I. OVERVIEW OF THE FUNDING OPPORTUNITY

Program Announcement for the Department of Defense

Defense Health Program

Congressionally Directed Medical Research Programs

Neurofibromatosis Research Program

Investigator-Initiated Research Program

Announcement Type: Initial

Funding Opportunity Number: HT942524NFRPIIRA

Assistance Listing Number: 12.420 Military Medical Research and Development

SUBMISSION AND REVIEW DATES AND TIMES

• **Pre-Application (Letter of Intent) Submission Deadline:** 5:00 p.m. Eastern time (ET), September 12, 2024

• Application Submission Deadline: 11:59 p.m. ET, October 3, 2024

• End of Application Verification Period: 5:00 p.m. ET, October 8, 2024

• Peer Review: December 2024

• **Programmatic Review:** February 2025

This program announcement must be read in conjunction with the General Application Instructions, version 901. The General Application Instructions document is available for downloading from the Grants.gov funding opportunity announcement by selecting the "Package" tab, clicking "Preview," and then selecting "Download Instructions."

TABLE OF CONTENTS

I.	OVERVIEW OF THE FUNDING OPPORTUNITY	1
Π.	DETAILED INFORMATION ABOUT THE FUNDING OPPORTUNITY	3
	II.A. Program Description	3
	II.A.1. NFRP Strategic Goals and FY24 Areas of Emphasis	
	II.A.2. Award History	5
	II.B. Award Information	5
	II.C. Eligibility Information	9
	II.C.1. Eligible Applicants	9
	II.C.2. Cost Sharing	9
	II.C.3. Other	10
	II.D. Application and Submission Information.	10
	II.D.1. Location of Application Package	10
	II.D.2. Content and Form of the Application Submission	11
	II.D.2.a. Step 1: Pre-Application Submission	12
	II.D.2.b. Step 2: Full Application Submission	13
	II.D.2.c. Applicant Verification of Full Application Submission in eBRAP	21
	II.D.3. Unique Entity Identifier (UEI) and System for Award Management (SAM)	21
	II.D.4. Submission Dates and Times	21
	II.D.5. Funding Restrictions	21
	II.D.6. Other Submission Requirements	22
	II.E. Application Review Information	22
	II.E.1. Criteria	22
	II.E.2. Application Review and Selection Process	25
	II.E.3. Integrity and Performance Information	26
	II.F. Federal Award Administration Information	26
	II.F.1. Federal Award Notices	26
	II.F.2. PI Changes and Award Transfers	27
	II.F.3. Administrative and National Policy Requirements	27
	II.F.4. Reporting	28
	II.G. Federal Awarding Agency Contacts	28
	II.G.1. eBRAP Help Desk	28
	II.G.2. Grants.gov Contact Center	28
	II.H. Other Information	29
	II.H.1. Program Announcement and General Application Instructions Versions	29
	II.H.2. Administrative Actions	
	II.H.3. Full Application Submission Checklist	31
AF	PPENDIX 1: ACRONYM LIST	32

II. DETAILED INFORMATION ABOUT THE FUNDING OPPORTUNITY

II.A. Program Description

The U.S. Army Medical Research Acquisition Activity (USAMRAA) is soliciting applications to the fiscal year 2024 (FY24) Neurofibromatosis Research Program (NFRP) using delegated authority provided by United States Code, Title 10, Section 4001 (10 USC 4001). The Congressionally Directed Medical Research Programs (CDMRP) at the U.S. Army Medical Research and Development Command (USAMRDC) is the program management agent for this funding opportunity. Congress initiated the NFRP in 1996 to provide support for research of high potential impact and exceptional scientific merit. Appropriations for the NFRP from FY96 through FY23 totaled \$427.85 million (M). The FY24 appropriation is \$25.0M.

The vision of the FY24 NFRP is to decrease the clinical impact of neurofibromatosis (NF). Toward this end, the NFRP promotes research directed toward the understanding, diagnosis, and treatment of NF1, NF2, and schwannomatosis to enhance the quality of life for persons with these disorders that impact Service Members, Veterans, and the general public.

The proposed research must be relevant to active-duty Service Members, Veterans, military beneficiaries, and/or the American public.

II.A.1. NFRP Strategic Goals and FY24 Areas of Emphasis

The NFRP seeks to support innovative, high-impact research that will foster new directions for and address neglected issues in NF research; sponsor multidisciplinary and multi-institutional collaborations that will bring new perspectives to the field; promote translational and clinical studies to move promising ideas from bench to bedside; and develop a balanced portfolio of meritorious research related to all aspects of NF type 1 (NF1), NF type 2 (NF2), and schwannomatosis.

Strategic Goals: The NFRP's current strategic goals are:

- Foster basic and exploratory research.
- Facilitate rapid testing of potential therapeutics.
- Increase research capacity.
- Encourage research in areas of critical interest to NF patients.

Applicants are encouraged to review the NFRP's strategic plan for more information on its goals: https://cdmrp.health.mil/nfrp/pdf/NFRP%20Strategic%20Plan.pdf.

Areas of Emphasis: To meet the intent of the funding opportunity, all applications should specifically address the critical needs of the NF community in one or more of the Areas of

Emphasis listed below. All applications are also encouraged to include materials and data from diverse populations in their research.

- NF2 and schwannomatosis-related areas (e.g., hearing, balance, schwannoma, ependymoma, meningioma, LZTR1, SMARCB1)
- Endpoint validation, biomarker discovery, and technological innovation for assessments
- Application of data science
- Non-tumor manifestations not limited to:
 - Pain
 - Cognitive manifestations
 - Sleep
- Heterogeneity of NF-related phenotypes
- Genetics, genomics, epigenetics, systems biology, metabolomics, or similar approaches
- Preclinical efficacy studies
- Target identification and drug discovery
- Nutritional, environmental, and other modifiers of NF
- Health services research

Note: Not all Areas of Emphasis are applicable to every award mechanism. If the proposed research project does not address at least one of the FY24 NFRP Areas of Emphasis, justification should be provided that it addresses an important problem related to NF research and/or patient care.

Definition of Health Services Research: Health services research studies the access, costs, and quality of health care for individuals, families, organizations, institutions, communities, and populations. It is a multidisciplinary field of scientific investigation, including basic and applied research, that examines how social factors, financing systems, organizational structures and functions, health technologies, and personal behaviors affect access to health care, the quality and cost of health care, and ultimately health, well-being, and quantity and quality of life.

The goals are to identify the most effective ways to organize, manage, finance, and deliver high-quality care, reduce medical errors, and improve patient safety. For more information, multiple resources are available, including "Health Services Research: Scope and Significance," from the National Institutes of Health (NIH) publication *Patient Safety and Quality: An Evidence-Based Handbook for Nurses*, found online at https://www.ncbi.nlm.nih.gov/books/NBK2660/.

NFRP Research Resources Initiative: Resources developed through NFRP funding that are available to the scientific community can be found at https://cdmrp.health.mil/nfrp/resources/nfrpresources. Investigators are urged to leverage and contribute to these resources and include a sharing and distribution plan in the application within the Data and Research Resources Sharing Plan (Attachment-7). For more guidance on data sharing, refer to the General Application Instructions, Appendix 2, Section K.

II.A.2. Award History

The NFRP Investigator-Initiated Research Award mechanism was first offered in FY96. Since then, 720 Investigator-Initiated Research Awards applications have been received, and 186 have been recommended for funding.

II.B. Award Information

The NFRP Investigator-Initiated Research Award supports highly rigorous, high-impact research projects that have the potential to make an important contribution to NF research and/or patient care. Research projects may focus on any phase of research, excluding clinical trials. The rationale for a research idea may be derived from laboratory discovery, population-based studies, a clinician's firsthand knowledge of patients, or anecdotal data. *Applications must include preliminary and/or published data that are relevant to NF and the proposed research project.*

Optional NF Open Science Initiative (NF-OSI): The FY24 NFRP supports the NF-OSI (https://www.ctf.org/news/nfrp-joins-nf-open-science-initiative/), which is aimed at catalyzing research for NF through early access to data and data sharing within the NF community.

- The NF Data Portal (https://nf.synapse.org) is a central component of the NF-OSI and is intended as a format on which to share and explore NF datasets, analysis tools, resources, and publications. It is a public repository of raw data of scientific experiments that allows the reanalysis and confirmation of results by a third party.
 - The portal is not the place to share finalized results (these are generally publishable figures and related information), but rather any data point or image derived from experiments.
 - NF studies that involve generation of extensive datasets including, but not limited to, gene expression, genomic variants, methylation profiles, drug screening, drug combination screening, cellular physiology, chromatin activity, proteomics, imaging, kinomics, pharmacokinetics/pharmacodynamics, and clinical studies are to utilize the NF Data Portal.
 - The portal allows participants to use the repository as their private data storage and selectively release the data to the public after an embargo period. For more information and requirements of participation, please visit https://nf.synapse.org/.
- Participants in the NF-OSI will share data following the FAIR (Findable, Accessible, Interoperable, and Reusable) Data Principles for reproducible science found in "The FAIR

Guiding Principles for scientific data management and stewardship" (https://www.nature.com/articles/sdata201618). Refer to the Data and Research Resources Sharing Plan document in Attachment 7.

- Applications utilizing the NF-OSI option must demonstrate their commitment to meeting the intent of the initiative in their Data and Research Resources Sharing Plan, including a description of milestones with respect to making the data or research resource(s) available and how they will be accessible after the period of performance expires. See <u>Attachment 7</u>.
- Applications utilizing the NF-OSI option must describe how participation in the NF-OSI will advance and/or accelerate research in NF.
- Applications funded under the NF-OSI option will need to comply with data submission requirements that meet the intent of the initiative as a condition of continued funding for their project.

Optional Qualified Collaborator: The FY24 NFRP encourages collaborative research between basic scientists and clinical researchers, and between academic and biotechnology scientists. Collaborations with investigators outside of the Principal Investigator's (PI's) institution and collaborations that bring new perspectives from other disciplines or that bring new investigators into the NF field are strongly encouraged. Although more than one collaborator may participate in the application, only one can be named for this option.

Collaborations that meet the criteria below will qualify for a higher level of funding as
described in <u>Section II.D.5</u>, <u>Funding Restrictions</u>. It should be clear that the success of the
proposed research project depends on the complementary skills and contributions of both the
PI and the collaborator. Refer to application submission instructions in <u>Attachment 9</u>, <u>Letters
of Collaboration</u>. The collaborator must be at or above the level of Assistant Professor (or
equivalent).

The anticipated direct costs budgeted for the entire period of performance for an FY24 NFRP Investigator-Initiated Research Award will not exceed one of the following levels:

- Level 1: Applications that do not include either of the two options qualify for the base level of funding at \$525,000.
- Level 2: Applications that include either the Qualified Collaborator or the NF-OSI Option: The anticipated direct costs budgeted for the entire period of performance will not exceed \$575,000 for applications with either the Qualified Collaborator or the NF-OSI Option.

Collaborating organizations should budget associated indirect costs in accordance with each organization's negotiated rate.

While applications utilizing the NF-OSI or Qualified Collaborator options qualify to apply for Level 2 funding, the NFRP reserves the right to reduce the funding level to Level 1 if applications submitted to Level 2 do not meet the stated intent. Refer to Section II.D.5, Funding Restrictions, for detailed funding information.

Innovative research involving nuclear medicine and related techniques to support early diagnosis, more effective treatment, and improved health outcomes of active-duty Service Members and their Families is encouraged. Such research could improve diagnostic and targeted treatment capabilities through noninvasive techniques and may drive the development of precision imaging and advanced targeted therapies.

Organizational Level Emphasis: The following areas of emphasis are broadly applicable to many CDMRP programs, not just the NFRP. Investigators are encouraged to consider addressing these areas in their applications if doing so is appropriate for their line of research, addresses the FY24 NFRP strategic priorities and/ Areas of Emphasis described in Section II.A.1, and meets the intent of the award mechanism.

Nuclear Medicine: Innovative research involving nuclear medicine and related techniques to support early diagnosis, more effective treatment, and improved health outcomes of active-duty Service Members and their Families is encouraged. Such research could improve diagnostic and targeted treatment capabilities through noninvasive techniques and may drive the development of precision imaging and advanced targeted therapies.

Women's Health: The CDMRP encourages research on health areas and conditions that affect women uniquely, disproportionately, or differently from men, including studies analyzing sex as a biological variable. Such research should relate anticipated project findings to improvements in women's health outcomes and/or advancing knowledge for women's health.

Metastatic Cancer Task Force: A congressionally mandated Metastatic Cancer Task Force was formed with the purpose of identifying ways to help accelerate clinical and translational research aimed at extending the lives of advanced state and recurrent patients. As a member of the Metastatic Cancer Task Force, CDMRP encourages applicants to review the recommendations (https://health.mil/Reference-Center/Congressional-Testimonies/2018/05/03/Metastatic-Cancer-Research) and submit research ideas to address these recommendations provided they are within the limitations of this funding opportunity and fit within the FY24 NFRP priorities.

Rigorous Study Design: All projects should adhere to a core set of standards for rigorous study design and reporting to maximize the reproducibility and translational potential of clinical and preclinical research. The standards are described in SC Landis et al., 2012, A call for transparent reporting to optimize the predictive value of preclinical research, *Nature* 490:187-191 (http://www.nature.com/nature/journal/v490/n7419/full/nature11556.html). While these standards are written for preclinical studies, the basic principles of randomization, blinding, sample-size estimation, and data handling derive from well-established best practices in clinical studies.

Military Service Involvement: Applications from investigators within the military services and applications involving multidisciplinary collaborations among academia, industry, the military services, the U.S. Department of Veterans Affairs (VA), and other federal government agencies are highly encouraged. These relationships can leverage knowledge, infrastructure, and access to unique clinical populations that the collaborators bring to the research effort, ultimately advancing research that is of significance to Service Members, Veterans, and/or their Families. If the proposed research relies on access to unique resources or databases, the application must

describe the access at the time of submission and include a plan for maintaining access as needed throughout the proposed research.

Clinical trials are not allowed under this funding opportunity. A clinical trial is defined in the Code of Federal Regulations, Title 45, Part 46.102 (45 CFR 46.102) as a research study in which one or more human subjects are prospectively assigned to one or more interventions (which may include a placebo or another control) to evaluate the effects of the interventions on biomedical or behavioral health-related outcomes.

Studies that do not seek to measure safety, effectiveness, and/or efficacy outcome(s) of an intervention are not considered clinical trials.

For the purposes of this funding opportunity, research that meets the definition of a clinical trial is distinct from clinical research. Clinical research encompasses research with human data, human specimens, and/or interaction with human subjects. Clinical research is observational in nature and includes:

- (1) Research conducted with human subjects and/or material of human origin such as data, specimens, and cognitive phenomena for which an investigator (or co-investigator) does *not* seek to assess the safety, effectiveness, and/or efficacy outcomes of an intervention. Research meeting this definition may include but is not limited to: (a) mechanisms of human disease, (b) diagnostic or detection studies (e.g., biomarker or imaging), (c) health disparity studies, and (d) development of new technologies.
- (2) Epidemiologic and behavioral studies that do *not* seek to assess the safety, effectiveness, and/or efficacy outcomes of an intervention.
- (3) Outcomes research and health services research that do not fit under the definition of clinical trial.

Excluded from the definition of clinical research are in vitro studies that utilize human data or specimens that cannot be linked to a living individual and meet the requirements for exemption under §46.104(d)(4) of the Common Rule.

Research Involving Animals: All research funded by the FY24 NFRP Investigator-Initiated Research Award involving new and ongoing research with animals must be reviewed and approved by the USAMRDC Office of Human and Animal Research Oversight (OHARO) Animal Care and Use Review Office (ACURO), in addition to the local Institutional Animal Care and Use Committee (IACUC) of record. IACUC approval at the time of submission is *not* required. *Allow at least 3 to 4 months for ACURO regulatory review and approval processes for animal studies.* Refer to the General Application Instructions, Appendix 1, for additional information.

The funding instrument for awards made under the program announcement will be grants (31 USC 6304).

The anticipated direct costs budgeted for the entire period of performance for an FY24 Investigator-Initiated Research Award should not exceed \$525,000 for a Level 1 application and

\$575,000 for a Level 2 application. Refer to <u>Section II.D.5</u>, <u>Funding Restrictions</u>, for detailed funding information.

Awards supported with FY24 funds will be made no later than September 30, 2025.

The CDMRP expects to allot approximately \$5.36M to fund approximately six Investigator-Initiated Research Award applications; two Level 1 applications, and four Level 2 applications. Funding of applications received is contingent upon the availability of federal funds for this program, the number of applications received, the quality and merit of the applications as evaluated by peer and programmatic review, and the requirements of the government. Funds to be obligated on any award resulting from this funding opportunity will be available for use for a limited time period based on the fiscal year of the funds. It is anticipated that awards made from this FY24 funding opportunity will be funded with FY24 funds, which will expire for use on September 30, 2030.

II.C. Eligibility Information

II.C.1. Eligible Applicants

II.C.1.a. Organization: Extramural and Intramural organizations are eligible to apply, including foreign or domestic organizations, for-profit and non-profit organizations, and public entities.

Extramural Organization: An eligible non-Department of Defense (DOD) organization. Examples of extramural organizations include academic institutions, biotechnology companies, foundations, federal government organizations other than the DOD (i.e., intragovernmental organizations), and research institutes.

Intramural DOD Organization: Refers specifically to DOD organizations including DOD laboratories, DOD military treatment facilities, and/or DOD activities embedded within a civilian medical center.

Awards are made to eligible *organizations*, not to individuals. Refer to the General Application Instructions, Appendix 1, for additional recipient qualification requirements

II.C.1.b. Principal Investigator

PIs must be *at or above* the level of Assistant Professor (or equivalent) and must plan to commit at least a 10% level of effort for each budget year throughout the entirety of the award.

An eligible PI, regardless of ethnicity, nationality, or citizenship status, must be employed by or affiliated with an eligible organization.

II.C.2. Cost Sharing

Cost sharing/matching is not an eligibility requirement.

II.C.3. Other

Organizations must be able to access .gov and .mil websites to fulfill the financial and technical deliverable requirements of the award and submit invoices for payment.

Refer to <u>Section II.H.2</u>, <u>Administrative Actions</u>, for a list of administrative actions that may be taken if a pre-application or full application does not meet the administrative, eligibility, or ethical requirements defined in this program announcement.

II.D. Application and Submission Information

II.D.1. Location of Application Package

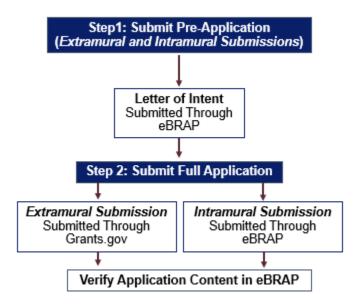
Submission is a two-step process requiring both a *pre-application* submitted via the Electronic Biomedical Research Application Portal (eBRAP.org) and a *full application* (eBRAP.org or Grants.gov). Depending on the type of submission (i.e., extramural vs. intramural), certain aspects of the submission process will differ.

The CDMRP uses two portal systems to accept pre- and full application submissions.

eBRAP (https://ebrap.org) is a secure web-based system that allows PIs and/or organizational representatives from both extra- and intramural organizations to receive communications from the CDMRP and submit their pre-applications. Additionally, eBRAP allows extramural applicants to view and verify full applications submitted to Grants.gov and allows intramural DOD applicants to submit and verify full applications following their pre-application submission.

Grants.gov (https://grants.gov) is a federal system that must be used by funding agencies to announce extramural grant applications. Full applications for CDMRP funding opportunities can only be submitted to Grants.gov after submission of a pre-application through eBRAP.

Application Submission Workflow



Extramural Submission: An application submitted by an <u>extramural organization</u> for an extramural or intramural PI working within an extramural or intramural organization. For example, a research foundation submitting an application for a DOD employee working within a DOD organization would be considered an extramural submission and should follow instructions specific to extramural submissions. Download application package components for HT942524NFRPIIRA from Grants.gov (https://grants.gov). Full applications from extramural organizations *must* be submitted through Grants.gov.

Intramural Submission: An application submitted by an <u>intramural DOD organization</u> for an investigator employed by that organization. Intramural DOD organizations <u>may</u> submit full applications to either eBRAP or Grants.gov. Download application package components for HT942524NFRPIIRA from the anticipated submission portal eBRAP (https://ebrap.org) or Grants.gov.

The submission process should be started early to avoid missing deadlines. Regardless of submission type or portal used, all pre- and full application components must be submitted by the deadlines stipulated on the first page of this program announcement. There are no grace periods for deadlines; failure to meet submission deadlines will result in application rejection. *The USAMRAA cannot make allowances/exceptions for submission problems encountered by the applicant organization using system-to-system interfaces with Grants.gov.*

II.D.2. Content and Form of the Application Submission

Submitting applications that propose essentially the same research project to different funding opportunities within the same program and fiscal year is prohibited and will result in administrative withdrawal of the duplicative application(s).

Unnecessary duplication of funding or accepting funding from more than one source for the same research, is prohibited. See the CDMRP's full position on research duplication at https://cdmrp.health.mil/funding/researchDup.

Including classified research data within the application and/or proposing research that may produce classified outcomes, or outcomes deemed sensitive to national security concerns, may result in application withdrawal. Refer to the General Application Instructions, Appendix 7, Section B.

FY24 NFRP Programmatic Panel members should not be involved in any pre-application or full application. For questions related to panel members and pre-applications or applications, refer to Section II.H.2.c, Withdrawal, or contact the eBRAP Help Desk at help@eBRAP.org or 301-682-5507.

II.D.2.a. Step 1: Pre-Application Submission

All pre-application components must be submitted by the Initiating PI through eBRAP (https://eBRAP.org/), including the submission of contact information for each Partnering PI.

During the pre-application process, eBRAP assigns each submission a unique log number. This unique log number is required during the full application submission process. The eBRAP log number, application title, and all information for each PI, the Business Official(s), performing organization(s), and contracting organization(s) must be consistent throughout the entire pre-application and full application submission process. Inconsistencies may delay application processing and limit or negate the ability to view, modify, and verify the application in eBRAP. If any changes need to be made, the applicant should contact the eBRAP Help Desk at help@eBRAP.org or 301-682-5507 prior to the application submission deadline.

When starting the pre-application, applicants will be asked to select a "Mechanism Option". Please be sure to select the correct option appropriate to your pre-application:

Application Includes:	Select Option:
Investigator-Initiated Research Award	IIRA-FL1
Investigator-Initiated Research Award (the Qualified	IIRA-FL2-OQC or
Collaborator Option <u>OR</u> the NF-OSI Option)	IIRA-FL2-NFOSI

II.D.2.a.i. Pre-Application Components

Pre-application submissions must include the following components (refer to the General Application Instructions, Section III.B, for detailed instructions regarding pre-application submission):

• Letter of Intent (LOI) (one-page limit): Provide a brief description of the research to be conducted.

LOIs are used for program planning purposes only (e.g., reviewer recruitment) and will not be reviewed during either the peer or programmatic review. *An invitation to submit a full*

application is NOT provided after LOI submission. Applicants are encouraged to develop pre-application and full application components concurrently and submit a full application AFTER successful submission of the pre-application.

II.D.2.b. Step 2: Full Application Submission

II.D.2.b.i. Full Application Submission Type

Extramural Submissions: Full applications from extramural organizations *must* be submitted through Grants.gov Workspace. Full applications from extramural organizations, including non-DOD federal organizations, received through eBRAP will be withdrawn. Refer to the General Application Instructions, Section IV, for considerations and detailed instructions regarding extramural full application submission.

Intramural Submissions: Intramural DOD organizations may submit full applications through either eBRAP or Grants.gov. There is no preference from the CDMRP for which submission portal is utilized; submission through one portal or the other does not provide the application any advantage during the review process. Intramural DOD organizations that choose to submit through Grants.gov should follow Extramural Submission instructions. Intramural DOD organizations that are unable to submit through Grants.gov should submit through eBRAP. For the remainder of this program announcement, it will be assumed intramural DOD submissions will proceed through eBRAP. Refer to the General Application Instructions, Section V, for considerations and detailed instructions regarding intramural DOD full application submission.

II.D.2.b.ii. Full Application Submission Components

Each application submission must include the completed full application package for this program announcement. See <u>Section II.H.3</u> of this program announcement for a checklist of the required application components.

(a) SF424 Research & Related Application for Federal Assistance Form (Extramural Submissions Only): Refer to the General Application Instructions, Section IV.B, for detailed information.

(b) Attachments:

Each attachment to the full application components must be uploaded as an individual file in the format specified and in accordance with the formatting guidelines listed in the General Application Instructions, Appendix 2.

• Attachment 1: Project Narrative (10-page limit): Upload as "ProjectNarrative.pdf". The page limit of the Project Narrative applies to text and non-text elements (e.g., figures, tables, graphs, photographs, diagrams, chemical structures, drawings) used to describe the project. Inclusion of URLs (uniform resource locators) that provide additional information that expands the Project Narrative and could confer an unfair competitive advantage is prohibited and may result in administrative withdrawal of the application. Describe the proposed project in detail using the outline below.

- Background: Clearly articulate the scientific rationale for the proposed research project. Cite relevant literature. Describe previous experience most pertinent to the proposed research project. Applications must include preliminary and/or published data that are relevant to NF and the proposed research project.
- Hypothesis or Objective: State the hypothesis to be tested or the objective to be reached.
- Specific Aims: Concisely explain the proposed research project's specific aims to be funded by this application. If the proposed research project is part of a larger study, present only tasks that this award would fund.

Research Strategy and Feasibility:

- Describe how the experimental design, methods, and analyses, including appropriate randomization, blinding, and controls, are designed to achieve reproducible and rigorous results in sufficient detail for scientific peer review.
 Address potential problem areas and present alternative methods and approaches.
- Describe how data will be collected, handled, and analyzed in a manner that is
 consistent with the study objectives. Include a complete power analysis to
 demonstrate that the sample size is appropriate to meet the objectives of the study.
- If pre-existing specimens and/or human anatomical samples will be used, include a detailed plan for how samples were or will be acquired. Clearly describe the tissue or tumor type to be studied, where applicable (e.g., encapsulated versus diffuse plexiform neurofibroma). Clinical trials are not allowed under this funding opportunity.

If the proposed research involves access to active-duty military and/or U.S. Department of Veterans Affairs (VA) patient populations and/or DOD or VA resources or databases, describe the access at the time of submission and include a plan for maintaining access as needed throughout the proposed research. Refer to the General Application Instructions, Appendix 4, for additional considerations.

Attachment 2: Supporting Documentation: Combine and upload as a single file named "Support.pdf". Start each document on a new page. The Supporting Documentation attachment should not include additional information such as figures, tables, graphs, photographs, diagrams, chemical structures, or drawings. These items should be included in the Project Narrative.

There are no page limits for any of these components unless otherwise noted. Include only those components described below; inclusion of items not requested or viewed as an extension of the Project Narrative will result in the removal of those items or may result in administrative withdrawal of the application.

- **References Cited:** List the references cited (including URLs, if available) in the Project Narrative using a standard reference format.
- List of Abbreviations, Acronyms, and Symbols: Provide a list of abbreviations, acronyms, and symbols.
- Facilities, Existing Equipment, and Other Resources: Describe the facilities and equipment available for performance of the proposed project and any additional facilities or equipment proposed for acquisition at no cost to the award. Indicate whether government-furnished facilities or equipment are proposed for use. If so, reference should be made to the original or present government award under which the facilities or equipment items are now accountable. There is no form for this information.
- Publications and/or Patents: Include a list of relevant publication URLs and/or patent abstracts. If articles are not publicly available, then copies of up to five published manuscripts may be included in Attachment 2. Extra items will not be reviewed.
- Letters of Organizational Support: Provide a letter (or letters, if applicable) signed by the Department Chair or appropriate organization official, confirming the laboratory space, equipment, and other resources available for the project. Letters of support not requested in the program announcement, such as those from members of Congress, do not impact application review or funding decisions.
- **Intellectual Property:** Information can be found in the 2 CFR 200.315, "Intangible Property."
 - Intellectual and Material Property Plan (*if applicable*): Provide a plan for resolving intellectual and material property issues among participating organizations.
 - Commercialization Strategy (if applicable): Describe the commercialization plan. The plan should include intellectual property, market size, financial analysis, strengths and weaknesses, barriers to the market, competitors, and management team. Discuss the significance of this development effort, when it can be anticipated, and the potential commercial use for the technology being developed.
- DOD Data Management Plan (two-page limit is recommended): Describe the data management plan in accordance with Section 3.c, Enclosure 3, <u>DoD Instructions 3200.12</u>. Do not duplicate the Data and Research Resources Sharing Plan. Refer to General Application Instructions, Section IV.B, Attachments Form, Attachment: Supporting Documentation, for detailed information regarding Data Management Plan content.
- Inclusion Enrollment Plan (only required if clinical research is proposed): Provide an anticipated enrollment table(s) for the inclusion of women and minorities using the

Public Health Service (PHS) Inclusion Enrollment Report, a three-page fillable PDF form, that can be downloaded from eBRAP at https://ebrap.org/eBRAP/public/
Program.htm. The enrollment table(s) should be appropriate to the objectives of the study with the proposed enrollment distributed on the basis of sex/gender, race, and ethnicity. Studies utilizing human biospecimens or datasets that cannot be linked to a specific individual, gender, ethnicity, or race (typically classified as exempt from Institutional Review Board [IRB] review) are exempt from this requirement.

- Use of DOD Resources (if applicable): Provide a letter of support signed by the lowest-ranking person with approval authority confirming access to active-duty military populations and/or DOD resources or databases.
- Use of VA Resources (if applicable): Provide a letter of support signed by the VA Facility Director(s) or individual designated by the VA Facility Director(s), such as the Associate Chief of Staff for Research and Development (ACOS/R&D) or Clinical Service Chief, confirming access to VA patients, resources, and/or VA research space. If the VA-affiliated non-profit corporation is not identified as the applicant organization for administering the funds, include a letter from the VA ACOS/R&D confirming this arrangement and identifying the institution that will administer the funds associated with the proposed research.
- Attachment 3: Technical Abstract (one-page limit): Upload as "TechAbs.pdf". The
 technical abstract is used by all reviewers. Abstracts of all funded research projects will
 be posted publicly. Use only characters available on a standard QWERTY keyboard.
 Spell out all Greek letters, other non-English letters, and symbols. Graphics are not
 allowed.

Of particular importance, programmatic reviewers may not have access to the full application and therefore rely on the technical abstract for appropriate description of the proposed research project's key aspects. Clarity and completeness within the space limits of the technical abstract are highly important.

Technical abstracts should be written using the outline below. Clarity and completeness within the space limits are highly important.

- **Background:** Present the scientific rationale behind the proposed research project.
- **Hypothesis/Objective(s):** State the hypothesis to be tested and/or objective(s) to be reached. Provide evidence or rationale that supports the objective/hypothesis.
- Specific Aims: State the specific aims of the study.
- **Study Design:** Describe the study design, including appropriate controls. If tumors or derived cell lines will be studied, the name and definition of the materials should be included (e.g., name of the cell or pathological classification of the tissue).
- **Impact:** Briefly describe how the proposed research project will have an impact on NF research and/or patient care.

Attachment 4: Lay Abstract (one-page limit): Upload as "LayAbs.pdf". The lay abstract is used by all reviewers, and addresses issues of particular interest to the affected community. Abstracts of all funded research projects will be posted publicly. Use only characters available on a standard QWERTY keyboard. Spell out all Greek letters, other non-English letters, and symbols. Graphics are not allowed. Do not duplicate the technical abstract.

Lay abstracts should address the points outlined below *in a manner that will be readily understood by readers without a background in science or medicine.* Avoid overuse use of scientific jargon, acronyms, and abbreviations.

- Summarize the objectives and rationale for the proposed research.
- Describe the ultimate applicability of the research.
 - What population will the research help, and how will it help them?
 - What are the potential applications, benefits, and risks of the anticipated outcomes?
 - What is the projected time it may take to achieve a patient-related outcome?
 - What are the likely contributions of the proposed research project to advancing research, patient care, and/or quality of life?
 - How will the data and resources generated during the performance of the proposed research project be shared with the research community (scientific and advocacy organizations) and the public?
- Attachment 5: Statement of Work (three-page limit): Upload as "SOW.pdf". Refer to the eBRAP "Funding Opportunities & Forms" web page
 (https://ebrap.org/eBRAP/public/Program.htm) for the suggested Statement of Work
 (SOW) format and recommended strategies for assembling the SOW.
 - For the Investigator-Initiated Research Award, refer to "Example: Assembling a Generic Statement of Work", for guidance on preparing the SOW. Use the "Suggested SOW Format" to develop the SOW for the proposed research. Submit as a PDF.
- Attachment 6: Impact Statement (one-page limit): Upload as "Impact.pdf". Explain how the proposed research project addresses one or more of the FY24 NFRP Areas of Emphasis or, if the project does not address an Area of Emphasis, provide justification that the proposed research project addresses a critical problem in NF research and/or patient care. Detail the anticipated outcome(s) that will be directly attributed to the results of the proposed research (short-term gains). Explain the anticipated short- and long-term gains from the proposed research project, including how the new understanding may ultimately contribute to the goal of advancing NF research and/or patient care. Describe how the data and resources generated during the performance of

the proposed research project will be shared with the research community (scientific and advocacy organizations) and the public.

- Attachment 7: Data and Research Resources Sharing Plan: Upload as "DataResourceSharing.pdf". Describe how data and resources generated during the performance of the proposed research project will be shared with the research community. If developing resources is part of the proposed research project, include the description of the type of data (animal models, tissue samples, methods) or other resources. Specifically describe the appropriateness of the milestones with respect to making the data or research resource(s) available and how the scientific community can obtain these data or research resource(s) after the period of performance expires. Describe how the data in the application follow the FAIR Data Principles for reproducible science found in "The FAIR Guiding Principles for scientific data management and stewardship." Refer to the General Application Instructions, Appendix 2, Section K, for more information about the CDMRP's expectations for making data and research resources publicly available. Explain how sharing this data will have an impact on the scientific field and/or the public.
 - Explain how the research project will advance and/or accelerate research in NF. The NFRP encourages sharing through the CDMRP website (https://cdmrp.health.mil/nfrp/resources/nfrpresources/).
 - For general guidance on sharing, refer to the General Application Instructions, Appendix 2, Section K.
- Attachment 8: Animal Research Plan (three-page limit) (required if proposed research project involves animals; failure to provide this plan may negatively impact the review criteria): Upload as "AnimalResPlan.pdf". (Attachment 8 is only applicable and required for applications proposing animal studies.)

If the proposed study involves animals, a summary describing the animal research that will be conducted must be included in the application. Consult the ARRIVE guidelines 2.0 (Animal Research: Reporting *In Vivo* Experiments) to ensure relevant aspects of rigorous animal research are adequately planned for and, ultimately, reported. The ARRIVE guidelines 2.0 can be found at https://arriveguidelines.org/arrive-guidelines. The Animal Research Plan may not be an exact replica of the protocol(s) submitted to the IACUC. The Animal Research Plan should address the following points to achieve reproducible and rigorous results for each proposed animal study:

- Briefly describe the research objective(s) of the animal study. Explain how and why the animal species, strain, and model(s) being used can address the scientific objectives and, where appropriate, the study's relevance to human biology.
- Summarize the procedures to be conducted. Describe how the study will be controlled.
- Describe the randomization and blinding procedures for the study, and any other measures to be taken to minimize the effects of subjective bias during animal

- treatment and assessment of results. If randomization and/or blinding will not be utilized, provide justification.
- Provide a sample size estimate for each study arm and the method by which it was derived, including power analysis calculations.
- Describe how data will be handled, including rules for stopping data collection, criteria for inclusion and exclusion of data, how outliers will be defined and handled, statistical methods for data analysis, and identification of the primary endpoint(s).
- Attachment 9: Letters of Collaboration (two-page limit) (required for applications submitted under the Qualified Collaborator Option). Upload as "Collaboration.pdf". Provide a signed letter from each collaborating individual or organization demonstrating that the PI has the support or resources necessary for the proposed work. If an investigator at an intramural organization is named as a collaborator on an application submitted through an extramural organization, the application must include a letter from the collaborator's Commander or Commanding Officer at the intramural organization that authorizes the collaborator's involvement. The following components should be addressed:
 - Describe how the Optional Qualified Collaborator will significantly contribute to the proposed research project such that it could not be accomplished without their involvement. A proposed research project in which the collaborator merely supplies biological/chemical materials, such as DNA/RNA constructs, purified or tagged proteins, chemical(s), transgenic mice, tissue samples, or access to patients will not meet the intent of the Qualified Collaborator Option and will not qualify for the higher level of funding.
 - It should be clear that the success of the proposed research project depends on the complementary skills and contributions of both the PI and the collaborator.
 - A minimum of 10% level of effort for each budget year is required of the collaborator. The contributions of the collaborator should be reflected in the Research and Related Budget for intramural and extramural applicants. This level of effort may be distributed over the period of performance as best fits the project.
- Attachment 10: Representations (Extramural Submissions Only): Upload as "RequiredReps.pdf". All extramural applicants must complete and submit the Required Representations template available on eBRAP (https://ebrap.org/eBRAP/ public/Program.htm). For more information, see the General Application Instructions, Appendix 8, Section B, Representations.
- Attachment 11: Suggested Intragovernmental/Intramural Budget Form (if applicable): Upload as "IGBudget.pdf". If an intramural DOD organization will be a collaborator in performance of the project, complete a separate budget using the "Suggested Intragovernmental/Intramural Budget Form", available for download on the eBRAP "Funding Opportunities & Forms" web page (https://ebrap.org/eBRAP/public/Program.htm). The budget should cover the entire

period of performance for each intramural DOD site and include a budget justification as instructed. The *total* costs per year for each subaward (direct and indirect costs) should be included on the Grants.gov Research & Related Budget Form under subaward costs. Refer to the General Application Instructions, Section V.A.(e), for additional information and considerations.

- (c) Research & Related Personal Data: For extramural submissions, refer to the General Application Instructions, Section IV.B.(c), and for intramural submissions, refer to the General Application Instructions, Section V.A.(c), for detailed instructions.
- (d) Research & Related Senior/Key Person Profile (Expanded): For extramural submissions, refer to the General Application Instructions, Section IV.B.(d), and for intramural submissions, refer to the General Application Instructions, Section V.A.(d), for detailed instructions.
 - PI Biographical Sketch (five-page limit): Upload as "Biosketch_LastName.pdf".
 - PI Previous/Current/Pending Support (no page limit): Upload as "Support LastName.pdf".
 - Key Personnel Biographical Sketches (five-page limit each): Upload as "Biosketch LastName.pdf".
 - **Key Personnel Previous/Current/Pending Support (no page limit):** Upload as "Support LastName.pdf".
- (e) Research & Related Budget: For extramural submissions, refer to the General Application Instructions, Section IV.B.(e), and for intramural submissions, refer to the General Application Instructions, Section V.A.(e), for detailed instructions.
 - Budget Justification (no page limit): For extramural submissions, refer to the General Application Instructions, Section IV.B.(e), Section L, for instructions. For intramural submissions, refer to General Application Instructions, Section V.A.(e), Budget Justification Instructions.
- (f) Project/Performance Site Location(s) Form: For extramural submissions, refer to the General Application Instructions, Section IV.B.(f), and for intramural submissions, refer to the General Application Instructions, Section V.A.(f), for detailed instructions.
- (g) Research & Related Subaward Budget Attachment(s) Form (if applicable, Extramural Submissions Only): Refer to the General Application Instructions, Section IV.B.(g), for detailed instructions.
 - Extramural Subaward: Complete the Research & Related Subaward Budget Form and upload through Grants.gov.

Intramural DOD Subaward: Complete a separate "<u>Suggested</u>
 <u>Intragovernmental/Intramural Budget Form</u>" for each intramural DOD subaward and
 upload as a single document titled **IGBudget.pdf** to Grants.gov as Attachment 11.

II.D.2.c. Applicant Verification of Full Application Submission in eBRAP

Independent of submission type, once the full application is submitted it is transmitted to and processed in eBRAP. At this stage, the PI and organizational representatives will receive an email from eBRAP instructing them to log into eBRAP to review, modify, and verify the full application submission. Verification is strongly recommended but not required. eBRAP will validate full application files against the specific program announcement requirements, and discrepancies will be noted in the "Full Application Files" tab in eBRAP. However, eBRAP does not confirm the accuracy of file content. It is the applicant's responsibility to review all application components and ensure proper ordering as specified in the program announcement. The Project Narrative and Research & Related Budget Form cannot be changed after the application submission deadline. If either the Project Narrative or the budget fails eBRAP validation or needs to be modified, an updated full application package must be submitted prior to the full application submission deadline. Other application components, including subaward budget(s) and subaward budget justification(s), may be changed until the end of the application verification period. The full application cannot be modified once the application verification period ends.

II.D.3. Unique Entity Identifier (UEI) and System for Award Management (SAM)

The applicant organization must be registered as an entity in SAM (https://www.sam.gov/content/home) and receive confirmation of an "Active" status before submitting an application through Grants.gov. Organizations must include the UEI generated by SAM in applications to this funding opportunity.

II.D.4. Submission Dates and Times

The pre-application and application submission process should be started early to avoid missing deadlines. There are no grace periods. Failure to meet either of these deadlines will result in submission rejection.

All submission dates and times are indicated in Section I, Overview of the Funding Opportunity.

II.D.5. Funding Restrictions

The maximum period of performance is 3 years.

The application's direct costs budgeted for the entire period of performance should not exceed \$525,000 for Level 1 (without the Optional Qualified Collaborator or NF-OSI Option) or \$575,000 for Level 2 (with the Optional Qualified Collaborator or NF-OSI Option). If indirect cost rates have been negotiated, indirect costs are to be budgeted in accordance with the organization's negotiated rate. Collaborating organizations should budget associated indirect costs in accordance with each organization's negotiated rate.

The NFRP reserves the right to reduce the funding level if applications submitted to the Level 2 option do not meet the intent.

All direct and indirect costs of any subaward or contract must be included in the direct costs of the primary award.

The applicant may request the entire maximum funding amount for a project that may have a period of performance less than the maximum 3 years.

For this award mechanism, direct costs may be requested for (not all-inclusive):

- Travel in support of multi-institutional collaborations.
- Costs for one investigator to travel to one scientific/technical meeting per year. The intent of travel to scientific/technical meetings should be to present project information or disseminate project results from the NFRP Investigator-Initiated Research Award.

Must not be requested for:

• Clinical Trial costs

For extramural awards with an intragovernmental component, direct transfer of funds from an extramural award recipient to a DOD or other federal agency is not allowed except under very limited circumstances. Funding to intramural DOD and other federal agencies will be managed through a direct funds transfer. Intramural applicants are responsible for coordinating through their agency's procedures the use of contractual or assistance funding awards or other appropriate agreements to support extramural collaborators.

Refer to the General Application Instructions, Section III.A.5, for budget regulations and instructions for the Research & Related Budget. For federal agencies or organizations collaborating with federal agencies, budget restrictions apply as are noted in the General Application Instructions, Section III.A.5.

II.D.6. Other Submission Requirements

Refer to the General Application Instructions, Appendix 2, for detailed formatting guidelines.

II.E. Application Review Information

II.E.1. Criteria

II.E.1.a. Peer Review

To determine technical merit, all applications will be individually evaluated according to the following **scored criteria**, which are listed in **decreasing order of importance**.

Research Strategy and Feasibility

- How well the preliminary data and scientific rationale support the proposed research project.
- How well each study is designed to achieve reproducible and rigorous results, including controls, sample size estimation, blinding, randomization, power analysis, and data handling.
- How well any animal studies proposed are designed to achieve the objectives, including the choice of model and endpoints/outcome measures to be used.
- o To what extent the proposed research project is feasible as described.
- How well the application identifies potential problems and addresses alternative approaches.
- o If applicable, whether the strategy for the inclusion of women and minorities and distribution of proposed enrollment are appropriate for the proposed research. Studies utilizing human biospecimens or datasets that cannot be linked to a specific individual, gender, ethnicity, or race (typically classified as exempt from IRB review) are exempt from this requirement.

Impact

To what extent:

- The anticipated outcomes (short-term goals) will be used as the foundation for future research projects.
- The anticipated long-term gains will contribute to the goal of advancing NF research and/or patient care.
- The data and resources generated during the performance of the proposed research project will be shared with the research community (scientific and advocacy organizations) and the public.
- How well the proposed research project addresses one or more of the <u>FY24 NFRP Areas</u> of <u>Emphasis</u> or a critical problem in NF research and/or patient care.

Personnel

- o To what degree the PI's experience, level of expertise, and record of accomplishment demonstrate their ability to successfully complete the proposed research project.
- o To what extent the levels of effort by the PI and other key personnel are appropriate to ensure success of the proposed research project.
- Optional Qualified Collaborator (if applicable) (scored for applications submitted under the optional qualified collaborator):

- Whether the collaborator meets the criteria for an Optional Qualified Collaborator as verified by the Statement of Collaboration (<u>Attachment 9</u>), including the commitment to 10% level of effort for each budget year.
- To what extent the collaborator's experience, expertise, and involvement represent a significant contribution to the proposed research project such that it could not be accomplished without their involvement.

In addition, the following criteria will also contribute to the overall evaluation of the application, but will not be individually scored and are therefore termed **unscored criteria**:

• Data and Resource Sharing Plan

- How well-detailed the Data and Resources Sharing Plan is, including but not limited to:
 - The description of the type of data or research resource(s) to be made publicly available.
 - The details of the plan to access data or research resources.
 - The appropriateness of plans to ensure the data or research resource(s) is/are accessible after the period of performance expires.
 - The appropriateness of the milestones with respect to making the data or research resource(s) available.
 - How well the data in the application follows the FAIR Data Principles for reproducible science found in the <u>FAIR Guiding Principles for scientific data</u> <u>management and stewardship.</u>
- How the research project will advance and/or accelerate research in NF.

Budget

- Whether the **direct costs** exceed the allowable direct costs as published in the program announcement.
- Whether the budget is appropriate for the proposed research.

Environment

- To what extent the scientific environment is appropriate for the proposed research project.
- How well the research requirements are supported by the availability of and accessibility to facilities and resources.
- To what extent the quality and level of institutional support are appropriate for the proposed research project.

Application Presentation

• To what extent the writing, clarity, and presentation of the application components influence the review.

II.E.1.b. Programmatic Review

To make funding recommendations and select the application(s) that, individually or collectively, will best achieve the program objectives, the following criteria are used by programmatic reviewers:

- Ratings and evaluations of the peer reviewers
- Relevance to the priorities of the Defense Health Program and FY24 NFRP, as evidenced by the following:
 - Adherence to the intent of the funding opportunity
 - Program portfolio composition
 - Relative impact
 - o Relative innovation and/or military benefit
 - o Programmatic relevance to the <u>FY24 NFRP Areas of Emphasis</u>

II.E.2. Application Review and Selection Process

All applications are evaluated by scientists, clinicians, and consumers in a two-tier review process. The first tier is **peer review**, the evaluation of applications against established criteria to determine technical merit, where each application is assessed for its own merit, independent of other applications. The second tier is **programmatic review**, a comparison-based process in which applications with high scientific and technical merit are further evaluated for programmatic relevance. Final recommendations for funding are made to the Commanding General, USAMRDC. *The highest-scoring applications from the first tier of review are not automatically recommended for funding. Funding recommendations depend on various factors as described in <u>Section II.E.1.b</u>, <u>Programmatic Review</u>. Additional information about the two-tier process used by the CDMRP can be found at https://cdmrp.health.mil/about/2tierRevProcess.*

All CDMRP review processes are conducted confidentially to maintain the integrity of the merit-based selection process. Panel members sign a statement declaring that application and evaluation information will not be disclosed outside the review panel. Violations of confidentiality can result in the dissolution of a panel(s) and other corrective actions. In addition, personnel at the applicant or collaborating organizations are prohibited from contacting persons involved in the review and approval process to gain protected evaluation information or to influence the evaluation process. Violations of these prohibitions will result in the administrative withdrawal of the organization's application. Violations by panel members or applicants that compromise the confidentiality of the review and approval process may also

result in suspension or debarment from federal awards. Furthermore, the unauthorized disclosure of confidential information of one party to a third party is a crime in accordance with 18 USC 1905.

II.E.3. Integrity and Performance Information

Prior to making an assistance agreement award where the federal share is expected to exceed the simplified acquisition threshold, as defined in 2 CFR 200.1, over the period of performance, the federal awarding agency is required to review and consider any information about the applicant that is available in SAM.

An applicant organization may review SAM and submit comments on any information currently available about the organization that a federal awarding agency previously entered. The federal awarding agency will consider any comments by the applicant, in addition to other information in the designated integrity and performance system, in making a judgment about the applicant's integrity, business ethics, and record of performance under federal awards when determining a recipient's qualification prior to award, according to the qualification standards of the Department of Defense Grant and Agreement Regulations (DoDGARs), Section 22.415.

II.F. Federal Award Administration Information

II.F.1. Federal Award Notices

Each applicant organization and PI will receive email notification when the funding recommendations are posted to eBRAP. At this time, each PI will receive a peer review summary statement on the strengths and weaknesses of the application and an information paper describing the funding recommendation and review process for the NFRP award mechanisms. The information papers and a list of organizations and PIs recommended for funding are also posted on the program's page within the CDMRP website.

If an application is recommended for funding, after the email notification is posted to eBRAP, a government representative will contact the person authorized to negotiate on behalf of the recipient organization.

Only an appointed USAMRAA Grants Officer may obligate the government to the expenditure of funds to an extramural organization. No commitment on the part of the government should be inferred from discussions with any other individual. The award document signed by the Grants Officer is the official authorizing document (i.e., assistance agreement).

Intra-DOD obligations of funding will be made according to the terms of a negotiated Inter-Agency Agreement and managed by a CDMRP Science Officer.

Funding obligated to *intragovernmental and intramural DOD organizations* will be sent through the Military Interdepartmental Purchase Request (MIPR), Funding Authorization Document (FAD), or Direct Charge Work Breakdown Structure processes. Transfer of funds is contingent upon appropriate safety and administrative approvals. Intragovernmental and intramural DOD investigators and collaborators must coordinate receipt and commitment of

funds through their respective Resource Manager/Task Area Manager/Comptroller or equivalent Business Official.

An organization may, at its own risk and without the government's prior approval, incur obligations and expenditures to cover costs up to 90 days before the beginning date of the initial budget period of a new award. For extramural submissions, refer to the General Application Instructions, Section IV.B.(e), Pre-Award Costs section, and for intramural submissions, refer to the General Application Instructions, Section V.A.(e), Pre-Award Costs section, for additional information about pre-award costs.

If there are technical reporting requirement delinquencies for any existing CDMRP awards at the applicant organization, no new awards will be issued to the applicant organization until all delinquent reports have been submitted.

II.F.2. PI Changes and Award Transfers

Changes in PI are not allowed, except under extenuating circumstances that will be evaluated on a case-by-case basis.

An organizational transfer of an award will not be allowed in the last year of the (original) period of performance or any extension thereof.

Refer to the General Application Instructions, Appendix 7, Section F, for general information on organization or PI changes.

II.F.3. Administrative and National Policy Requirements

Applicable requirements in the DoDGARs found in 32 CFR, Chapter I, Subchapter C, and 2 CFR, Chapter XI, apply to grants and cooperative agreements resulting from this program announcement.

Refer to the General Application Instructions, Appendix 7, for general information regarding administrative requirements.

Refer to the General Application Instructions, Appendix 8, for general information regarding national policy requirements.

Refer to full text of the latest <u>DoD R&D Terms and Conditions</u> and the <u>USAMRAA Research Terms and Conditions</u>: <u>Addendum to the DoD R&D Terms and Conditions</u> for further information.

Applications recommended for funding that involve animals, human data, human specimens, human subjects, or human cadavers must be reviewed for compliance with federal and DOD animal and/or human subjects protection requirements and approved by the USAMRDC OHARO prior to implementation. This administrative review requirement is in addition to the local IACUC, IRB, or Ethics Committee review. Refer to the General Application Instructions, Appendix 6, for additional information.

II.F.4. Reporting

Annual technical progress reports as well as a final technical progress report will be required. Annual and final technical reports must be prepared in accordance with the Research Performance Progress Report (RPPR).

The Award Terms and Conditions will specify whether additional and/or more frequent reporting is required.

Award Expiration Transition Plan: An Award Expiration Transition Plan must be submitted with the final progress report. Use the one-page template "Award Expiration Transition Plan," available on the eBRAP "Funding Opportunities & Forms" web page (https://ebrap.org/eBRAP/public/Program.htm) under the "Progress Report Formats" section. The Award Expiration Transition Plan must outline whether and how the research supported by this award will progress and must include source(s) of funding, either known or pending.

PHS Inclusion Enrollment Reporting Requirement (*Required for clinical research*): Enrollment reporting on the basis of sex/gender, race, and/or ethnicity will be required with each annual and final progress report. The PHS Inclusion Enrollment Report is available on the "Funding Opportunities & Forms" web page (https://ebrap.org/eBRAP/public/Program.htm) in eBRAP.

Awards resulting from this program announcement may entail additional reporting requirements related to recipient integrity and performance matters. Recipient organizations that have federal contract, grant, and cooperative agreement awards with a cumulative total value greater than \$10.0M are required to provide information to SAM about certain civil, criminal, and administrative proceedings that reached final disposition within the most recent 5-year period and that were connected with performance of a federal award. These recipients are required to disclose, semiannually, information about criminal, civil, and administrative proceedings as specified in the applicable Representations (see General Application Instructions, Appendix 8, Section B).

II.G. Federal Awarding Agency Contacts

II.G.1. eBRAP Help Desk

Questions regarding program announcement content or submission requirements as well as technical assistance related to pre-application or intramural application submission:

Phone: 301-682-5507

Email: <u>help@eBRAP.org</u>

II.G.2. Grants.gov Contact Center

Questions regarding Grants.gov registration and Workspace:

Phone: 800-518-4726; International 1-606-545-5035

Email: support@grants.gov

II.H. Other Information

II.H.1. Program Announcement and General Application Instructions Versions

Questions related to this program announcement should refer to the program name, the program announcement name, and the program announcement version code 901a. The program announcement numeric version code will match the General Application Instructions version code 901.

II.H.2. Administrative Actions

After receipt of full applications, the following administrative actions may occur.

II.H.2.a. Rejection

The following will result in administrative rejection of the full application:

- Project Narrative exceeds page limit.
- Project Narrative is missing.
- Budget is missing.
- Pre-application was not submitted.
- Attachment 7 is missing in application submitted under Optional NF-OSI.
- Attachment 9 is missing in application submitted under Qualified Collaborator Option.

II.H.2.b. Modification

- Pages exceeding the specific limits will be removed prior to review for all documents other than the Project Narrative.
- Documents not requested will be removed.

II.H.2.c. Withdrawal

The following may result in administrative withdrawal of the full application:

- An FY24 NFRP Programmatic Panel member is named as being involved in the research proposed or is found to have assisted in the pre-application or application processes including, but not limited to, concept design, application development, budget preparation, and the development of any supporting documentation, including letters of support/recommendation.
 A list of the FY24 NFRP Programmatic Panel members can be found at https://cdmrp.health.mil/nfrp/panels/panels24.
- The application fails to conform to this program announcement description.

- Inclusion of URLs, with the exception of links in References Cited and Publication and/or Patent Abstract sections.
- Applications that include names of personnel from either of the CDMRP peer or
 programmatic review companies. For FY24, the identities of the peer review contractor and
 the programmatic review contractor may be found at the CDMRP website
 (https://cdmrp.health.mil/about/2tierRevProcess).
- Personnel from applicant or collaborating organizations are found to have contacted persons involved in the review or approval process to gain protected evaluation information or to influence the evaluation process.
- Applications from extramural organizations, including non-DOD federal agencies, received through eBRAP.
- Applications submitted by a federal government organization (including an intramural DOD organization) may be withdrawn if (a) the organization cannot accept and execute the entirety of the requested budget in current fiscal year (FY24) funds and/or (b) the federal government organization cannot coordinate the use of contractual, assistance, or other appropriate agreements to provide funds to collaborators.
- Application includes research data that are classified and/or proposes research that may produce classified outcomes, or outcomes deemed sensitive to national security concerns.
- Submission of the same research project to different funding opportunities within the same program and fiscal year.
- The PI does not meet the eligibility criteria.
- A clinical trial is proposed.
- The application fails to demonstrate access to the relevant study population or resources.
- The application does not include preliminary and/or published data that are relevant to NF and the proposed research project.

II.H.2.d. Withhold

Applications that appear to involve research misconduct will be administratively withheld from further consideration pending organizational investigation. The organization will be required to provide the findings of the investigation to the USAMRAA Grants Officer for a determination of the final disposition of the application.

II.H.3. Full Application Submission Checklist

Full Application Components	Uploaded
SF424 Research & Related Application for Federal Assistance (Extramural submissions only)	
Summary (Tab 1) and Application Contacts (Tab 2) (Intramural submissions only)	
Attachments	
Project Narrative – Attachment 1, upload as "ProjectNarrative.pdf"	
Supporting Documentation – Attachment 2, upload as "Support.pdf"	
Technical Abstract – Attachment 3, upload as "TechAbs.pdf"	
Lay Abstract – Attachment 4, upload as "LayAbs.pdf"	
Statement of Work – Attachment 5, upload as "SOW.pdf"	
Impact Statement – Attachment 6 upload as "Impact.pdf"	
Data and Research Resources Sharing Plan – Attachment 7 upload as "DataResourceSharing.pdf"	
Animal Research Plan – Attachment 8 upload as "AnimalResPlan.pdf" (if applicable; required for research projects involving animals)	
Statement of Collaboration – Attachment 9 upload as "Collaboration.pdf" (if applicable; required for applications submitted under the Qualified Collaborator Option)	
Representations (Extramural submissions only) – Attachment 10, upload as "RequiredReps.pdf"	
Suggested Intragovernmental/Intramural Budget Form (if applicable) – Attachment 11, upload as "IGBudget.pdf"	
Research & Related Personal Data	
Research & Related Senior/Key Person Profile (Expanded)	
Attach PI Biographical Sketch (Biosketch LastName.pdf)	
Attach PI Previous/Current/Pending Support (Support_LastName.pdf)	
Attach Biographical Sketch (Biosketch_LastName.pdf) for each senior/key person	
Attach Previous/Current/Pending (Support_LastName.pdf) for each senior/key person	
Research & Related Budget (Extramural submissions only) Include budget justification	
Budget (Intramural submissions only) Include budget justification	
Project/Performance Site Location(s) Form	
Research & Related Subaward Budget Attachment(s) Form (if applicable)	

APPENDIX 1: ACRONYM LIST

ACOS/R&D Associate Chief of Staff for Research and Development

ACURO Animal Care and Use Review Office

ARRIVE Animal Research: Reporting *In Vivo* Experiments
CDMRP Congressionally Directed Medical Research Programs

CFR Code of Federal Regulations
DOD Department of Defense

DoDGARs Department of Defense Grant and Agreement Regulations

eBRAP Electronic Biomedical Research Application Portal

ET Eastern Time

FAD Funding Authorization Document

FAIR Findable, Accessible, Interoperable, and Reusable

FY Fiscal Year

IACUC Institutional Animal Care and Use Committee

IIRA Investigator-Initiated Research Award

IRB Institutional Review Board

LOI Letter of Intent

M Million MB Megabytes

MIPR Military Interdepartmental Purchase Request

NF1 Neurofibromatosis Type 1 NF2 Neurofibromatosis Type 2 NF-OSI NF Open Science Initiative

NFRP Neurofibromatosis Research Program

NIH National Institutes of Health

OHARO Office of Human and Animal Research Oversight

PDF Portable Document Format
PHS Public Health Service
PI Principal Investigator

RPPR Research Performance Progress Report

SAM System for Award Management

SOW Statement of Work

UEI Unique Entity Identifier
URL Uniform Resource Locator

USAMRAA U.S. Army Medical Research Acquisition Activity

USAMRDC U.S. Army Medical Research and Development Command

USC United States Code

VA U.S. Department of Veterans Affairs