation criteria are included in [Section I-C](#).

## **V-E. Letter of Intent**

All applicants considering submission of a proposal in response to this program announcement are requested to submit a Letter of Intent no later than July 11, 2001. This form can be found in Appendix A and submitted as directed, or completed and submitted via the CDMRP web site at <http://cdmrp.army.mil/funding/default>

## **V-F. Proposal Preparation**

Instructions for proposal preparation for all award mechanisms are found in Appendix B of this program announcement. The following supplemental information is specific for IIRAs. Please note that the body of the proposal is limited to **20 pages**, inclusive of figures, tables, graphs, and photographs. **Proposals exceeding specified page limits may be administratively withdrawn prior to peer review.** Ensure that one electronic PDF (Portable Document Format) version of your proposal, which will serve as the official proposal submission, is sent by your organization's sponsored programs office (or equivalent) through the Internet by **4:00 p.m. (your local time) on July 25, 2001**. The electronic PDF version of your proposal must be accompanied by the Electronic Proposal Cover Booklet. In addition, one printed version of the electronic PDF file and one printed version of the Electronic Proposal Cover Booklet are to be received by **July 31, 2001**.

1. Who May Apply – See Appendix B, part 1.  
Eligible applicants for Nested Postdoctoral Traineeships are postdoctoral students with 3 years or less of experience at the time of proposal submission. At the time of award negotiations, an applicant must have successfully defended a doctoral thesis and completed all academic requirements.
2. Proposal Acceptance Criteria – See Appendix B, part 2.
3. Resubmissions and Duplicate Submissions – See Appendix B, part 3.
4. Electronic Proposal Cover Booklet – See Appendix B, part 4 and Appendix C.
5. Title/Referral Page – See Appendix B, part 5.
6. Table of Contents – See Appendix B – Part 6.  
Use the [table of contents](#) at the end of this section in your proposal submission. This table of contents should be used as a guide for assembling all required components of the proposal. Number all pages consecutively at the bottom center, beginning with the Title/Referral Page. Provide a header on every page of the proposal that includes the PI name (last name, first name, middle initial).
7. Checklist for Proposal Submission – See Appendix B, part 7.



8. Proposal Abstracts – See Appendix B, part 8.
9. Statement of Work – See Appendix B, part 9 and Appendix D.
10. Proposal Relevance Statement – See Appendix B, part 10.
11. Proposal Body – See Appendix B, part 11.

a. IIRA Proposal Body.

The body of IIRA proposals is limited to **20 pages**. Figures, tables, graphs, and photographs, if used, must be included in this section.

The inclusion of preliminary data **is required** for IIRA proposals; investigators must submit promising and well-founded preliminary data relevant to NF and the proposed project.

Describe the proposed project using the general outline provided below:

- i. Background: Describe the ideas behind the proposed work and cite relevant literature references. Describe previous experience most pertinent to this proposal.
  - ii. Hypothesis/Rationale/Purpose: State the hypothesis to be tested and the expected results.
  - iii. Objectives: State the specific aims and the research strategy of the study.
  - iv. Methods: Describe the experimental design and methodology.
  - v. Preliminary Data: Provide pertinent data to support the necessity, feasibility, and potentiality of the proposed project.
- b. Nested Postdoctoral Traineeship Proposal Body.  
The body of the Nested Postdoctoral Traineeship proposal is limited to two pages. Identify the staff members who are responsible for the trainees. Describe the research training in which the trainees will participate such as research, coursework, laboratory techniques, conferences, and journal clubs.

12. Abbreviations – See Appendix B, part 12.
13. References – See Appendix B, part 13.
14. Biographical Sketches – See Appendix B, part 14.  
Note that biographical sketches should be included for the applicant, named trainee(s), and all collaborating investigators. Each biographical sketch may not exceed 3 pages.

15. Existing/Pending Support – See Appendix B, part 15.
16. Facilities/Equipment Description – See Appendix B, part 16.
17. Administrative Documentation – See Appendix B, part 17.
18. Detailed Cost Estimate – See Appendix B, part 18.

Budget is a consideration in both peer and programmatic review, and applicants are cautioned to use discretion in budget requests. Please provide complete justification for expenses in all categories. There are no total dollar amount restrictions for IIRA proposals but funding can only be requested for up to 3 years. Funding for Nested Postdoctoral Traineeships can be requested for a maximum of \$50,000 per year inclusive of direct and indirect costs for a maximum of \$150,000 per trainee over 3 years. Direct costs can cover salary, stipends, seminars and courses, expenses including research supplies, equipment, and travel to scientific meetings. The amount allotted for travel is \$1,800 per year per PI. The amount allotted for postdoctoral trainee travel is \$1,500 per year.
19. Instruments – See Appendix B, part 19.
20. Publications and Patent Abstracts – See Appendix B, part 20.
21. Proposal Submission – See Appendix B, part 21.
22. Receipt Deadlines – See Appendix B, part 22.

Please note that one electronic PDF version of your proposal must be sent by your organization's sponsored programs office (or equivalent) through the Internet by **4:00 p.m. (your local time) on July 25, 2001**. In addition, one printed version of the electronic PDF file is to be received by **July 31, 2001**. **Receipt of a proposal after the deadline may be grounds for proposal rejection.**
23. Regulatory Compliance and Quality Requirements – See Appendix B, part 23.

**Principal Investigator:** \_\_\_\_\_  
*Last Name* *First Name* *MI*

**Proposal Title:** \_\_\_\_\_

---

**Investigator-Initiated Research Award Proposal  
Table of Contents**

	<b>Page Number</b>
Electronic Proposal Cover Booklet	
Title/Referral Page (no page limit) .....	i
Table of Contents (1-page limit) .....	1
Checklist for Proposal Submission (1 page) .....	2
Technical Abstract (1-page limit) .....	3
Public Abstract (1-page limit) .....	4
Statement of Work (2-page limit) .....	5
Proposal Relevance Statement (1-page limit) .....	___
Investigator-Initiated Research Award Proposal Body (20-page limit) .....	___
Nested Postdoctoral Traineeship Proposal Body, if applicable (1-page limit for each trainee) .....	___
Abbreviations (1-page limit) .....	___
References (no page limit) .....	___
Biographical Sketches (3-page limit each)	
PI.....	___
Key Personnel (including collaborating investigators and Nested Postdoctoral Trainees) .....	___
Existing/Pending Support (no page limit) .....	___
Facilities/Equipment Description (no page limit) .....	___
Administrative Documentation (no page limit) .....	___
List of all items included in this section.....	___
Letters of support from collaborating individuals and/or institutions.....	___
Detailed Cost Estimate (no page limit) .....	___
Instruments (no page limit) .....	___
Publications and Patent Abstracts (5-document limit) .....	___

---

## **VI. Therapeutic Development Awards**

### **VI-A. Therapeutic Development Awards**

In an effort to boost the number of clinical trials within the neurofibromatosis (NF) research field, the NFRP is offering the Therapeutic Development Award. The intent of this award mechanism is to sponsor the development and evaluation of preclinical model systems for NF1 and NF2. More specifically, this award supports research projects in one or more of the following phases of the preclinical drug development process:

- Development of new or modification of existing *in vitro* or *in vivo* preclinical model systems for elucidating the actions of potential drugs for NF. Preclinical model systems could include cell-based assays, mammalian or non-mammalian models, or high-throughput assays.
- Confirmation of the predictive value of newly developed or existing *in vitro* or *in vivo* preclinical model systems.
- Use of established model systems to screen and/or determine the therapeutic potential of drugs for NF.

The overall goal of this award mechanism is to allow NF investigators to develop the skills and generate the preclinical data necessary to conduct clinical trials after completion of the research. The Therapeutic Development Award is not restricted to research in malignant neoplasias, but is open to the full spectra of manifestations of NF1 and NF2. The proposed studies are expected to be empirical in nature and product-driven rather than hypothesis-driven. It is anticipated that the agents and model systems generated from these awards will lead to the development of a broad platform on which to test future therapies.

Specific programmatic interests include proposals that:

- Develop model systems to test potential lead agents or therapies for NF;
- Make existing preclinical model systems for NF suitable for pharmacological screening;
- Improve the understanding of mechanism of action of new therapies; or
- Test new therapies for NF, using established preclinical model systems.

The preclinical drug development process may require resources beyond those available at a single institution. Therefore, Therapeutic Development Awards are open to investigators interested in establishing synergistic, goal-focused, multi-institutional consortia (e.g., between industry and academia or between multiple academic institutions) focused on developing and

validating animal models for their use in preclinical testing, identifying lead agents, and testing the clinical potential of the lead agents developed by the investigators. If a consortium is proposed, sufficient characterization of the consortium and justification for the collaborative partners must be included in the proposal (see [Section VI-B](#)).

Although there are no total dollar amount restrictions to these awards, programmatic priority will be given to smaller-scale, cost-efficient projects with well-defined endpoints. Funding can be requested for up to 3 years. Direct costs can cover salary, expenses including research supplies, equipment, and travel to scientific meetings. For proposals involving a consortium, direct costs can also cover expenses for meetings that bring together members of the consortium.

All applicants for Therapeutic Development Awards **must include preliminary data** relevant to the phase(s) of the preclinical drug development process covered by the research in their proposals. If appropriate, the proposal should include a clear statistical plan of analysis. Priority will be given to proposals that meet the specific goal of the program (i.e., developing therapeutic agents for NF).

For complete proposal requirements, please refer to [Section VI-E](#). Additional guidance for proposal preparation may be gained by reviewing the peer and programmatic review criteria listed in [Sections VI-B](#) and [VI-C](#).

## **VI-B. Scientific Peer Review Evaluation Criteria for Therapeutic Development Award Proposals**

Therapeutic Development Award proposals will be evaluated according to the following criteria:

- **Research Strategy:** Does the applicant provide preliminary data that support the approach and scientific rationale for the study? Are the conceptual framework, design, methods, and analyses adequately developed and well integrated to support the feasibility and promise of the approach? Is the experimental design sound and sufficiently well developed with the required statistical method and analysis plan to lead to significant results? Is the appropriate statistical expertise represented on the research team? Does the applicant acknowledge potential problem areas and consider alternative methods/tactics?
- **Therapeutic Relevance:** Does the applicant make a convincing case for the relevance of the preclinical model to the development of NF therapeutics? Is evidence provided for the predictive value of the preclinical model? If lead agents are being screened, how relevant are they to NF? How does this research advance the agenda of bringing therapies to clinical trials?
- **Personnel:** Is the PI appropriately trained and well suited to carry out this work? Are the other scientific personnel well qualified to participate in the project? Is there appropriate representation from all areas of expertise needed to conduct the study successfully? If a consortium is proposed, is the team appropriate for addressing the proposed project?

- **Environment:** Is there evidence that the scientific environment is an appropriate setting for the proposed research? Is there evidence that the research requirements are adequately supported by the scientific environment, necessary resources, and any collaborative arrangements proposed? Is there evidence of institutional support for this proposal? **For proposals involving consortia:** Is there evidence that the consortium is goal-focused? Is there adequate synergy between the involved institutions/organizations? Is there a clear plan for interaction between members of the consortium? Do the institutions/organizations involved in the project strengthen the proposal?
- **Budget:** Is the budget appropriate for the research proposed?

### **VI-C. Programmatic Review Evaluation Criteria for Therapeutic Development Award Proposals**

Funding recommendations at this second tier of review are based on a comparative process. Applicants are reminded of the importance of programmatic relevance and the importance of meeting the intent of the Therapeutic Development Award mechanism. Additional details on programmatic review procedures and evaluation criteria are included in [Section I-C](#).

### **VI-D. Letter of Intent**

All applicants considering submission of a proposal in response to this program announcement are requested to submit a Letter of Intent no later than July 11, 2001. This form can be found in Appendix A and submitted as directed, or completed and submitted via the CDMRP web site at <http://cdmrp.army.mil/funding/default>

### **VI-E. Proposal Preparation**

Instructions for proposal preparation for all award mechanisms are found in Appendix B. The following supplemental information is specific for Therapeutic Development Awards. Please note that the body of the proposal is limited to **20 pages**, inclusive of figures, tables, graphs, and photographs. **Proposals exceeding specified page limits may be administratively withdrawn prior to peer review.** Ensure that one electronic PDF (Portable Document Format) version of your proposal, which will serve as the official proposal submission, is sent by your organization's sponsored programs office (or equivalent) through the Internet by **4:00 p.m. (your local time) on July 25, 2001**. The electronic PDF version of your proposal must be accompanied by the Electronic Proposal Cover Booklet. In addition, one printed version of the electronic PDF file and one printed version of the Electronic Proposal Cover Booklet are to be received by **July 31, 2001**.

1. Who May Apply – See Appendix B, part 1.
2. Proposal Acceptance Criteria – See Appendix B, part 2.
3. Resubmissions and Duplicate Submissions – See Appendix B, part 3.
4. Electronic Proposal Cover Booklet – See Appendix B, part 3 and Appendix C.
5. Title/Referral Page – See Appendix B, part 5.
6. Table of Contents – See Appendix B, part 6.  
Use the [table of contents](#) found at the end of this section in your proposal submission. This table of contents should be used as a guide for assembling all required components of the proposal. Number all pages consecutively at the bottom center, beginning with the Title/Referral Page. Provide a header on every page of the proposal that includes the PI name (last name, first name, middle initial).
7. Checklist for Proposal Submission – See Appendix B, part 7.
8. Proposal Abstracts – See Appendix B, part 8.
9. Statement of Work – See Appendix B, part 9 and Appendix D.
10. Proposal Relevance Statement – See Appendix B, part 10.
11. Proposal Body – See Appendix B, part 11.  
The body of Therapeutic Development Award proposals is limited to **20 pages**. Figures, tables, graphs, and photographs, if used, must be included in this section. The inclusion of preliminary data **is required** for all Therapeutic Development Award proposal submissions. Investigators must submit promising and well-founded preliminary data relevant to NF and the proposed project.

Describe the proposed project using the general outline below:

- a. **Background:** Describe the ideas and reasoning behind the proposed work and previous experience most pertinent to the proposal. Cite relevant literature references.
- b. **Rationale:** State the purpose of the study and the expected results.
- c. **Objectives:** State concisely the specific aims of the study.
- d. **Preliminary Data:** Provide pertinent data to support the necessity, feasibility, and potentiality of the proposed project.
- e. **Methodology:** Describe the experimental design and methodology, including statistical analysis.

12. Abbreviations – See Appendix B, part 12.
13. References – See Appendix B, part 13.
14. Biographical Sketches – See Appendix B, part 14.
15. Existing/Pending Support – See Appendix B, part 15.
16. Facilities/Equipment Description – See Appendix B, part 16.  
Clinical, data management, and laboratory facilities, as well as required equipment should be described in detail for **all** participating institutions.
17. Administrative Documentation – See Appendix B, part 17.
18. Detailed Cost Estimate – See Appendix B, part 18.  
Budget is a consideration in both peer and programmatic review, and applicants are cautioned to use discretion in budget requests. Please provide complete justification for expenses in all categories. There are no total dollar amount restrictions for Therapeutic Development Award proposals, but funding can only be requested for 3 years. A budget for the entire period of the grant must be provided. A total overall budget as well as itemized, individual budgets for each year of support requested must be prepared. If multiple centers are proposed or if any subcontract(s) for personnel or facilities exist, separate itemized budgets must be prepared for each year of the study. Direct costs can cover salary, expenses including research supplies, and travel to scientific meetings. The amount allotted for travel is \$1,800 per year per PI. For proposals involving a consortium, direct costs can also cover expenses for meetings that bring together members of the consortium.
19. Instruments – See Appendix B, part 19.
20. Publications and Patent Abstracts – See Appendix B, part 20.
21. Proposal Submission – See Appendix B, part 21.
22. Receipt Deadlines – See Appendix B, part 22.  
Please note that one electronic PDF version of your proposal must be sent by your organization's sponsored programs office (or equivalent) through the Internet by **4:00 p.m. (your local time) on July 25, 2001**. In addition, one printed version of the electronic PDF file is to be received by **July 31, 2001**. **Receipt of a proposal after the deadline may be grounds for proposal rejection.**
23. Regulatory Compliance and Quality – See Appendix B, part 23.



**Principal Investigator:** \_\_\_\_\_  
*Last Name* *First Name* *MI*

**Proposal Title:** \_\_\_\_\_

---

**Therapeutic Development Award Proposal  
Table of Contents**

	<b>Page Number</b>
Electronic Proposal Cover Booklet	
Title/Referral Page (1-page limit) .....	i
Table of Contents (1-page limit) .....	1
Checklist for Proposal Submission (1 page) .....	2
Technical Abstract (1-page limit) .....	3
Public Abstract (1-page limit) .....	4
Statement of Work (2-page limit) .....	5
Proposal Relevance Statement (1-page limit) .....	___
Proposal Body (20-page limit) .....	___
Abbreviations (1-page limit) .....	___
References (no page limit) .....	___
Biographical Sketches (3-page limit each)	
PI .....	___
Collaborating Investigators .....	___
Existing/Pending Support (no page limit) .....	___
Facilities/Equipment Description (no page limit) .....	___
Administrative Documentation (no page limit) .....	___
List of all items included in this section.....	___
Letters of support from collaborating individuals and/or institutions.....	___
Detailed Cost Estimate (no page limit) .....	___
Instruments (no page limit) .....	___
Publications and Patent Abstracts (5-document limit) .....	___

---

## **VII. Clinical Trial Awards**

### **VII-A. Clinical Trial Awards**

The intent of Clinical Trial Awards is to sponsor clinically oriented research with the potential to have a major impact on the treatment of either neurofibromatosis 1 (NF1) or NF2. Three types of clinical trials will be funded by this award mechanism: **Phase 1 clinical trials**, **Pilot clinical trials**, and **Phase 2 clinical trials**. Separate discussions are provided below for each of these types of Clinical Trial Awards. Applicants should clearly specify in their proposals for which type of Clinical Trial Award they are applying. The ultimate goal of the Clinical Trial Award mechanism is to sponsor novel clinical research that has the potential to substantially improve today's approach to the treatment of NF1 and NF2.

**Phase 1 clinical trials** should be focused on determining the safety, toxicity, tolerability, and pharmacokinetics of new agents or treatment schedules. It is expected that this award will allow the recipient the opportunity to obtain the data and experience necessary to conduct a Phase 2 clinical trial. Applicants for Phase 1 trials must include adequate preclinical supplemental data to support the feasibility of their hypotheses and approaches. Applicants must include a detailed plan for completing the Phase 1 trial during the course of the award and a clear experimental and appropriately powered statistical plan to perform the Phase 1 trial.

**Pilot clinical trials** should be focused on determining the feasibility of a treatment regimen or defining new agents or surrogate markers for future use in Phase 2 or 3 clinical trials. These studies should establish proof-of-principal and demonstrate that the biological effects of the agents under investigation are promising enough to warrant their exploration in a formal Phase 2 or 3 clinical trial. The dose and safety of the agents to be used in the Pilot clinical trial must already be documented. The NFRP encourages proposals for Pilot clinical trials that investigate new endpoints (e.g., tumor markers) or that combine agents in novel patterns. Applicants must include a detailed plan for completing the Pilot clinical trial during the course of the award.

**Phase 2 clinical trials** should be focused on defining the efficacy of new agents. Applicants for Phase 2 clinical trials must include Phase 1 or Pilot clinical trial data and adequate preclinical supplemental data to support the feasibility of their hypotheses and approaches, along with a detailed plan to complete the Phase 2 clinical trial during the course of the award. Applicants must also include a clear experimental and appropriately powered statistical plan to perform the Phase 2 clinical trial.

Although there are no total dollar amount restrictions to these awards, programmatic priority will be given to smaller scale, cost-efficient clinical trials. The NFRP is particularly interested in proposals for Phase 1 and Pilot clinical trials that are under \$500,000. Funding for Phase 1 and Pilot clinical trials can be requested for up to 3 years, while funding for Phase 2 clinical trials can be requested for up to 4 years. Consideration of cost-sharing with other funding sources is encouraged.

Proposals submitted with research involving human subjects and/or anatomical substances must be approved by the appropriate local review board. Proposals must also be approved by the U.S. Army Human Subjects Research Review Board (HSRRB). The HSRRB is mandated to comply with specific laws and directives governing research involving human subjects that is conducted or supported by the DOD. These laws and directives are rigorous and detailed and will require information in addition to that supplied to the local review board. Investigators submitting such proposals must comply with these requirements **before funded research can begin**.

For complete proposal requirements, please refer to [Section VII-E](#). Additional guidance for proposal preparation may be gained by reviewing the peer and programmatic review criteria listed in [Sections VII-B](#) and [VII-C](#).

## **VII-B. Scientific Peer Review Evaluation Criteria for Clinical Trial Award Proposals**

Clinical Trial Award proposals will be evaluated according to the following criteria:

- **Trial Design:** Are the conceptual framework, design, methods, and analyses adequately developed and well integrated, including laboratory and other preclinical evidence, to support the clinical feasibility and promise of the approach? Have the logistical aspects of the proposed clinical trial been appropriately addressed? Has the availability of subjects for the clinical trial, the prospect of their participation, and the likelihood of subject attrition been addressed? Is the recruitment schedule reasonable?
- **Clinical Relevance and Impact:** Does the study address an important problem related to the treatment of NF? If the aims of the proposal are achieved, are they likely to have a substantial clinical impact?
- **Statistical Plan:** For the proposed clinical trial, is a clear statistical plan, including sample size projections and power analysis, outlined in the proposal? Is the appropriate statistical expertise represented on the research team?
- **Personnel:** Does the PI have expertise in NF? Is the PI appropriately trained and well suited to carry out this work? Are the other scientific personnel well qualified to participate in the project? Is there representation from all the areas of expertise needed to conduct the clinical trial successfully?
- **Environment:** Is there evidence for an appropriate clinical setting and the availability of institutional resources to support the study at each participating center? Are there assurances that therapies to be used are available? Are letters of commitment included from participating centers?

- **Budget:** Is the budget appropriate for the research proposed? Is there evidence that, where appropriate, arrangements have been made to compensate human subjects/participants for expenses they incur from participating in the project?

### **VII-C. Programmatic Review Evaluation Criteria for Clinical Trial Award Proposals**

Funding recommendations at this second tier of review are based on a comparative process. Applicants are reminded of the importance of programmatic relevance and the importance of meeting the intent of the Clinical Trial Award mechanism. Additional details on programmatic review procedures and evaluation criteria are included in [Section I-C](#).

### **VII-D. Letter of Intent**

All applicants considering submission of a proposal in response to this program announcement are requested to submit a Letter of Intent no later than July 11, 2001. This form can be found in Appendix A and submitted as directed, or completed and submitted via the CDMRP web site at <http://cdmrp.army.mil/funding/default>

### **VII-E. Proposal Preparation**

Instructions for proposal preparation for all award mechanisms are found in Appendix B. The following supplemental information is specific for Clinical Trial Awards. Please note that the body of the proposal is limited to **50 pages**, inclusive of figures, tables, graphs, and photographs. **Proposals exceeding specified page limits may be administratively withdrawn prior to peer review.** Ensure that one electronic PDF (Portable Document Format) version of your proposal, which will serve as the official proposal submission, is sent by your organization's sponsored programs office (or equivalent) through the Internet by **4:00 p.m. (your local time) on July 25, 2001**. The electronic PDF version of your proposal must be accompanied by the Electronic Proposal Cover Booklet. In addition, one printed version of the electronic PDF file and one printed version of the Electronic Proposal Cover Booklet are to be received by **July 31, 2001**.

1. Who May Apply – See Appendix B, part 1.
2. Proposal Acceptance Criteria – See Appendix B, part 2.
3. Resubmissions and Duplicate Submissions – See Appendix B, part 3.
4. Electronic Proposal Cover Booklet – See Appendix B, part 4 and Appendix C.

5. Title/Referral Page – See Appendix B, part 5.  
In the “Award Mechanism” section of the Title/Referral Page, indicate whether the proposal is for a Phase 1 clinical trial, Pilot clinical trial, or Phase 2 clinical trial.
6. Table of Contents – See Appendix B, part 6.  
Use the [table of contents](#) found at the end of this section in your proposal submission. This table of contents should be used as a guide for assembling all required components of the proposal. Number all pages consecutively at the bottom center, beginning with the Title/Referral Page. Provide a header on every page of the proposal that includes the PI name (last name, first name, middle initial).
7. Checklist for Proposal Submission – See Appendix B, part 7.
8. Proposal Abstracts – See Appendix B, part 8.
9. Statement of Work – See Appendix B, part 9 and Appendix D.
10. Proposal Relevance Statement – See Appendix B, part 10.
11. Proposal Body – See Appendix B, part 11.  
The body of Clinical Trial Award proposals is limited to **50 pages**.  
Phase 1, Pilot, and Phase 2 clinical trial applicants must submit promising and well-founded preliminary data relevant to NF and the proposed project. In addition, the inclusion of Phase 1 or Pilot clinical trial data is required for Phase 2 clinical trial applicants.

Describe the proposed project using the general outline below:

- a. Background: Describe the ideas and reasoning behind the proposed work and previous experience most pertinent to the proposal. Cite relevant literature references.
- b. Rationale: State the purpose of the study and the expected results.
- c. Objectives: State the specific aims of the study.
- d. Preliminary Studies: A presentation of the studies that led to the proposed clinical trial is required. In addition, Phase 2 clinical trial applicants must provide Phase 1 or Pilot clinical trial data.
- e. Clinical Protocol (address as relevant to your Phase 1, Pilot, or Phase 2 clinical trial):
  - i. Study design for the intervention(s) to be used.
  - ii. Discussion of the potential biases in the research protocol and how they will be addressed.

- iii. Description of clinical, behavioral, laboratory, and physiological tests and protocols.
- iv. Patient recruitment:
  - (1) Inclusion and exclusion criteria.
  - (2) Description of the criteria to be used for assignment of patients to experimental conditions, methods of randomization (if any), and study endpoints.
  - (3) Availability of patients.
  - (4) Characteristics and appropriateness of the study population.
  - (5) Approaches to be utilized for recruitment, retention, and follow-up.
  - (6) Plans for maintaining the cooperation of subjects and addressing composition changes in the study population over the course of the trial.
  - (7) Data supporting recruitment and retention estimates.
  - (8) Ability of clinical centers to recruit and retain the proposed number of subjects.
- v. Data management/quality control/data analysis:
  - (1) Approach to data management.
  - (2) Statistical plan including sample size calculations.
  - (3) Methods for monitoring quality and consistency of the intervention(s) and data collection.
- vi. Description of the methods of analysis (primary and secondary endpoints should be clearly defined and related to the power calculation).
- vii. Human Subjects: The applicant should address any issues that may lead to concern for the welfare of subjects. The investigator must also address data security measures and confidentiality.
- viii. Study organization/administration: A description of how the study will be organized and managed must be provided. Additionally, the following descriptions also must be included in the proposal body:
  - (1) Organizational chart showing the interactions between the PI, key personnel, and consumer representatives.

- (2) Coordination of all participating centers.
- (3) A timetable for completion of the various stages of the clinical trial.

12. Abbreviations – See Appendix B, part 12.
13. References – See Appendix B, part 13.
14. Biographical Sketches – See Appendix B, part 14.
15. Existing/Pending Support – See Appendix B, part 15.
16. Facilities/Equipment Description – See Appendix B, part 16.  
Clinical, data management, and laboratory facilities, as well as required equipment should be described in detail for **all** participating institutions.
17. Administrative Documentation – See Appendix B, part 17.
18. Detailed Cost Estimate – See Appendix B, part 18.  
Budget is a consideration in both peer and programmatic review, and applicants are cautioned to use discretion in budget requests. Please provide complete justification for expenses in all categories. There are no total dollar amount restrictions for Clinical Trial Award proposals but funding can only be requested for 3 years for Phase 1 and Pilot clinical trials and 4 years for Phase 2 clinical trials. A budget for the entire trial and data analysis period must be provided. If some costs of the trial are to be funded through other sources, provide detailed information about these sources. Budgets should clearly delineate which portions are being requested for support by this program and which are to be supported by other sources. A total overall budget as well as itemized, individual budgets for each year of support requested must be prepared. If multiple centers are proposed or if any subcontract(s) for personnel or facilities exist, separate itemized budgets must be prepared for each year of the study. Direct costs can cover salary, expenses including research supplies, and travel to scientific meetings. The amount allotted for travel is \$1,800 per year per PI.
19. Instruments – See Appendix B, part 29.  
Please note that for Clinical Trial Award submissions, the clinical protocol must be included in the body of the proposal and not under the Instruments section.
20. Publications and Patent Abstracts – See Appendix B, part 20.
21. Proposal Submission – See Appendix B, part 21.

22. Receipt Deadline – See Appendix B, part 22.

Please note that one electronic PDF version of your proposal must be sent by your organization's sponsored programs office (or equivalent) through the Internet by **4:00 p.m. (your local time) on July 25, 2001**. In addition, one printed version of the electronic PDF file is to be received by **July 31, 2001**. **Receipt of a proposal after the deadline may be grounds for proposal rejection.**

23. Regulatory Compliance and Quality – See Appendix B, part 23.



**Principal Investigator:** \_\_\_\_\_  
*Last Name* *First Name* *MI*

**Proposal Title:** \_\_\_\_\_

---

**Clinical Trial Award Proposal  
Table of Contents**

	<b>Page Number</b>
Electronic Proposal Cover Booklet	
Title/Referral Page (1-page limit) .....	i
Table of Contents (1-page limit) .....	1
Checklist for Proposal Submission (1 page) .....	2
Technical Abstract (1-page limit) .....	3
Public Abstract (1-page limit) .....	4
Statement of Work (2-page limit) .....	5
Proposal Relevance Statement (1-page limit) .....	___
Proposal Body (50-page limit) .....	___
Abbreviations (1-page limit) .....	___
References (no page limit) .....	___
Biographical Sketches (3-page limit each)	
PI .....	___
Collaborating Investigators .....	___
Existing/Pending Support (no page limit) .....	___
Facilities/Equipment Description (no page limit) .....	___
Administrative Documentation (no page limit) .....	___
List of all items included in this section.....	___
Letters of support from collaborating individuals and/or institutions.....	___
Detailed Cost Estimate (no page limit) .....	___
Instruments (no page limit) .....	___
Publications and Patent Abstracts (5-document limit) .....	___

---