I. OVERVIEW OF THE FUNDING OPPORTUNITY

Program Announcement for the Department of Defense

Defense Health Program

Congressionally Directed Medical Research Programs

Chronic Pain Management Research Program

Investigator-Initiated Research Award

Announcement Type: Initial

Funding Opportunity Number: W81XWH-22-CPMRP-IIRA

Assistance Listing Number: 12.420 Military Medical Research and Development

SUBMISSION AND REVIEW DATES AND TIMES

• Pre-Application Submission Deadline: 5:00 p.m. Eastern time (ET), July 12, 2022

• Invitation to Submit an Application: August 25, 2022

Application Submission Deadline: 11:59 p.m. ET, October 13, 2022

• End of Application Verification Period: 5:00 p.m. ET, October 18, 2022

• **Peer Review:** December 2022

• **Programmatic Review:** March 2023

This program announcement must be read in conjunction with the General Application Instructions, version 702. 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."

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II. DETAILED INFORMATION ABOUT THE FUNDING OPPORTUNITY

II.A. Program Description

Applications to the Fiscal Year 2022 (FY22) Chronic Pain Management Research Program (CPMRP) are being solicited by the U.S. Army Medical Research Acquisition Activity (USAMRAA) using delegated authority provided by United States Code, Title 10, Section 4001 (10 USC 4001). The execution management agent for this program announcement is the Congressionally Directed Medical Research Programs (CDMRP) at the U.S. Army Medical Research and Development Command (USAMRDC). The CPMRP was initiated in 2019 to provide support for research of exceptional scientific merit with the potential to make a significant impact on improving the health and quality of life of those living with chronic pain. Appropriations for the CPMRP from FY19 through FY21 totaled \$40 million (M). The FY22 appropriation is \$15M.

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

Per the FY19 CPMRP congressional appropriation, chronic pain is defined as pain that occurs on at least half of the days for 6 months or more, and which can be caused by issues including, but not limited to, combat- and training-related physical or mental stress and trauma, migraines and chronic headaches, traumatic brain injury (TBI), arthritis, muscular skeletal conditions, neurological disease, tick and vector-borne disease, and other insect-transmitted or tropical disease, and cancer. The CPMRP encourages alignment of research projects with the Federal Pain Research Strategy for maximizing the impact of chronic pain research outcomes. 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.

II.A.1. FY22 CPMRP Investigator Initiated Research Award Focus Areas

To meet the intent of the award mechanism, applications must address at least one of the FY22 CPMRP Investigator-Initiated Research Award (IIRA) Focus Areas. Selection of the appropriate focus area is the responsibility of the applicant.

- Chronification of pain
 - Understanding mechanisms of, and developing models for studying, the transition from acute to chronic pain following trauma either physical and/or psychological
 - o Development of mechanistically justified therapies to prevents and treat chronification
 - Identifying risk or protective factors or biomarkers for patients susceptible to chronification, including relevant subpopulations

- Investigating relationships between pain and its co-morbidities that can contribute to the development/progression of chronic pain
- Effectiveness or observational studies of novel treatments or untested techniques/approaches/pathways to chronic pain management
 - o Pilot/preliminary studies
 - o Potential clinical effectiveness
- Development of non-opioid therapies and methods of the treatment of chronic pain
 - Novel non-opioid pharmacological solutions
 - Devices that treat chronic pain directly
 - o Devices that improve the administration of non-opioid analgesics

Additionally, the incorporation of one or more of the following into the proposed research approaches is encouraged but not required:

- Pain informatics
- Pragmatic approaches
- Patient expectations, preference, and goals of treatment at point of care
- Multiple ecological levels of stakeholder engagement in the study design with human participants
- High prevalence in military populations including Service Members, Veterans, and beneficiaries.
- Established models of pain assessments that include pain interference in emotional and physical functioning

II.A.2. Award History

The CPMRP IIRA mechanism was first offered in FY19. Since then, 168 IIRA applications have been received, and 20 have been recommended for funding for a 12% funding rate.

II.B. Award Information

The intent of the FY22 CPMRP is to support studies that have the potential to make significant advances in the research, patient care and/or quality of life in the FY22 CPMRP IIRA Focus Areas. IIRA applications may involve basic, translational, and clinically oriented research, including studies in animal models, research with human anatomical substances, and research with human subjects, as well as correlative studies associated with an existing clinical trial;

however, this award may not be used to conduct clinical trials. Multidisciplinary collaborations and innovative approaches are encouraged. Studies seeking to advance new and novel opioid-based therapeutic interventions do not meet the intent of the award mechanism and will not be selected for funding. Studies seeking to understand and reduce opioid utilization in chronic pain management within the context of current prescribing practices are acceptable.

Important aspects of this award mechanism include:

- **Impact:** Applications should articulate both the short- and long-term impact of the proposed research. The proposed research project should significantly impact the understanding of one or more of the FY22 CPMRP IIRA Focus Areas and, if successful, make important contributions toward the goals of advancing chronic pain research, patient care, and/or improving quality of life for those living with chronic pain.
- Innovation: The proposed research should be innovative. Innovative research may introduce new insights, technologies, or paradigms; challenge existing paradigms; look at existing problems from new perspectives; and/or exhibit other highly creative qualities. Incremental advances upon published data or the next logical step are not considered innovative.
- **Preliminary Data:** Observations that drive a research idea may be derived from laboratory discovery, population-based studies, a clinician's first-hand knowledge of patients, or anecdotal data. Applications must include preliminary and/or published data that are relevant to the mission of the CPMRP and support the proposed research project. Any unpublished preliminary data provided should originate from the laboratory of the Principal Investigator (PI) or a member(s) of the research team.
- **Multidisciplinary Collaborations:** Applications are encouraged to form multidisciplinary teams of investigators who bring specific skills that contribute to the successful completion of the project. This is expected to include both intellectual input and research resources (e.g., supplies, reagents, equipment, personnel, services, tissue samples, access to patients or populations).
- Correlative Studies: The FY22 CPMRP IIRA can support innovative, hypothesis-based, correlative studies that derive from ongoing or completed clinical trials supported by other funding sources. These studies, if successful, will have the potential to significantly inform treatment strategies, support personalized medicine approaches, provide increased understanding of biological changes resulting from the intervention in chronic pain management, or provide other insight that will significantly enhance management of chronic pain.
- Relevance to Military Health: The CPMRP seeks to support research that is relevant to the healthcare needs of military Service Members, Veterans, and/or their families. Relevance may arise by addressing high incidence rate within a population of interest, or significant debilitating effects on focused subpopulations. *Investigators are encouraged* to consider the following characteristics as examples of how a project may demonstrate relevance to military health:

- o Use of military or Veteran populations, biospecimens, or data/databases in the proposed research.
- Collaborations that include the Department of Defense (DOD) Military Health System (MHS), Military Treatment Facilities (MTFs), and/or VA investigators and facilities.
- Research projects that integrate and/or align with DOD and/or VA research laboratories and programs. A list of websites that may be useful in identifying additional information about ongoing DOD and VA areas of research interest or potential opportunities for collaboration can be found in Appendix 2.
- Research projects that integrate techniques/approaches/pathways that fill an unmet requirement in patient care and are feasible for deployment within the existing Defense Health Agency (DHA) or Veterans Health Administration (VHA) healthcare systems.
- Explanation of how the project addresses an aspect of chronic pain management that has direct relevance to military Service Members, Veterans, or other MHS beneficiaries.
- Stakeholder Engagement: Applicants are encouraged to consider the views, opinions, and priorities of stakeholders at various ecological levels of patient care. Input from those living with or providing care for chronic pain conditions can help identify relevant research questions and shape study designs and objectives across the continuum of basic to clinical research. Studies performing prospective human subject recruitment should consider patient experiences and perspectives, and are encouraged, but not required, to include key stakeholders (e.g., patients, caregivers, patient advocates, and community leaders) as part of the research team participating in study design, oversight, and evaluation. Broader stakeholder engagement with clinicians, hospital/heath system administrators, and healthcare policy and decision makers is also encouraged.

Applicants seeking information regarding considerations for stakeholder inclusion in participatory research and current practices for patient engagement during research planning and execution are encouraged to review resources available from the:

- o U.S. Food and Drug Administration (FDA) Patient Engagement Advisory Committee
- Patient-Centered Outcomes Research Institute (PCORI)

Clinical studies conducted in DOD MTFs have distinct stakeholders whose support are critical for project success. Onsite collaborators and co-investigators play an essential role in helping extramural partners navigate the unique considerations required when performing research in the MHS and facilitating stakeholder engagement with local commanders, senior military leaders, and potential study participants. Applicants are encouraged to consider the challenges for clinical research in military settings described in Rhon DI, Oh RC, and Teyhen DS. 2021. Challenges with engaging military stakeholders for clinical research at the point of care in the U.S. Military Health System. *Military Medicine*; usab494.

Partnering PI Option: The FY22 CPMRP IIRA encourages applications that include meaningful and productive collaborations between two investigators. Electing to submit to the Partnering PI Option does not influence the total direct cost limit as outlined in Section II.D.5, Funding Restrictions. One PI will be identified as the Initiating PI and will be responsible for the majority of the administrative tasks associated with application submission. The other PI will be identified as a Partnering PI. Both PIs should contribute significantly to the development of the proposed research project, including the Project Narrative, Statement of Work (SOW), and other required components. The PIs may have expertise in similar or disparate scientific disciplines, but each PI is expected to bring distinct contributions to the application. The application should clearly demonstrate that both PIs have equal intellectual input into the design of the project and will devote similar and appropriate levels of effort to the conduct of the project. It is expected that funding will be balanced between both PIs unless appropriately justified. New partnerships are encouraged, but not required. The application is expected to describe how the PIs' unique expertise combined as a partnership will better address the research question, how the unique expertise that each individual brings to the application is critical for the research strategy and completion of the SOW, how each PI's expertize complements each other, and why the work should be done together rather than through separate efforts. To meet the intent of the Partnering PI Option, applicants are discouraged from being named as a Partnering PI on multiple applications unless they are clearly addressing distinct research questions. Applications in which a mentor and their current postdoctoral fellow or junior investigator are named as Initiating and Partnering PIs do not meet the intent of the Partnering PI Option. If recommended for funding, each PI will be named to an individual award within the recipient organization. For individual submission requirements for the Initiating and Partnering PI, refer to Section II.D.2, Content and Form of the Application Submission.

The types of awards made under the program announcement will be assistance agreements. An assistance agreement is appropriate when the federal government transfers a "thing of value" to a "state, local government," or "other recipient" to carry out a public purpose of support or stimulation authorized by a law of the United States instead of acquiring property or service for the direct benefit and use of the U.S. government. An assistance agreement can take the form of a grant or cooperative agreement. The level of involvement on the part of the DOD during project performance is the key factor in determining whether to award a grant or cooperative agreement. If "no substantial involvement" on the part of the funding agency is anticipated, a grant award will be made (31 USC 6304). Conversely, if substantial involvement on the part of the funding agency is anticipated, a cooperative agreement will be made (31 USC 6305), and the award will identify the specific substantial involvement. Substantial involvement may include, but is not limited to, collaboration, participation, or intervention in the research to be performed under the award. The award type, along with the start date, will be determined during the negotiation process.

The anticipated direct costs budgeted for the entire period of performance for an FY22 CPMRP IIRA will not exceed \$900,000. Refer to Section II.D.5, Funding Restrictions, for detailed funding information.

Awards will be made no later than September 30, 2023. For additional information refer to Section II.F.1, Federal Award Notices.

The CDMRP expects to allot approximately \$7.20M to fund approximately five IIRA applications. Funding of applications received is contingent upon the availability of federal funds for this program as well as the number of applications received, the quality and merit of the applications as evaluated by scientific 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 FY22 funding opportunity will be funded with FY22 funds, which will expire for use on September 30, 2028.

Research Involving Human Anatomical Substances, Human Subjects, or Human Cadavers: All DOD-funded research involving new and ongoing research with human anatomical substances, human subjects, or human cadavers must be reviewed and approved by the USAMRDC Office of Research Protections (ORP), Human Research Protection Office (HRPO), prior to research implementation. This administrative review requirement is in addition to the local Institutional Review Board (IRB) or Ethics Committee (EC) review. Local IRB/EC approval at the time of submission is *not* required. Allow up to 3 months to complete the HRPO regulatory review and approval process following submission of *all required and complete* documents to the HRPO. Refer to the General Application Instructions, Appendix 1, and the HRPO Resources and Overview document available on the electronic Biomedical Research Application Portal (eBRAP) "Funding Opportunities & Forms" web page (https://ebrap.org/eBRAP/public/Program.htm) for additional information.

If the proposed research involves more than one institution, a written plan for single IRB review arrangements must be provided at the time of application submission or award negotiation. The lead institution responsible for developing the master protocol and master consent form should be identified and should be the single point of contact for regulatory submissions and requirements.

Clinical trials will not be supported by the FY22 CPMRP IIRA. A clinical trial is defined 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.

Clinical research is defined as: (1) Patient-oriented research. Research conducted with human subjects (or on material of human origin such as tissues, specimens, and cognitive phenomena) for which an investigator (or colleague) directly interacts with human subjects. Excluded from this definition are in vitro studies that utilize human tissues that cannot be linked to a living individual. Patient-oriented research includes: (a) mechanisms of human disease, (b) therapeutic interventions, (c) clinical trials, and (d) development of new technologies. (2) Epidemiologic and behavioral studies. (3) Outcomes research and health services research. Note: Studies that meet the requirements for IRB Exemption 4 are not considered CDMRP-defined clinical research. IRB Exemption 4 refers to research involving the collection or study of existing deidentified specimens or data, if these sources are publicly available.

Use of DOD or VA Resources: If the proposed research involves access to active-duty military or veteran patient populations and/or DOD or VA 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. Refer to <u>Section II.D.2.b.ii</u>, <u>Full Application Submission</u> <u>Components</u>, for detailed information. Refer to the General Application Instructions, Appendix 1, for additional information.

Rigor of Experimental Design: All projects should adhere to accepted standards for rigorous study design and reporting to maximize the reproducibility and translational potential of preclinical research. Core standards are described in Landis, S.C., et al., "A call for transparent reporting to optimize the predictive value of preclinical research," *Nature* 2012, 490:187-191 (http://www.nature.com/nature/journal/v490/n7419/full/nature11556.html). While these standards were written for preclinical studies, the basic principles of randomization, blinding, sample-size estimation, and data handling derive from well-established best practices in research and should be applied consistently across basic and translational studies. Projects that include research on animal models are required to describe how these standards will be addressed. Refer to the application submission instructions for more information. Applicants should consult the Animal Research: Reporting *In Vivo* Experiments (ARRIVE) guidelines 2.0 to ensure relevant aspects of rigorous animal research are adequately planned for and, ultimately, reported. The ARRIVE guidelines can be found at https://arriveguidelines.org/arrive-guidelines.

Research Involving Animals: All research funded by the FY22 CPMRP IIRA involving new and ongoing research with animals must be reviewed and approved by the USAMRDC ORP 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.

Prospective Human Studies and the Federal Interagency Traumatic Brain Injury Research (FITBIR) Informatics System: The DOD requires that awardees make TBI research data generated by this award mechanism available to the research community through the FITBIR Informatics System. The FITBIR Informatics System is a free resource designed to accelerate research progress by allowing the storage, re-analysis, integration, and rigorous comparison of multiple datasets. Currently, FITBIR-eligible research includes all studies generating prospectively collected human TBI subject data (e.g., clinical, demographic, phenotypic, imaging, genomic). Data reporting to FITBIR is an opportunity for investigators to facilitate their own research and to collaborate with others engaged in similar research. While there is no direct charge to users of the FITBIR Informatics System, a project estimation tool (https://fitbir.nih.gov/jsp/contribute/fitbir-costs.jsp) is available to help estimate costs and manpower needs that may be associated with data submission. FITBIR guidance and policies, as well as the considerable advantages of FITBIR participation to the researcher, are detailed at https://fitbir.nih.gov/.

II.C. Eligibility Information

II.C.1. Eligible Applicants

II.C.1.a. Organization: All organizations, including foreign organizations, foreign public entities, and international organizations, are eligible to apply.

Government Agencies Within the United States: Local, state, and federal government agencies are eligible to the extent that applications do not overlap with their fully funded internal programs. Such agencies are required to explain how their applications do not overlap with their internal programs.

As applications for this program announcement may be submitted by extramural and intramural organizations, these terms are defined below.

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

Intramural DOD Organization: A DOD laboratory, DOD military treatment facility, and/or DOD activity embedded within a civilian medical center. Intramural Submission: An application submitted by a DOD organization for an intramural investigator working within a DOD laboratory or military treatment facility or in a DOD activity embedded within a civilian medical center.

The USAMRAA makes awards to eligible organizations, not to individuals.

II.C.1.b. Principal Investigator

Investigators at or above the level of Assistant Professor (or equivalent) may be named by the organization as the PI or Partnering PI on the application.

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

The CDMRP strongly encourages all PIs to participate in a digital identifier initiative through Open Researcher and Contributor ID, Inc. (ORCID). Registration for a unique ORCID identifier can be done online at https://orcid.org/.

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 in order to fulfill the financial and technical deliverable requirements of the award and submit invoices for payment.

For general information on required qualifications for award recipients, refer to the General Application Instructions, Appendix 3.

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 application does not meet the administrative, eligibility, or ethical requirements defined in this program announcement.

II.D. Application and Submission Information

Submission of applications that are essentially identical or 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).

II.D.1. eBRAP and Grants.gov

eBRAP (https://ebrap.org) is a secure web-based system that allows PIs to submit their preapplications, view and verify extramural full applications submitted to Grants.gov (https://grants.gov), receive communications from the CDMRP, and submit documentation during award negotiations and throughout the period of performance. eBRAP also allows intramural organizations to submit full applications following pre-application submission.

Grants.gov is a federal system required to be utilized by agencies to receive and process extramural grant applications. Full applications may only be submitted to Grants.gov after submission of a pre-application through eBRAP.

Contact information for the eBRAP Help Desk and the Grants.gov Contact Center can be found in <u>Section II.G</u>, <u>Federal Awarding Agency Contacts</u>.

Extramural Submission:

- Pre-application content and forms must be accessed and submitted at eBRAP.org.
- Full application packages must be accessed and submitted at Grants.gov.

Intramural DOD Submission:

- Pre-application content and forms must be accessed and submitted at eBRAP.org.
- Full application packages must be accessed and submitted at eBRAP.org.

Note: Applications from an intramural DOD organization or from an extramural federal government organization may be submitted to Grants.gov through a research foundation.

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

Submission is a two-step process requiring both *pre-application* (eBRAP.org) and *full application* (eBRAP.org or Grants.gov) as indicated below. The submission process should be started early to avoid missing deadlines. There are no grace periods. Full application

submission guidelines differ for extramural (Grants.gov) and intramural (eBRAP.org) organizations (refer to <u>Table 1</u>, <u>Full Application Guidelines</u>).

The application title, eBRAP log number, and all information for the PI(s), Business Official(s), performing organization, and contracting organization 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.

Partnering PI Option: The Initiating PI must complete the pre-application submission process and submit the contact information for the Partnering PI. The Partnering PI will then be notified of the pre-application submission separately by email. The Partnering PI must follow the link in the notification email in order to associate their full application package with that of the Initiating PI. After following the link, the Partnering PI must verify their contact information, organization, and designation as an extramural or intramural submission within eBRAP. If not previously registered, the Partnering PI must register in eBRAP. A new pre-application based on this research project should not be initiated by the Partnering PI. Applicants are urged to complete these steps as soon as possible. If they are not completed, the Partnering PI will not be able to view and modify their application during the verification period in eBRAP. If these steps are not completed, an intramural partner will not be able to submit the Partnering PI's required full application package components to eBRAP.

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

During the pre-application process, eBRAP assigns each submission a unique log number. This unique eBRAP log number is required during the full application submission process.

To begin the pre-application process, first select whether the submitting organization is extramural or intramural, then confirm your selection or cancel. **Incorrect selection of extramural or intramural submission type will delay processing.**

If an error has been made in the selection of extramural versus intramural and the pre-application submission deadline has passed, the PI or Business Official must contact the eBRAP Help Desk at help@eBRAP.org or 301-682-5507 to request a change in designation.

All pre-application components must be submitted by the Initiating PI through eBRAP (https://eBRAP.org/). Because the invitation to submit an application is based on the contents of the pre-application, investigators should not change the title or research objectives after the pre-application is submitted.

The applicant organization and associated PI identified in the pre-application should be the same as those intended for the subsequent application submission. If any changes are necessary after submission of the pre-application, the applicant must contact the eBRAP Help Desk at help@eBRAP.org or 301-682-5507.

PIs with an ORCID identifier should enter that information in the appropriate field in the "My Profile" tab in the "Account Information" section of eBRAP.

When starting the pre-application, PIs should ensure that they have selected the appropriate application option:

- IIRA Single PI Option
- IIRA Partnering PI Option

The pre-application consists of the following components, which are organized in eBRAP by separate tabs (refer to the General Application Instructions, Section II.B, for additional information on pre-application submission):

• Tab 1 – Application Information

Submission of application information includes assignment of primary and secondary research classification codes, which may be found at https://ebrap.org/eBRAP/public/Program.htm. Applicants are strongly encouraged to review and confirm the codes prior to making their selection.

• Tab 2 – Application Contacts

Enter contact information for the PI(s). Enter the organization's Business Official(s) responsible for sponsored program administration (the "person to be contacted on matters involving this application" in Block 5 of the Grants.gov SF424 Research & Related Form). The Business Official must be either selected from the eBRAP list or invited in order for the pre-application to be submitted.

Select the performing organization (site at which the PI(s) will perform the proposed work) and the contracting organization (organization[s] submitting on behalf of the PI[s], which corresponds to Block 5 on the Grants.gov SF424 Research & Related Form), and click on "Add Organizations to this Pre-application." The organization(s) must be either selected from the eBRAP drop-down list or invited in order for the pre-application to be submitted.

It is recommended that PIs identify an Alternate Submitter in the event that assistance with pre-application submission is needed.

• Tab 3 – Collaborators and Key Personnel

Enter the name, organization, and role of all collaborators and key personnel associated with the application.

If the research team will include <u>key stakeholders</u> (e.g., patients, caregivers, patient advocates, community leaders) provide their identity along with any relevant details regarding their experience with chronic pain conditions and/or organizational/advocacy affiliations. (For administrative purposes, please use the label "Consumer" when assigning the community partners' roles in eBRAP.)

<u>FY22 CPMRP Programmatic Panel members</u> should not be involved in any pre-application or application. For questions related to panel members and pre-applications or applications, refer to <u>Section II.H.2.c, Withdrawal</u>, or contact the CDMRP Help Desk at <u>help@eBRAP.org</u> or 301-682-5507.

For the Partnering PI Option, the Initiating PI must enter the contact information for the Partnering PI in the Partnering PI section.

• Tab 4 – Conflicts of Interest

List all individuals other than collaborators and key personnel who may have a conflict of interest in the review of the application (including those with whom the PI[s] has/have a personal or professional relationship).

• Tab 5 – Pre-Application Files

Note: Upload documents as individual PDF files unless otherwise noted. eBRAP will not allow a file to be uploaded if the number of pages exceeds the limit specified below.

• Preproposal Narrative (two-page limit): The Preproposal Narrative page limit 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 that provide additional information to expand the Preproposal Narrative and could confer an unfair competitive advantage is prohibited and may result in administrative withdrawal of the pre-application.

The Pre-proposal Narrative should include the following:

- Alignment to CPMRP Intent: Describe how the proposed research meets the intent of the FY22 CPMRP IIRA as describes in <u>Section II.B Award Information</u>, including adherence to restrictions on allowable and prohibited research categories. State the <u>FY22 CPMRP IIRA Focus Area(s)</u> the study seeks to address.
- Scientific Rationale and Approach: State the background and scientific rationale on which the proposed project is based. Relevant literature citations must be included. Preliminary data is encouraged at the pre-application stage and will be required for invited full applications. Concisely state the project's specific aims and describe the scientific approach.
- Impact: Explain the potential impact of the proposed research project and how it will make important advances in chronic pain research, patient care, and/or improve the quality of life of Service Members, Veterans, and/or their family members or beneficiaries living with chronic pain.
- Pre-Application Supporting Documentation: The items to be included as supporting documentation for the pre-application *must be uploaded as individual files* and are limited to the following:

- References Cited (one-page limit): List the references cited (including URLs if available) in the Preproposal Narrative using a standard reference format that includes the full citation (i.e., author[s], year published, reference title, and reference source, including volume, chapter, page numbers, and publisher, as appropriate).
- List of Abbreviations, Acronyms, and Symbols: Provide a list of abbreviations, acronyms, and symbols used in the Preproposal Narrative.
- Key Personnel Biographical Sketches (six-page limit per individual): All biographical sketches should be uploaded as a single combined file. Biographical sketches should be used to demonstrate background and expertise through education, positions, publications, and previous work accomplished.

• Tab 6 – Submit Pre-Application

This tab must be completed for the pre-application to be accepted and processed.

Pre-Application Screening

• Pre-Application Screening Criteria

To determine the technical merits of the pre-application and the relevance to the mission of the Defense Health Program (DHP) and CPMRP, pre-applications will be screened based on the following criteria:

- Alignment to CPMRP intent: How well the proposed research meets the intent of the FY22 CPMRP IIRA. Whether the proposed research adheres to research restrictions and does not include prohibited studies. The degree to which the study addresses one or more of the FY22 CPMRP IIRA Focus Area(s).
- Scientific Rationale and Approach: How well the background, scientific rationale, relevant literature citations, and preliminary data (if applicable) demonstrate sufficient evidence to support the proposed research project. The degree to which the specific aims are reasonable and address the research problem. How well the scientific approach supports of the specific aims proposed.
- o **Impact:** To what degree the research will impact the field of the chronic pain management. Whether the proposed project will make important advances in chronic pain research, patient care, and/or improves the quality of life of Service Members, Veterans and/or their family members or beneficiaries living with chronic pain.

• Notification of Pre-Application Screening Results

Following the pre-application screening, Initiating PIs will be notified as to whether or not they are invited to submit applications; however, they will not receive feedback (e.g., a critique of strengths and weaknesses) on their pre-application. The estimated timeframe for notification of invitation to submit an application is indicated in <u>Section I, Overview of the</u>

<u>Funding Opportunity</u>. Invitations to submit a full application are based on the Pre-Application Screening Criteria listed above.

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

Applications will not be accepted unless notification of invitation has been received by the Initiating PI.

The CDMRP cannot make allowances/exceptions to its policies for submission problems encountered by the applicant organization using system-to-system interfaces with Grants.gov.

Each application submission must include the completed full application package for this program announcement. The full application package is submitted by the Authorized Organizational Representative through Grants.gov (https://grants.gov/) for extramural organizations or through eBRAP (https://ebrap.org/) for intramural organizations. See Table 1 below for more specific guidelines.

II.D.2.b.i. Full Application Guidelines

Extramural organizations must submit full applications through Grants.gov. Applicants must create a Grants.gov Workspace for submission, which allows the application components to be completed online and routed through the applicant organization for review prior to submission. Applicants may choose to download and save individual PDF forms rather than filling out webforms in Workspace. A compatible version of Adobe Reader **must** be used to view, complete, and submit an application package consisting of PDF forms. If more than one person is entering text into an application package, the *same version* of Adobe Reader software should be used by each person. Check the version number of the Adobe software on each user's computer to make sure the versions match. Using different versions of Adobe Reader may cause submission and/or save errors – even if each version is individually compatible with Grants.gov. Refer to the General Application Instructions, Section III, and the "Apply For Grants" page of Grants.gov (https://www.grants.gov/web/grants/applicants/apply-for-grants.html) for further information about the Grants.gov Workspace submission process. Submissions of extramural applications through eBRAP may be withdrawn.

Do not password protect any files of the application package, including the Project Narrative.

Table 1. Full Application Submission Guidelines

Extramural Submissions	Intramural DOD Submissions		
Application Package Location			
W81XWH-22-CPMRP-IIRA from Grants.gov	Download application package components for W81XWH-22-CPMRP-IIRA from eBRAP (https://ebrap.org).		

Extramural Submissions	Intramural DOD Submissions			
applicant organization for review prior to submission.				
Full Application Package Components				
SF424 Research & Related Application for Federal Assistance Form: Refer to the General Application Instructions, Section III.A.1, for detailed information.	Tab 1 – Summary: Provide a summary of the application information. Tab 2 – Application Contacts: This tab will be pre-populated by eBRAP; add Authorized Organizational Representative.			
Descriptions of each required file can be found under Full Application Submission Components: • Attachments • Research & Related Personal Data • Research & Related Senior/Key Person Profile (Expanded) • Research & Related Budget • Project/Performance Site Location(s) Form • Research & Related Subaward Budget Attachment(s) Form	Tab 3 – Full Application Files: Upload files under each Application Component in eBRAP. Descriptions of each required file can be found under Full Application Submission Components: • Attachments • Key Personnel • Budget • Performance Sites Tab 4 – Application and Budget Data: Review and edit proposed project start date, proposed end date, and budget data prepopulated from the Budget Form.			
Application Package Submission				
Create a Grants.gov Workspace. Add participants (investigators and Business Officials) to Workspace, complete all required forms, and check for errors before submission.	Submit package components to eBRAP (https://ebrap.org). Tab 5 – Submit/Request Approval Full Application: After all components are uploaded			
Submit a Grants.gov Workspace Package. An application may be submitted through Workspace by clicking the "Sign and Submit" button on the "Manage Workspace" page, under the "Forms" tab. Grants.gov recommends submission of the application package at least 24-48 hours prior to the close date to allow time to correct any potential technical issues that may disrupt the application submission.	and prior to the full application submission deadline, enter your password in the space provided next to "Enter Your Password Here" and press the "Submit Full Application" button. eBRAP will notify your Resource Manager/Comptroller/Task Area Manager or equivalent Business Official by email. Do not password protect any files of the application package, including the Project Narrative.			

Note: If either the Project Narrative or the budget fails eBRAP validation or needs to be modified, an updated Grants.gov application package must be submitted via Grants.gov as a "Changed/Corrected Application" with the previous Grants.gov Tracking ID *prior to* the

Extramural Submissions	Intramural DOD Submissions			
application submission deadline. Do not password protect any files of the application package, including the Project Narrative.				
Application Verification Period				
The full application package submitted to Grants.gov may be viewed and modified in eBRAP until the end of the application verification period. During the application verification period, the full application package may be modified with the exception of the Project Narrative and Research & Related Budget Form.	After eBRAP has processed the full application, the organizational Resource Manager/ Comptroller/Task Area Manager or equivalent Business Official and PI(s) will receive email notification of this status and will be able to view and modify application components in eBRAP. During the application verification period, the full application package may be modified with the exception of the Project Narrative and Research & Related Budget Form. Your Resource Manager/Comptroller/Task Area Manager or equivalent Business Official should log into eBRAP to review and to approve prior to the application verification deadline.			
Further In	nformation			
Tracking a Grants.gov Workspace Package. After successfully submitting a Workspace package, a Grants.gov Tracking Number is automatically assigned to the package. The number will be listed on the "Confirmation" page that is generated after submission. Refer to the General Application Instructions, Section III, for further information regarding	Refer to the General Application Instructions, Section IV, for further information regarding eBRAP requirements.			

Partnering PI Option: The CDMRP requires separate full application package submissions for the Initiating PI and each Partnering PI, even if the PIs are located within the same organization. Initiating and Partnering PIs will each be assigned a unique eBRAP log number. Each full application package must be submitted using the unique eBRAP log number. *Note: All associated applications (Initiating PI's and the Partnering PI's) must be submitted by the full application submission deadline.*

The full application package must be submitted using the unique eBRAP log number to avoid delays in application processing.

Grants.gov requirements.

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

• Extramural Applications Only

SF424 Research & Related Application for Federal Assistance Form: Refer to the General Application Instructions, Section III.A.1, for detailed information.

• Extramural and Intramural Applications

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 4.

For all attachments, ensure that the file names are consistent with the guidance. Attachments will be rejected if the file names are longer than 50 characters or have incorrect file names that contain characters other than the following: A-Z, a-z, 0-9, underscore, hyphen, space, and period. In addition, there are file size limits that may apply in some circumstances. Individual attachments may not exceed 20 megabytes (MB), and the file size for the entire full application package may not exceed 200 MB.

Attachment 1: Project Narrative (12-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 to expand 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/Rationale: Present the scientific rationale behind the proposed research project, and clearly demonstrate that there is sufficient scientific evidence to support the proposed stage of research, including preliminary, published and/or unpublished data. Cite relevant literature. Describe any stakeholder engagement that was performed and how it helped to formulate the hypothesis/objective and research strategy, if applicable.
- Objective or Hypothesis: State the objective(s) to be reached or hypothesis(es) to be tested.
- FY22 CPMRP IIRA Focus Area: State the <u>FY22 CPMRP IIRA Focus Area(s)</u> to be addressed by the proposed research.
- Specific Aims: Concisely explain the project's specific aims. The aims should agree with the primary aims and associated tasks described in Attachment 5, Statement of

<u>Work</u>. If the proposed research project is part of a larger study, present only tasks that this CPMRP award would fund.

Research Strategy and Feasibility:

- Describe the experimental design, methods, and analyses, including appropriate controls, in sufficient detail for analysis, as appropriate, for the proposed research.
- Address potential problem areas and pitfalls, and present alternative methods and approaches.
- If proposing a correlative study, specify how the proposed project complements the existing research efforts and provides additional relevant insight beyond the initial study design.
- If applicable, briefly describe the relevance of the chosen animal model to human chronic pain research; full details will be required in Attachment 11, Animal Research Plan.
- If human subject, anatomical samples, or data will be used, include a detailed plan for the recruitment of subjects or the acquisition of samples or data. Describe the statistical model and data analysis plan with respect to the study objectives. Include a complete power analysis to demonstrate that the sample size is appropriate to meet the objectives of the study. Ensure sufficient information is provided to allow thorough evaluation of all statistical calculations during review of the application. Describe the strategy for the inclusion of women and minorities appropriate to the objectives of the study, including a description of the composition of the proposed study population in terms of sex/gender, racial, and ethnic group, and an accompanying rationale for the selection of subjects. The inclusion strategy should agree with the enrollment table(s) provided in Attachment 2, Supporting Documents: Inclusion Enrollment Report.
- Describe any stakeholder engagement activities that will be performed during the course of the proposed research study, if applicable.
- Describe how data will be reported.
- If the research will support therapeutic development, describe how the data will be appropriately reported and documented to support a regulatory filing with the FDA. *This award cannot be used to conduct clinical trials.*
- Attachment 2: Supporting Documentation: Combine and upload as a single file named "Support.pdf". Start each document on a new page. If documents are scanned to PDF, the lowest resolution (100 to 150 dpi) should be used. 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 that includes the full citation (i.e., author[s], year published, title of reference, source of reference, volume, chapter, page numbers, and publisher, as appropriate).

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 or not 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.

Letters of Collaboration (if applicable): Provide a signed letter from each collaborating individual or organization that demonstrates 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.

Intellectual Property: Information can be found in the Code of Federal Regulations, Title 2, Part 200.315 (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.

Data and Research Resources Sharing Plan: Describe how data and resources generated during the performance of the project will be shared with the research community. Refer to the General Application Instructions, Appendix 2, Section K,

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 from 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. For VA PIs, if the VA non-profit corporation is not identified as the applicant institution 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.

Inclusion Enrollment Report: If proposing research involving human subjects, provide an anticipated enrollment table(s) for the inclusion of women and minorities appropriate to the objectives of the study with the proposed enrollment distributed on the basis of sex/gender, race, and ethnicity. The Public Health Service (PHS) Inclusion Enrollment Report is a three-page fillable PDF form, which can be downloaded from eBRAP at https://ebrap.org/eBRAP/public/Program.htm.

• 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. Do not include proprietary or confidential information. Use only characters available on a standard QWERTY keyboard. Spell out all Greek letters, other non-English letters, and symbols. Graphics are not allowed.

Technical abstracts should be written using the outline below. The technical abstract should provide an appropriate description of the project's key aspects; clarity and completeness within the space limits of the technical abstract are highly important.

- Background/Rationale: Present the scientific rationale behind the proposed research project, including sufficient scientific evidence to support the proposed stage of research.
- Objective/Hypothesis: State the objective(s) to be reached or the hypothesis(es) to be tested.

- **Specific Aims:** State the specific aims of the proposed research project.
- Study Design: Briefly describe the experimental design, including appropriate controls.
- Impact: Briefly describe how the proposed research project will impact the addressed FY22 CPMRP IIRA Focus Area(s) and will make important contributions toward the goals of advancing chronic pain research, patient care, and/or improving quality of life for those living with chronic pain.
- Relevance to Military Health: Briefly describe the relevance of the proposed research project to military Service Members, Veterans, and/or their family members or beneficiaries living with chronic pain.
- Attachment 4: Lay Abstract (one-page limit): Upload as "LayAbs.pdf". The lay abstract is used by all reviewers. Abstracts of all funded research projects will be posted publicly. *Do not include proprietary or confidential information*. *Do not duplicate the technical abstract*. Use only characters available on a standard QWERTY keyboard. Spell out all Greek letters, other non-English letters, and symbols. Graphics are not allowed.

Lay abstracts should be written using the outline below. Minimize use of acronyms and abbreviations, where appropriate. The lay abstract is an important component of the application review process because it addresses issues of particular interest to the consumer community.

- State the <u>FY22 CPMRP IIRA Focus Area(s)</u> to be addressed by the proposed research.
- Describe the objectives and rationale for the proposed research in a manner that will be readily understood by readers without a background in science or medicine.
 - Describe the ultimate applicability of the research.
 - What persons with chronic pain will it help, and how will it help them?
 - What are the potential clinical applications, benefits, and risks?
 - What is the projected time it may take to achieve a person-related outcome?
- If the research is too basic for immediate clinical applicability, then describe the interim outcomes.
- What are the likely contributions of the proposed research project to advancing the field of chronic pain research, patient care, and/or quality of life for those managing chronic pain?

• Attachment 5: Statement of Work (five-page limit): Upload as "SOW.pdf". The suggested SOW format and examples specific to different types of research projects are available on the eBRAP "Funding Opportunities & Forms" web page (https://ebrap.org/eBRAP/public/Program.htm). Recommended strategies for assembling the SOW can be found at https://ebrap.org/eBRAP/public/Program.htm.

For the FY22 CPMRP IIRA mechanism, refer to either the "Suggested SOW Strategy Clinical Research" or "Suggested SOW Strategy Generic Research", whichever format is most appropriate for the proposed effort, and use the blank SOW format titled "Suggested SOW Format". The SOW must be in PDF format prior to attaching.

- For FITBIR-eligible (human prospective TBI studies) research, also include:
 - FITBIR investigator and study registration within the first 30 days of the award
 - Sharing of draft data collection forms with FITBIR
 - Annual FITBIR data submissions

Partnering PI Option: Each PI must submit an identical copy of a jointly created SOW. The contributions of the Initiating PI and the Partnering PI should be noted for each task.

- Attachment 6: Impact Statement (one-page limit): Upload as "Impact.pdf".
 - Describe how the proposed research project will impact our understanding of the addressed <u>FY22 CPMRP IIRA Focus Area(s)</u> and will make important contributions toward the goals of advancing chronic pain research, patient care, and/or improving quality of life.
 - Describe the short-term impact: Detail the anticipated outcome(s)/product(s)
 (intellectual and/or tangible) that will directly result from the proposed research and
 explain how the outcomes will drive the chronic pain management field forward and
 support new avenues for research or clinical care.
 - Describe the long-term impact: Explain the potential long-term impact of this study on the field of chronic pain research, patient care, and/or quality of life.
- O Attachment 7: Innovation Statement (one-page limit): Upload as "Innovation.pdf". Describe how the proposed research is innovative. For example, state how the research will provide new insights, examine a new paradigm, challenge existing paradigms, look at existing problems from new perspectives, or introduce new technologies and/or applications with the potential to impact the field of chronic pain management. Describe how the proposed research represents more than an incremental advance upon published data or more than the next logical step in a research project.
- Attachment 8: Research Team Statement (one-page limit): Upload as "Team.pdf"
 (Attachment 8 is only applicable and <u>required</u> for applications submitted under the
 Single PI Option). Discuss the qualifications of the research team and each individual's

specific contributions to the project, including how the appropriate experience is incorporated to address the research question and enable the success of the proposed project. Clearly state if key personnel are not receiving salary from the award. If applicable, provide assurances/letters of commitment that the unpaid personnel will contribute the required level of effort to complete the project. If including key stakeholders as members of the research team, identify the individual(s) and any relevant affiliations they have with an advocacy organization(s). Describe the PI's record of accomplishment and their ability to lead the research team to accomplish the proposed research project. Describe previous experience most pertinent to this project.

- Attachment 9: Partnership Statement (one-page limit): Upload as "Partnership.pdf". (Attachment 9 is only applicable and required for applications submitted under the Partnering PI Option). Describe the partnership and combined expertise of the Initiating and Partnering PIs that are critical for the research strategy and completion of the SOW. Describe how the complementary efforts of each PI can better address the research question and why the work should be done together rather than through separate individual efforts. Explain how both PIs have equal intellectual input into the design of the project and will devote similar and appropriate levels of effort to the conduct of the project. Explain how funding will be balanced between both PIs or otherwise provide appropriate justification. Identify any other key personnel, beyond the Initiated and Partnering PI, that participating in the collaborative study and describe their contributions. If other key personnel are not receiving salary from the award, provide assurances/letters of commitment that the unpaid personnel will contribute the required level of effort to complete the project, as applicable. If including key stakeholders as members of the research team, identify the individual(s) and any relevant affiliations they have with an advocacy organization(s).
- Attachment 10: Relevance to Military Health Statement (one-page limit): Upload as "Military.pdf". Demonstrate how the proposed research project is applicable to the healthcare needs and quality of life of military Service Members, Veterans, and/or their family members or beneficiaries living with chronic pain. Provide evidence that the chronic pain condition under investigation is either prevalent in military or Veteran general populations or presents a significant healthcare burden on a vulnerable subpopulation. If active-duty military, Veteran, or military family member population(s) will be used in the proposed research project, describe the population(s), the appropriateness of the population(s) for the proposed research, and the feasibility of using the population. Identify any collaborations within the military Services and the proposed use of the MHS or an MTF. If applicable, discuss how the research study will fill an unmet requirement in patient care within the DHA and/or VHA and is feasible for deployment within the existing healthcare systems. If a non-military population will be used for the proposed research project, explain how the population simulates the targeted population (i.e., Service Members or Veterans).
- Attachment 11: Animal Research Plan (if applicable; three-page limit): Upload as "AnimalResPlan.pdf". When the proposed study involves animals, a summary describing the animal research that will be conducted must be included in the application. 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 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, how well the animal model reproduces the human disease. Be specific as to why the animal chronic pain model was chosen over other models and how it is optimal for addressing the study aims and is relevant to human chronic pain.
- 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 12: Representations, if applicable (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 5, Section B, Representations.
- Attachment 13: Suggested Collaborating DOD Military Facility Budget Format, if applicable: Upload as "MFBudget.pdf". If a military facility (MHS facility, research laboratory, medical treatment facility, dental treatment facility, or DOD activity embedded with a civilian medical center) will be a collaborator in performance of the project, complete a separate budget, using "Suggested Collaborating DOD Military Facility Budget Format", available for download on the eBRAP "Funding Opportunities & Forms" web page (https://ebrap.org/eBRAP/public/Program.htm), including a budget justification, for each military facility as instructed. The costs per year should be included on the Grants.gov Research & Related Budget Form under subaward costs. Refer to the General Application Instructions, Section III.A.8, for detailed information.

• Extramural and Intramural Applications

To evaluate compliance with Title IX of the Education Amendments of 1972 (20 USC 1681[a] et seq.), the DOD is collecting certain demographic and career information to be able to assess the success rates of women who are proposed for key roles in applications in

science, technology, engineering, and/or mathematics (STEM) disciplines. To enable this assessment, each application must include the following forms completed as indicated.

Research & Related Personal Data: For extramural submissions (via Grants.gov), refer to the General Application Instructions, Section III.A.3, and for intramural submissions (via eBRAP), refer to the General Application Instructions, Section IV.A.2, for detailed information.

Research & Related Senior/Key Person Profile (Expanded): For extramural submissions (via Grants.gov), refer to the General Application Instructions, Section III.A.4, and for intramural submissions (via eBRAP), refer to the General Application Instructions, Section IV.A.3, for detailed information.

- o PI Biographical Sketch (six-page limit): Upload as "Biosketch_LastName.pdf". The suggested biographical sketch format is available on the "Funding Opportunities & Forms" web page (https://ebrap.org/eBRAP/public/Program.htm) in eBRAP. The National Institutes of Health (NIH) Biographical Sketch may also be used. All biographical sketches should be submitted in uneditable PDF format.
- PI Previous/Current/Pending Support (no page limit): Upload as "Support LastName.pdf".
 - For extramural submissions, refer to the General Application Instructions, Section III.A.4, for detailed information.
 - For intramural submissions, refer to the General Application Instructions, Section IV.A.3, for detailed information.
- Key Personnel Biographical Sketches (six-page limit each): Upload as "Biosketch_LastName.pdf".
- Key Personnel Previous/Current/Pending Support (no page limit): Upload as "Support LastName.pdf".
 - For extramural submissions, refer to the General Application Instructions, Section III.A.4, for detailed information.
 - For intramural submissions, refer to the General Application Instructions, Section IV.A.3, for detailed information.

Research & Related Budget: For extramural submissions (via Grants.gov), refer to the General Application Instructions, Section III.A.5, and for intramural submissions (via eBRAP), refer to the General Application Instructions, Section IV.A.4, for detailed information.

Budget Justification (no page limit): Upload as "BudgetJustification.pdf". The budget justification for the entire period of performance must be uploaded to the Research & Related Budget after completion of the budget for Period 1.

Initiating and Partnering PIs must have a separate budget and justification specific to their distinct portions of the effort that the applicant organization will submit as separate Grants.gov or eBRAP application packages. The Initiating PI should not include budget information for Partnering PI(s) even if they are located within the same organization. Refer to Section II.D.5, Funding Restrictions, for detailed information.

Project/Performance Site Location(s) Form: For extramural submissions (via Grants.gov), refer to the General Application Instructions, Section III.A.6, and for intramural submissions (via eBRAP), refer to the General Application Instructions, Section IV.A.5, for detailed information.

• Extramural Applications Only

Research & Related Subaward Budget Attachment(s) Form (if applicable): Refer to the General Application Instructions, Section III.A.7, for detailed information.

- Extramural Subaward: Complete the Research & Related Subaward Budget Form through Grants.gov. (Refer to the General Application Instructions, Section III.A.7, for detailed information.) Verify subaward budget(s) and budget justification forms are present in eBRAP during the application verification period. If these components are missing, upload them to eBRAP before the end of the application verification period.
- o Intramural DOD Collaborator(s): Complete the "Suggested Collaborating DOD Military Facility Budget Format" and upload to Grants.gov attachment form as Attachment 13. (Refer to the General Application Instructions, Section IV.A.4, for detailed information.) Each Intramural DOD Collaborator should include costs per year on the Grants.gov Research & Related Budget Form under subaward costs.

Suggested DOD Military Budget Format: A military facility collaborating in the performance of the project (but not participating as a Partnering PI) should be treated as a subaward for budget purposes. *Note:* Applicants should complete a separate military budget using "Suggested Collaborating DOD Military Facility Budget Format" (available for download on the eBRAP "Funding Opportunities & Forms" web page [https://ebrap.org/eBRAP/public/Program.htm]) (Attachment 13) to show all direct and indirect costs. The costs per year should be included on the Grants.gov Research & Related Budget Form under subaward costs. Refer to the General Application Instructions, Section III.A.8, for detailed information.

Application Components for the Partnering PI, if applying under the Partnering PI Option

The Partnering PI must follow the link in the email from eBRAP and, if not registered in eBRAP, must complete the registration process prior to the application submission deadline in order to associate their full application package with that of the Initiating PI.

For the Partnering PI, the Initiating PI must identify if the Partnering PI will be named on an extramural or intramural application (in accordance with the guidelines in <u>Section II.C.1.a.</u> <u>Organization</u>) and the appropriate mode of submission (Grants.gov for extramural and eBRAP

for intramural). The Partnering PI must verify their contact information and mode of submission within eBRAP to ensure proper submission of their application.

The application submission process for the Partnering PI uses an abbreviated full application package that includes:

• Extramural and Intramural Applications

Attachments:

- Attachment 5: Statement of Work (five-page limit): Upload as "SOW.pdf". Refer to the General Application Instructions, Section III.A.2, for detailed information on completing the SOW. Each PI must submit an identical copy of a jointly created SOW. The contributions of the Initiating PI and the Partnering PI should be noted for each task.
- Attachment 12: 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 5, Section B, Representations.
- Attachment 13: Suggested Collaborating DOD Military Facility Budget Format: Upload as "MFBudget.pdf". Refer to the General Application Instructions, Section IV.A.4, for detailed information. The costs per year should be included on the Grants.gov Research & Related Budget Form under subaward costs.

Research & Related Personal Data: For extramural submissions (via Grants.gov) refer to the General Application Instructions, Section III.A.3, and for intramural submissions (via eBRAP), refer to the General Application Instructions, Section IV.A.2, for detailed information.

Research & Related Senior/Key Person Profile (Expanded): For extramural submissions (via Grants.gov), refer to the General Application Instructions, Section III.A.4, and for intramural submissions (via eBRAP), refer to the General Application Instructions, Section IV.A.3, for detailed information.

o PI Biographical Sketch (six-page limit): Upload as "Biosketch_LastName.pdf". The suggested biographical sketch format is available on the "Funding Opportunities & Forms" web page (https://ebrap.org/eBRAP/public/Program.htm) in eBRAP. The NIH Biographical Sketch may also be used. All biographical sketches should be submitted in the PDF format that is not editable.

- PI Previous/Current/Pending Support (no page limit): Upload as "Support_LastName.pdf".
 - For extramural submissions, refer to the General Application Instructions, Section III.A.4, for detailed information.
 - For intramural submissions, refer to the General Application Instructions, Section IV.A.3, for detailed information.
- Key Personnel Biographical Sketches (six-page limit each): Upload as "Biosketch LastName.pdf".
- Key Personnel Previous/Current/Pending Support (no page limit): Upload as "Support LastName.pdf".
 - For extramural submissions, refer to the General Application Instructions, Section III.A.4, for detailed information.
 - For intramural submissions, refer to the General Application Instructions,
 Section IV.A.3, for detailed information.

Research & Related Budget: For extramural submissions, refer to the General Application Instructions, Section III.A.5, and for intramural submissions, refer to the General Application Instructions, Section IV.A.4, for detailed information.

Budget Justification (no page limit): Upload as "BudgetJustification.pdf".

Initiating and Partnering PIs must each submit a budget and justification specific to their own portion of the efforts as part of their separate Grants.gov or eBRAP application packages. The Research & Related Budget for the Partnering PI should not include budget information for the Initiating PI, even if they are located within the same organization. Refer to Section II.D.5, Funding Restrictions, for detailed information.

Project/Performance Site Location(s) Form: For extramural submissions (via Grants.gov), refer to the General Application Instructions, Section III.A.6, and for intramural submissions (via eBRAP), refer to General Application Instructions, Section IV.A.5, for detailed information.

• Extramural Applications Only

Research & Related Subaward Budget Attachment(s) Form:

- Extramural Subaward: Complete the Research & Related Subaward Budget Form through Grants.gov. (Refer to the General Application Instructions, Section III.A.7, for detailed information.)
- o **Intramural DOD Collaborator(s):** Complete a separate DOD military budget, using Suggested Collaborating DOD Military Facility Budget Format (available for download

on the eBRAP "Funding Opportunities & Forms" web page [https://ebrap.org/eBRAP/public/Program.htm]), and upload to Grants.gov attachment form as Attachment 13 (Refer to the General Application Instructions, Section III.A.8, for detailed information.)

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/SAM/) and receive confirmation of an "Active" status before submitting an application through Grants.gov. As published in the Federal Register, July 10, 2019, (https://www.federalregister.gov/documents/2019/07/10/2019-14665/unique-entity-id-standardfor-awards-management), the UEI for awards management generated through SAM will be used instead of the Data Universal Numbering System (DUNS) number as of April 2022. All federal awards including, but not limited to, contracts, grants, and cooperative agreements will use the **UEI.** USAMRDC will transition to use of the UEI beginning with FY22 announcements and utilize the latest SF424, which includes the UEI. The DUNS will no longer be accepted. Applicant organizations will not go to a third-party website to obtain an identifier. During the transition, your SAM registration will automatically be assigned a new UEI displayed in SAM. (For more information, visit the General Services Administration: https://www.gsa.gov/aboutus/organization/federal-acquisition-service/office-of-systems-management/integrated-awardenvironment-iae/iae-information-kit/unique-entity-identifier-update.) Current SAM.gov registrants are assigned their UEI and can view it within SAM.gov. Authorized Organizational Representatives with existing eBRAP accounts should update their organizational profile to include the UEI prior to submission of the full application to Grant.gov (see Section II.D.4, Submission Dates and Times below). Refer to the General Application Instructions, Section III, for further information regarding Grants.gov requirements.

II.D.4. Submission Dates and Times

All submission dates and times are indicated in <u>Section I, Overview of the Funding Opportunity</u>. Pre-application and application submissions are required. 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.

Applicant Verification of Full Application Submission in eBRAP

For Both Extramural and Intramural Applicants: eBRAP allows an organization's representatives and PIs to view and modify the full application submissions associated with them. Following retrieval and processing of the full application, eBRAP will notify the organizational representatives and PI by email to log into eBRAP to review, modify, and verify the full application submission. eBRAP will validate full application files against the specific program announcement requirements, and discrepancies will be noted in an email to the PI and in the "Full Application Files" tab in eBRAP. eBRAP does not confirm the accuracy of file content. Application viewing, modification, and verification in eBRAP are strongly recommended, but not required. It is the applicant's responsibility to review all application components and ensure proper ordering as specified in the program announcement. 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 application submission deadline. The

Project Narrative and Research & Related Budget Form cannot be changed after the application submission deadline. Other application components may be changed until the end of the application verification period. Verify that subaward budget(s) and budget justification forms are present in eBRAP during the application verification period. If these components are missing, upload them to eBRAP before the end of the application verification period. After the end of the application verification period, the full application cannot be modified.

Extramural Submission: The full application package submitted to Grants.gov may be viewed and modified in eBRAP until the end of the application verification period. During the application verification period, the full application package, with the exception of the Project Narrative and Budget Form, may be modified.

Intramural DOD Submission: After eBRAP has processed the full application, the organizational Resource Manager/Comptroller/Task Area Manager or equivalent Business Official(s) and PI(s) will receive email notification of the status and will be able to view and modify application components in eBRAP. During the application verification period, the full application package, with the exception of the Project Narrative and Budget Form, may be modified. The Resource Manager/Comptroller/Task Area Manager or equivalent Business Official should log into eBRAP to review and to approve the application package prior to the application verification deadline.

For All Submissions: Verify that subaward budget(s) with budget justification are present in eBRAP during the application verification period. If these components are missing, upload them to eBRAP before the end of the application verification period.

II.D.5. Funding Restrictions

Single PI Option:

The maximum period of performance is 4 years.

The anticipated direct costs budgeted for the entire period of performance will not exceed \$900,000. If indirect cost rates have been negotiated, indirect costs are to be budgeted in accordance with the organization's negotiated rate. No budget will be approved by the government exceeding \$900,000 direct costs or using an indirect cost rate exceeding the organization's negotiated rate.

All direct and indirect costs of any subaward or contract must be included in the total 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 4 years.

Partnering PI Option:

The maximum period of performance is 4 years.

The anticipated combined direct costs budgeted for the entire period of performance in the applications of the Initiating PI and the Partnering PI will not exceed \$900,000. 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 combined budgeted direct costs approved by the government will not exceed \$900,000 or use an indirect cost rate exceeding each organization's negotiated rate.

A separate award will be made to each PI's organization.

The PIs are expected to be partners in the research, and direct cost funding should be divided accordingly unless otherwise warranted and clearly justified.

The applicants may request the entire maximum funding amount for a project that may have a period of performance less than the maximum 4 years. The duration of the period of performance for the Initiating PI and Partnering PI should be the same.

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

- Travel in support of multidisciplinary collaborations.
- Costs for the PI(s) to present project information or disseminate project results at 2 DOD-sponsored meetings (e.g., MHS Research Symposium) during the lifetime or the award. For budget purposes, it is suggested that these cost be included in year 2 of the award.
- Costs for investigator(s) to travel to one scientific/technical meeting per year in addition to the meetings described above. The intent of travel costs to scientific/technical meeting(s) is to present project information or disseminate project results of the FY22 CPMRP IIRA.
- Costs for stakeholder engagement activities or consultations.

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 4, 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 evaluated according to the following **scored criteria**, which are listed in decreasing order of importance:

Research Strategy and Feasibility

- How clearly the scientific rationale behind the proposed research project demonstrates sufficient scientific evidence, including preliminary data, to support moving into the proposed stage of research.
- o To what extent stakeholder engagement activities were performed and to what degree it helped formulate the projects hypothesis/objective and research strategy, if applicable.
- How well developed and how feasible the objectives or hypothesis, specific aims, experimental design, methods, and analyses are.
- How well statistical analysis plans, including power analysis, as appropriate, have been described to obtain meaningful results from the proposed research.
- How thoroughly the application acknowledges potential problems or pitfalls and addresses alternative approaches.
- If applicable, how well the proposed correlative study complements an existing research effort and to what degree it will provide additional relevant insight beyond the initial study design.
- If applicable, how well designed each animal study is to achieve the objectives, including
 the endpoints to be used, and how well the selected animal model reproduces the human
 disease or condition.
- o If applicable, how well established the human subject recruitment, data, or sample acquisition plans are to achieve the study objectives.
- To what degree stakeholder engagement will be performed during the course of the proposed study, if applicable.
- If applicable, whether data will be appropriately reported and documented to support a regulatory filing with the FDA.

• Impact

- How well the research project will impact our understanding of one or more of the <u>FY22</u> <u>CPMRP IIRA Focus Area(s)</u> and will make important contributions toward the goals of advancing chronic pain research, patient care, and/or improving quality of life.
- To what degree the anticipated short-term outcome(s)/product(s) (intellectual and/or tangible) will drive the chronic pain management field forward and support new avenues for research or clinical care.
- How well the anticipated long-term gains from this research will yield relevant results for chronic pain management research, patient care, and/or quality of life.

Innovation

- o To what extent the proposed research will provide new insights, examine a new paradigm, challenges existing paradigms, look at existing problems from new perspectives, or introduce new technologies and/or applications with the potential to impact the field of chronic pain management.
- o To what extent the proposed research represents more than an incremental advance upon published data or more than the next logical step in a research project.

Personnel

Single PI Option Only – Research Team

- How qualified the research team is to conduct the proposed research, including how
 well each member's experience is incorporated into the project to address the research
 question and ensure success. To what extent the background and experience of the PI
 and key personnel are appropriate to accomplish the proposed research project.
- To what extent the levels of effort by the PI and key personnel are appropriate to ensure the success of this project.
- How well the PI's record of accomplishments demonstrates their ability to lead the research team to accomplish the proposed research project.

Partnering PI Option Only - Partnership

- How well the partnership and combined expertise of the Initiating and Partnering PIs contribute to the research strategy and completion of the SOW.
- To what degree the complementary efforts of each PI will better address the research question together rather than through separate individual efforts.

- How well the application reflects that both PIs contribute equal intellectual input into the design of the project and will devote similar and appropriate levels of effort to the conduct of the project.
- Whether funding will be balanced between both PIs or is otherwise appropriately justified.
- To what extent the levels of effort by other key personnel are appropriate to ensure the success of this project.

In addition, the following **unscored** criteria will also contribute to the overall evaluation of the application:

Environment

- o To what degree the scientific environment is appropriate for the proposed research.
- o To what degree the quality and extent of organizational support are appropriate.
- o If applicable, to what degree the intellectual and material property plan is appropriate

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.

• 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 mission of the DHP and FY22 CPMRP, as evidenced by the following:
 - Adherence to the intent of the award mechanism
 - Program portfolio composition
 - Relative impact

- Relative innovation
- Relevance to military health

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 Section II.E.1.b, Programmatic Review*. Additional information about the two-tier process used by the CDMRP can be found at https://cdmrp.army.mil/about/2tierRevProcess. An information paper describing the funding recommendations and review process for the award mechanisms for the FY22 CPMRP will be provided to the PI(s) and posted on the CDMRP website.

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 panel. Violations of confidentiality can result in the dissolving 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 another 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 the Federal Awardee Performance and Integrity Information System (FAPIIS).

An applicant organization may review FAPIIS, accessible through SAM, and submit comments to FAPIIS on any information about the organization that a federal awarding agency previously entered and is currently available in FAPIIS.

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.E.4. Anticipated Announcement and Federal Award Dates

All application review dates and times are indicated in <u>Section I, Overview of the Funding</u> Opportunity.

Each PI and organization will receive email notification of posting of the funding recommendation in eBRAP. Each PI will receive a peer review summary statement on the strengths and weaknesses of the application.

II.F. Federal Award Administration Information

II.F.1. Federal Award Notices

Awards supported with FY22 funds are anticipated to be made no later than September 30, 2023. Refer to the General Application Instructions, Appendix 2, for additional award administration information.

After email notification of application review results through eBRAP, and if selected for funding, a representative from the USAMRAA will contact the Business Official authorized to negotiate on behalf of the PI's organization.

Pre-Award Costs: An institution of higher education, hospital, or non-profit 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. Refer to the General Application Instructions, Section III.A.5.

Only an appointed USAMRAA Grants Officer may obligate the government to the expenditure of funds. 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.

Federal Government Organizations: Funding made to federal government organizations (to include intramural DOD organizations) will be executed through the Military Interdepartmental Purchase Request (MIPR) or Funding Authorization Document (FAD) process. Transfer of funds is contingent upon appropriate safety and administrative approvals. Intramural applicants and collaborators are reminded to coordinate receipt and commitment of funds through their respective Resource Manager/Task Area Manager/Comptroller or equivalent Business Official.

II.F.1.a. PI Changes and Award Transfers

An organizational transfer of an award supporting the Initiating PI or Partnering PI is discouraged and will be evaluated on a case-by-case basis and only allowed at the discretion of the Grants Officer.

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 2, Section B, for general information on organization or PI changes.

II.F.2. 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 2, for general information regarding administrative requirements.

Refer to the General Application Instructions, Appendix 5, for general information regarding national policy requirements.

Refer to full text of the latest <u>DoD R&D General Terms and Conditions</u>; the <u>USAMRAA</u> <u>General Research Terms and Conditions with Institutions of Higher Education, Hospitals, and Non-Profit Organizations: Addendum to the DoD R&D General Terms and Conditions; and the <u>USAMRAA General Research Terms and Conditions with For-Profit Organizations</u>, for further information.</u>

New Requirement: Certification Regarding Disclosure of Funding Sources. The proposing entity must comply with Section 223(a) of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021, which requires that the PI, Partnering PIs (if applicable), and all key personnel:

- Certify that the current and pending support provided on the application is current, accurate, and complete;
- Agree to update such disclosure at the request of the agency prior to the award of support and at any subsequent time the agency determines appropriate during the term of the award; and
- Have been made aware of the requirements under Section 223(a)(1) of this Act.

False, fictitious, or fraudulent statements or claims may result in criminal, civil, or administrative penalties (18 USC 1001).

II.F.3. Reporting

Refer to the General Application Instructions, Appendix 2, Section A, for general information on reporting requirements. If there are technical reporting requirement delinquencies for any existing USAMRAA-sponsored awards at the applicant organization, no new awards will be issued to the applicant organization until all delinquent reports have been submitted.

Annual progress reports as well as a final progress report with quad charts will be required.

The Award Terms and Conditions will specify if 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 (*only required for clinical research studies*): Enrollment 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 format 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 \$10M are required to provide information to FAPIIS 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 5, Section B).

II.G. Federal Awarding Agency Contacts

II.G.1. eBRAP Help Desk

Questions related to program announcement content or submission requirements as well as questions related to the pre-application or intramural application submission through eBRAP should be directed to the eBRAP Help Desk, which is available Monday through Friday from 8:00 a.m. to 5:00 p.m. ET. Response times may vary depending upon the volume of inquiries.

Phone: 301-682-5507

Email: help@eBRAP.org

II.G.2. Grants.gov Contact Center

Questions related to extramural application submission through Grants.gov portal should be directed to the Grants.gov Contact Center, which is available 24 hours a day, 7 days a week

(closed on U.S. federal holidays). Note that the eBRAP Help Desk is unable to provide technical assistance with Grants.gov submission.

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

Email: support@grants.gov

Sign up on Grants.gov for "send me change notification emails" by following the link on the "Synopsis" page for the program announcement or by responding to the prompt provided by Grants.gov when first downloading the Grants.gov application package. If the Grants.gov application package is updated or changed, the original version of the application package may not be accepted by 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 702b. The program announcement numeric version code will match the General Application Instructions version code 702.

II.H.2. Administrative Actions

After receipt of pre-applications or applications, the following administrative actions may occur:

II.H.2.a. Rejection

The following will result in administrative rejection of the pre-application:

- Preproposal Narrative exceeds page limit.
- Preproposal Narrative is missing.

The following will result in administrative rejection of the application:

- Submission of an application for which a letter of invitation was not received.
- Project Narrative exceeds page limit.
- Project Narrative is missing.
- Budget is missing.

II.H.2.b. Modification

• Pages exceeding the specific limits will be removed prior to review for all documents other than the Preproposal Narrative and Project Narrative.

• Documents not requested will be removed.

II.H.2.c. Withdrawal

The following may result in administrative withdrawal of the pre-application or application:

- An FY22 CPMRP 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. A list of the FY22 CPMRP Programmatic Panel members can be found at https://cdmrp.army.mil/cpmrp/panels/panels22.
- 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.
- Page size is larger than 8.5 inches x 11.0 inches (approximately 21.59 cm x 27.94 cm).
- To preserve the integrity of its peer and programmatic review processes, the CDMRP discourages inclusion of any employee of its review contractors having any role in the preparation, research or other duties for submitted applications. For FY22, the identities of the peer review contractor and the programmatic review contractor may be found at the CDMRP website (https://cdmrp.army.mil/about/2tierRevProcess). Applications that include names of personnel from either of these companies may be administratively withdrawn.
- 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 may be withdrawn.
- Applications submitted by an intramural DOD organization may be withdrawn if the intramural organization cannot coordinate the use of contractual, assistance, or other appropriate agreements to provide funds to extramural collaborators.
- Submission of the same research project to different funding opportunities within the same program and fiscal year.
- The invited application proposes a different research project than that described in the preapplication.
- The applications does not address at least one of the FY22 CPMRP IIRA Focus Areas.
- A clinical trial is proposed.

- The application proposes a study seeking to advance a new or novel opioid-based therapeutic intervention.
- The PI(s) do not meet the eligibility criteria.
- **Partnering PI Option:** Failure to submit all associated (Initiating and Partnering PI) applications by the deadline.

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. Application Submission Checklist

Application Components	Action	Single or Initiating PI Completed	Partnering PI Completed
SF424 Research & Related Application for Federal Assistance (extramural submissions only)	Complete form as instructed		
Summary (Tab 1) and Application Contacts (Tab 2) (intramural submissions only)	Complete tabs as instructed		
Attachments	Project Narrative: Upload as Attachment 1 with file name "ProjectNarrative.pdf" Supporting Documentation: Upload as Attachment 2 with file name "Support.pdf" Technical Abstract: Upload as Attachment 3 with file name "TechAbs.pdf" Lay Abstract: Upload as Attachment 4 with file name "LayAbs.pdf" Statement of Work: Upload as Attachment 5 with file name "SOW.pdf" Impact Statement: Upload as Attachment 6 with file name "Impact.pdf" Innovation Statement: Upload as Attachment 7 with file name "Innovation.pdf" Research Team Statement: Upload as Attachment 8 with file name "Team.pdf" if applicable (required for Single PI Option) Partnership Statement: Upload as Attachment 9 with file name "Partnership.pdf" if applicable (required for Partnering PI Option) Relevance to Military Health Statement: Upload as Attachment 10 with file name "Military.pdf" Animal Research Plan: Upload as Attachment 11 with file name "AnimalResPlan.pdf" if applicable		

Application Components	Action	Single or Initiating PI Completed	Partnering PI Completed
	Representations (extramural submissions only): Upload as Attachment 12 with file name "RequiredReps.pdf"	•	
	Suggested Collaborating DOD Military Facility Budget Format: Upload as Attachment 13 with file name "MFBudget.pdf" if applicable		
Research & Related Personal Data	Complete form as instructed		
Research & Related Senior/Key Person Profile (Expanded)	Attach PI Biographical Sketch (Biosketch_LastName.pdf) to the appropriate field Attach PI Previous/Current/Pending Support (Support_LastName.pdf) to the appropriate field Attach Biographical Sketch (Biosketch_LastName.pdf) for each senior/key person to the appropriate field Attach Previous/Current/Pending (Support_LastName.pdf) for each senior/key person to the appropriate		
Research & Related Budget (extramural submissions only)	field Complete as instructed. Attach Budget Justification (BudgetJustification.pdf) to the appropriate field		
Budget (intramural	Complete the Suggested DOD Military		
submissions only)	Budget Format, including justification		
Project/Performance Site Location(s) Form	Complete form as instructed		
Research & Related Subaward Budget Attachment(s) Form	Complete form as instructed		

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

CPMRP Chronic Pain Management Research Program

DHA Defense Health Agency
DHP Defense Health Program
DOD Department of Defense

DoDGARs Department of Defense Grant and Agreement Regulations

DUNS Data Universal Numbering System

eBRAP Electronic Biomedical Research Application Portal

EC Ethics Committee
ET Eastern Time

FAD Funding Authorization Document

FAPIIS Federal Awardee Performance and Integrity Information System

FDA U.S. Food and Drug Administration

FITBIR Federal Interagency Traumatic Brain Injury Research

FY Fiscal Year

HRPO Human Research Protection Office

IACUC Institutional Animal Care and Use Committee

IIRA Investigator-Initiated Research Award

IRB Institutional Review Board

M Million MB Megabytes

MIPR Military Interdepartmental Purchase Request

MHS Military Health System

MTFs Military Treatment Facilities NIH National Institutes of Health

ORCID Open Researcher and Contributor ID, Inc.

ORP Office of Research Protections
PDF Portable Document Format

PHS Public Health Service
PI Principal Investigator

SAM System for Award Management

SOW Statement of Work

SF Standard Form

STEM Science, Technology, Engineering, and/or Mathematics

TBI Traumatic Brain Injury
URL Uniform Resource Locator
UEI Unique Entity Identifier

USAMRAA U.S. Army Medical Research Acquisition Activity

USAMRDC U.S. Army Medical Research and Development Command

USC United States Code

VA Department of Veterans Affairs
VHA Veterans Health Administration

APPENDIX 2: DOD AND VA WEBSITES

PIs are encouraged to integrate and/or align their research projects with DOD and/or VA research laboratories and programs. Collaboration with DOD or VA investigators is also encouraged. Below is a list of websites that may be useful in identifying additional information about DOD and VA areas of research interest, ongoing research, or potential opportunities for collaboration.

Air Force Office of Scientific Research https://www.wpafb.af.mil/afrl/afosr/

Air Force Research Laboratory https://www.wpafb.af.mil/afrl

Armed Forces Radiobiology Research Institute https://afrri.usuhs.edu/home

Combat Casualty Care Research Program https://ccc.amedd.army.mil

Congressionally Directed Medical Research Programs https://cdmrp.army.mil

Defense Advanced Research Projects Agency https://www.darpa.mil/

Defense Health Agency https://health.mil/dha

Defense Suicide Prevention Office https://www.dspo.mil/

Defense Technical Information Center https://www.dtic.mil

Defense Threat Reduction Agency https://www.dtra.mil/

Military Health System Research Symposium https://mhsrs.amedd.army.mil/

Military Infectious Diseases Research Program https://midrp.amedd.army.mil

Military Operational Medicine Research Program https://momrp.amedd.army.mil Navy Bureau of Medicine and Surgery https://www.med.navy.mil/

Naval Health Research Center https://www.med.navy.mil/Naval-Medical-Research-Center/R-D-Commands/Naval-Health-Research-Center/

Navy and Marine Corps Public Health Center https://www.med.navy.mil/sites/nmcphc/

Naval Medical Research Center https://www.med.navy.mil/Naval-Medical-Research-Center/

Office of Naval Research https://www.onr.navy.mil/

Office of the Under Secretary of Defense for Acquisition, Technology and Logistics https://www.acq.osd.mil/

Telemedicine and Advanced Technology Research Center https://www.tatrc.org/

Uniformed Services University of the Health Sciences

 $\underline{https://www.usuhs.edu/research}$

U.S. Air Force 59th Medical Wing https://www.59mdw.af.mil/

U.S. Army Aeromedical Research Laboratory https://www.usaarl.army.mil/

U.S. Army Combat Capabilities Development Command https://www.army.mil/ccdc U.S. Army Institute of Surgical Research https://usaisr.amedd.army.mil

U.S. Army Medical Materiel Development Activity

https://www.usammda.army.mil/

U.S. Army Medical Research and Development Command https://mrdc.amedd.army.mil/

U.S. Army Medical Research Institute of Infectious Diseases https://www.usamriid.army.mil/

U.S. Army Research Institute of Environmental Medicine https://www.usariem.army.mil/

U.S. Army Research Laboratory https://www.arl.army.mil

U.S. Army Sharp, Ready, and Resilient Directorate

https://www.armyresilience.army.mil/sharp/index.html

U.S. Department of Defense Blast Injury Research Program https://blastinjuryresearch.amedd.army.mil/

U.S. Department of Veterans Affairs, Office of Research and Development https://www.research.va.gov

U.S. Naval Research Laboratory https://www.nrl.navy.mil

Walter Reed Army Institute of Research https://www.wrair.army.mil