Program Announcement

for the

Defense Health Program

Defense Medical Research and Development Program

Department of Defense

Congressionally Directed Medical Research Programs

Tuberous Sclerosis Complex Research Program

Exploration – Hypothesis Development Award

Funding Opportunity Number:  W81XWH-14-TSCRP-EHDA

Catalog of Federal Domestic Assistance Number:  12.420

SUBMISSION AND REVIEW DATES AND TIMES

- **Pre-Application Deadline:** 5:00 p.m. Eastern time (ET), July 10, 2014
- **Application Submission Deadline:** 11:59 p.m. ET, July 24, 2014
- **End of Application Verification Period:** 5:00 p.m. ET, July 29, 2014
- **Peer Review:** September 2014
- **Programmatic Review:** November 2014

*Change for Fiscal Year 2014:* The CDMRP eReceipt System has been replaced with the electronic Biomedical Research Application Portal (eBRAP). Principal Investigators and organizational representatives should register in eBRAP as soon as possible. All pre-applications must be submitted through eBRAP. In addition, applications submitted through Grants.gov will now be available for viewing, modification, and verification in eBRAP prior to the end of the application verification period.

*This Program Announcement/Funding Opportunity is one of two documents with instructions to prepare and submit an application for this funding opportunity. The second document, the General Application Instructions, is available for downloading from Grants.gov.*
## TABLE OF CONTENTS

I. Funding Opportunity Description ........................................................................... 3  
   A. Program Description ......................................................................................... 3  
   B. FY14 TSCRP Mission and Focus Areas .............................................................. 3  
   C. Award Information ............................................................................................ 4  
   D. Eligibility Information ...................................................................................... 5  
   E. Funding .............................................................................................................. 5  

II. Submission Information ....................................................................................... 6  
   A. Where to Obtain the Application Package ......................................................... 7  
   B. Pre-Application Submission and Content Form .................................................. 7  
   C. Application Submission Content and Forms ..................................................... 8  
   D. Verification of Grants.gov Application in eBRAP ............................................. 12  
   E. Submission Dates and Times ............................................................................ 13  
   F. Other Submission Requirements ..................................................................... 13  

III. Application Review Information ......................................................................... 13  
   A. Application Review and Selection Process ....................................................... 13  
   B. Application Review Process ............................................................................ 14  
   C. Recipient Qualification ..................................................................................... 15  
   D. Application Review Dates ............................................................................... 15  
   E. Notification of Application Review Results ..................................................... 15  

IV. Administrative Actions ....................................................................................... 16  
   A. Rejection ........................................................................................................... 16  
   B. Modification ..................................................................................................... 16  
   C. Withdrawal ....................................................................................................... 16  
   D. Withhold .......................................................................................................... 17  

V. Award Administration Information ...................................................................... 17  
   A. Award Notice .................................................................................................... 17  
   B. Administrative Requirements ......................................................................... 17  
   C. National Policy Requirements ........................................................................ 17  
   D. Reporting ......................................................................................................... 17  
   E. Award Transfers ............................................................................................... 17  

VI. Agency Contacts ............................................................................................... 18  
   A. CDMRP Help Desk ......................................................................................... 18  
   B. Grants.gov Contact Center ............................................................................. 18  

VII. Application Submission Checklist ...................................................................... 19
I. FUNDING OPPORTUNITY DESCRIPTION

A. Program Description

Applications to the Fiscal Year 2014 (FY14) Tuberous Sclerosis Complex Research Program (TSCRP) are being solicited for the Assistant Secretary of Defense for Health Affairs, Defense Health Program (DHP), by the U.S. Army Medical Research Acquisitions Activity (USAMRAA). The TSCRP was initiated in 2002 to provide support for research of exceptional scientific merit and to promote innovative research focused on decreasing the clinical impact of tuberous sclerosis complex (TSC). Appropriations for the TSCRP from FY02 through FY13 totaled $47 million (M). The FY14 appropriation is $6M.

B. FY14 TSCRP Mission and Focus Areas

The mission of the FY14 TSCRP is to encourage innovative research to improve the lives of individuals with TSC through understanding the pathogenesis and manifestations of TSC and developing improved diagnostic and treatment approaches. Within this context, the FY14 TSCRP encourages applications that address one or more of these vital program Focus Areas:

- **Clinical Aspects of TSC**
  - Infantile spasms and epileptic encephalopathy, including biomarkers for early diagnosis and treatment
  - Neurocognitive, sleep, and behavioral issues, e.g., TAND (TSC-associated neuropsychiatric disorders)
  - Impact of TSC manifestations in adults, including LAM and angiomyolipomas

- **Personalization of Care**
  - Developmental origin of TSC manifestations
  - Phenotype/genotype studies and genetic modifiers
  - Gene dose and lesional genetics
  - Biomarkers for perinatal/newborn screening

- **Optimization of Treatments**
  - Pathogenesis-based biomarkers of disease progression and response to treatment
  - Development or validation of clinical endpoints in TSC
  - Identification or development of novel pathogenesis-based treatment targets
  - Continued refinement of cell-based and preclinical models
  - Dose, timing, and duration of treatment with mTORC-1 inhibitors

If the proposed research project does not address one of the FY14 Focus Areas, justification that the proposed research project addresses an important problem related to TSC research and/or patient care should be provided.
TSCRP Research Resources Initiative: Resources developed through TSCRP funding that are available to the scientific community can be found at [http://cdmrp.army.mil/tscrp/resources/tscresources](http://cdmrp.army.mil/tscrp/resources/tscresources). Investigators are urged to leverage and contribute to these resources and include a sharing and distribution plan in the application for data and resources generated during the performance of the proposed research project. For more guidance on data sharing, refer to the General Application Instructions, Appendix 4, Section L.

C. Award Information

The TSCRP Exploration – Hypothesis Development Award mechanism was first offered in FY07. Since then, 93 Exploration – Hypothesis Development Award applications have been received, and 26 have been recommended for funding.

The Exploration – Hypothesis Development Award supports the initial exploration of innovative, high-risk, high-gain, and potentially groundbreaking concepts in the TSC research field. The studies supported by this award mechanism are expected to lay the groundwork for future avenues of scientific investigation. The proposed research project should include a well-formulated, testable hypothesis based on strong scientific rationale and study design. *The presentation of preliminary and/or published data is encouraged, but not required.*

*The proposed research project should be innovative.* Innovative research may introduce a novel paradigm, challenge existing paradigms, look at existing problems from novel perspectives, or exhibit other highly creative qualities. Research that is an incremental advance upon published data is not considered innovative and is not consistent with the intent of this award mechanism. It is the responsibility of the Principal Investigator (PI) to clearly and explicitly articulate how the proposed research project is innovative in the field of TSC.

*Research involving human subjects and human anatomical substances is permitted; however, studies must be exempt under Title 32 of the Code of Regulations, Part 219.101(b) (32 CFR 219.101(b)) or eligible for expedited review (32 CFR 219.110 or 21 CFR 56.110).* Exemption or expedited status is first determined by the Institutional Review Board (IRB) of record. Investigators must review their institutional requirements and guidelines for filing with the IRB for exempt or expedited status. Studies that do not qualify for exempt or expedited status will be administratively withdrawn. *Clinical trials are not allowed under this funding opportunity.* For more information on clinical trials and clinical research overall, a Human Subject Resource Document is provided on the electronic Biomedical Research Application Portal (eBRAP) system at [https://ebrap.org/eBRAP/public/Program](https://ebrap.org/eBRAP/public/Program). PIs wishing to apply for funding for a pilot clinical trial should utilize the FY14 TSCRP Pilot Clinical Trial Award mechanism (Funding Opportunity Number: W81XWH-14-TSCRP-PCTA).

*The Congressionally Directed Medical Research Programs (CDMRP) intends that data and research resources generated under awards funded by this Program Announcement/Funding Opportunity be made available to the research community (which includes both scientific and consumer advocacy communities) and to the public at large. For additional guidance, refer to the General Application Instructions, Appendix 4, Section L.*
D. Eligibility Information

- Investigators at all academic levels (or equivalent), or postdoctoral fellows are eligible to submit applications.
- Cost sharing/matching is not an eligibility requirement.
- Eligible investigators must apply through an organization. Organizations eligible to apply include national, international, for-profit, non-profit, public, and private organizations.
- Refer to the General Application Instructions, Appendix 1, for general eligibility information.

E. Funding

- The maximum period of performance is 2 years.
- The maximum allowable direct costs for the entire period of performance are $100,000 plus indirect costs.
- All direct and indirect costs of any subaward (subgrant or subcontract) 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 2 years.
- Regardless of the period of performance proposed, the applicant may not exceed the maximum allowable direct costs. Indirect costs shall be proposed in accordance with the organization’s negotiated rate agreement.

Refer to the General Application Instructions, Section II.C.4., for budget regulations and instructions for the Research & Related Budget. For all federal agencies or organizations collaborating with federal agencies, budget restrictions apply as are noted in Section II.C.4. of the General Application Instructions.

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

- Salary
- Research supplies
- Travel between collaborating organizations
- Travel costs of up to $1,800 per year to attend scientific/technical meetings

Intramural Department of Defense (DoD), other federal agency, and extramural investigators are encouraged to apply to this Program Announcement/Funding Opportunity. An intramural investigator is defined as a DoD military or civilian employee working within a DoD laboratory or medical treatment facility, or working in a DoD activity embedded within a civilian medical center. Intramural applicants and collaborators are reminded to coordinate receipt and commitment of funds through their respective resource managers. It is permissible for an intramural investigator to be named as a collaborator on an application submitted by an
extramural investigator. **In such cases, the extramural investigator must include a letter from the intramural collaborator’s Commander or Commanding Officer that authorizes the involvement of the intramural collaborator.**

As required of all applicants to this Program Announcement/Funding Opportunity, if PIs from federal agencies submit applications, they must submit through Grants.gov. Therefore, federal applicants must be familiar with Grants.gov requirements, including the need for an active System for Award Management (SAM) registration and a Data Universal Numbering System (DUNS) number. Refer to Appendix 3 of the General Application Instructions for further information regarding Grants.gov requirements.

Awards to extramural organizations will consist solely of assistance agreements (Cooperative Agreements and Grants). Awards to intramural agencies and other federal agencies will be executed through the Military Interdepartmental Purchase Request (MIPR) or Funding Authorization Document (FAD) process. Direct transfer of funds from the recipient to a federal agency is not allowed except under very limited circumstances. Refer to the General Application Instructions, Section II.C.4. Research & Related Budget, for additional information on budget considerations for applications involving federal agencies.

**The CDMRP expects to allot approximately $1.12M of the $6.0M FY14 TSCRP appropriation to fund approximately 7 Exploration – Hypothesis Development Award applications, depending on the quality and number of applications received. Funding of applications received in response to this Program Announcement/Funding Opportunity is contingent upon the availability of federal funds for this program.**

### II. SUBMISSION INFORMATION

Submission is a two-step process requiring both (1) pre-application submission through the electronic Biomedical Research Application Portal (eBRAP) ([https://eBRAP.org/](https://eBRAP.org/)) and (2) application submission through Grants.gov ([http://www.grants.gov/](http://www.grants.gov/)).

**New for FY14: The CDMRP has replaced its eReceipt System with eBRAP.** Submission remains a two-step process requiring both pre-application and application submission.

PIs must be registered in eBRAP in order to submit a pre-application and receive notification of the status of a pre-application or application. A key feature of eBRAP is that an organization’s representatives and PIs are able to view and modify the Grants.gov application submissions associated with them, but only if the organization, Business Officials, and PIs are registered and affiliated to the organization in eBRAP (see [eBRAP User Guide](https://ebrap.org/eBRAP/public/UserGuide.pdf)). Upon completion of an organization’s registration in eBRAP and approval by the CDMRP Help Desk, the organization name will be displayed in eBRAP to assist the organization’s business officials and PIs as they register.

**Note:** Submission of either the pre-application to eBRAP or application to Grants.gov does not require registering an organization and affiliating its Business Officials and PIs in eBRAP; however, the ability to view and modify the Grants.gov application in eBRAP is contingent upon the registration and affiliation. **Application viewing, modification, and verification in eBRAP**
is strongly recommended, but not required. The Project Narrative and Budget cannot be changed after the application submission deadline. Any other application component cannot be changed after the end of the application verification period. If verification is not completed by the end of the application verification period, the application will be reviewed as submitted through Grants.gov or may be subject to administrative rejection (see Section IV.A., Rejection).

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.

A. Where to Obtain the Application Package

To obtain the complete application package, including all required forms, perform a Grants.gov (http://www.grants.gov/) basic search using the Funding Opportunity Number: W81XWH-14-TSCRP-EHDA.

B. Pre-Application Submission and Content Form

All pre-application components must be submitted by the PI through eBRAP (https://eBRAP.org/).

PIs and organizations 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 PI must contact the CDMRP Help Desk at help@eBRAP.org or 301-682-5507.

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):

- **Application Information – Tab 1**
- **Application Contacts – Tab 2**
  ○ It is recommended that PIs identify an Alternate Submitter in the event that assistance with pre-application submission is needed.
- **Collaborators and Conflicts of Interest – Tab 3**
  FY14 TSCP Integration Panel (IP) members should not be involved in any pre-application or application. For questions related to IP members and pre-applications or applications, refer to Section IV.C., Withdrawal, or contact the CDMRP at help@eBRAP.org or 301-682-5507.
- **Required Files – Tab 4**
  **Letter of Intent (LOI) (one-page limit):** Provide a brief description of the research to be conducted. LOIs are used for program planning purposes only (e.g., reviewer recruitment) and will not be reviewed during either the peer or programmatic review sessions.
- **Submit Pre-Application – Tab 5**
  This tab must be completed for the pre-application to be accepted and processed.
C. Application Submission Content and Forms

Each application submission must include the completed application package of forms and attachments provided in Grants.gov for this Program Announcement/Funding Opportunity. The application package is submitted by the Authorized Organizational Representative through the Grants.gov portal (http://www.grants.gov/).

New for FY14: Applications submitted through and validated by Grants.gov will be retrieved and processed by eBRAP to allow for review, modification, and verification. The PI and organizational representatives will receive an email request from eBRAP to review, modify, and verify the application submitted to Grants.gov. During this verification period, the PI may upload missing files (excluding those listed in Section IV.A., Rejection), replace files, and re-categorize files. These modifications must be completed by the end of the verification period.

Note: Changes to either the Project Narrative or Budget are not allowed in eBRAP; if such changes are required, the entire application package must be submitted through Grants.gov as a “Changed/Corrected Application” with the Previous Grants.gov Tracking ID prior to the application submission deadline (which occurs earlier than the end of the application verification period).

Grants.gov application package components: For the Exploration – Hypothesis Development Award, the Grants.gov application package includes the following components (refer to the General Application Instructions, Section II.C., for additional information on application submission):

1. SF 424 (R&R) Application for Federal Assistance Form: Refer to the General Application Instructions, Section II.C., for detailed information.

2. Attachments Form

   • Attachment 1: Project Narrative (four-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, etc.) used to describe the project. Inclusion of URLs that provide additional information to expand the Project Narrative and could confer an unfair competitive advantage is prohibited and will result in administrative withdrawal of the application.

   Describe the proposed project in detail using the outline below.

   o Rationale: Clearly articulate the rational for the proposed research project. Cite relevant literature. The presentation of preliminary and/or published data is encouraged, but not required.

   o Hypothesis: State concisely the new concept, theory, paradigm, and/or method that addresses an important problem in TSC research and/or patient care.

   o Specific Aims: Concisely explain the proposed research project’s specific aims to be funded by this application. If this research project is part of a larger study, present only tasks that this award would fund.
- **Research Strategy:**
  - Describe the experimental design, methods, and analyses, including appropriate controls, in sufficient detail for scientific peer review. Address potential problem areas and present alternative methods and approaches.
  - Describe the statistical plan, if appropriate for the research proposed.
  - If human subjects or human anatomical samples will be used, include a detailed plan for the recruitment of subjects or the acquisition of samples. *This award may only be used to conduct studies that are exempt under 32 CFR 219.101(b) or eligible for expedited review (32 CFR 219.110 or 21 CFR 56.110).*

- **Attachment 2: Supporting Documentation.** Start each document on a new page. Combine and upload as a single file named “Support.pdf.” If documents are scanned to pdf, the lowest resolution (100 to 150 dpi) should be used. *There are no page limits for any of these components unless otherwise noted. Include only those components described below; inclusion of items not requested may result in the removal of those items or administrative withdrawal of the application.*
  - References Cited (five-citation limit): 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 Patent Abstracts (five-document limit): Include relevant publication URLs and/or patent abstracts. If publications are not publicly available, then a copy/copies of the published manuscript(s) must 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 Collaboration: Provide a signed letter from each collaborating individual or organization that will demonstrate that the PI has the support or resources necessary for the proposed work.
- Intellectual and Material Property Plan (if applicable): Provide a plan for resolving intellectual and material property issues among participating organizations.

- **Attachment 3: Technical Abstract (one-page limit):** Upload as “TechAbs.pdf.”
  Technical abstracts should be written using the outline below. The technical abstract is used by all reviewers. Of particular importance, programmatic reviewers typically do not have access to the full application and therefore rely on the technical abstract for appropriate description of the project’s key aspects. Therefore, clarity and completeness within the space limits of the technical abstract are highly important.
  - Background: Present the ideas and reasoning behind the proposed research project.
  - Research Questions and/or Concepts: State the question/concept to be tested. Provide evidence or rationale that supports the objective.
  - Specific Aims: State the specific aims of the proposed research project.
  - Study Design: Briefly describe the study design including appropriate controls.
  - Innovation: Briefly describe how the proposed research project is innovative in the field of TSC.
  - Impact: Briefly describe how the proposed project will have an impact on TSC research and/or patient care.

- **Attachment 4: Lay Abstract (one-page limit):** Upload as “LayAbs.pdf.”
  Lay abstracts should be written using the outline below. The lay abstract is used by consumer reviewers along with other components of the application package.
  - Clearly describe, in a manner readily understood by lay persons, the rationale and objective for the proposed research project.
    - Do not duplicate the technical abstract.
  - Describe the ultimate applicability of the research.
    - What types of patients 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 patient-related outcome?
  - If the research is too basic for clinical applicability, describe the interim outcomes.
  - What are the likely contributions of this proposed research project to advancing the field of TSC research and/or patient care?
• **Attachment 5: Statement of Work (SOW) (two-page limit):** Upload as “SOW.pdf.” Refer to the General Application Instructions, Section II.C.2., for detailed guidance on creating the SOW.

The suggested SOW format and examples specific to different types of research projects are available on the eBRAP “Program Announcement and Forms” web page ([https://ebrap.org/eBRAP/public/Program.htm](https://ebrap.org/eBRAP/public/Program.htm)). For the Exploration – Hypothesis Development Award mechanism, use the SOW format example titled “SOW (Statement of Work) Generic Format.” The SOW must be in PDF format prior to attaching.

• **Attachment 6: Innovation Statement (one-page limit):** Upload as “Innovation.pdf.” Describe how the proposed research project is innovative in the field TSC. Research deemed innovative may represent a new paradigm, challenge current paradigms, look at existing problems from new perspectives, or exhibit other highly creative qualities. Innovative research may include high-risk approaches. Research that is an incremental advance upon published data is not considered innovative.

Although not all-inclusive, the following examples are ways in which the proposed research project may be innovative:

- The proposed research project will explore a novel idea and/or research question in TSC.
- The proposed research project will use or develop novel methods or technologies to address a question in TSC.
- The proposed research project will apply or adapt existing methods or technologies for novel TSC research or clinical purposes that differ fundamentally from those originally intended.

• **Attachment 7: Impact Statement (one-page limit):** Upload as “Impact.pdf.” State explicitly how the proposed research project addresses one or more of the FY14 Focus Areas, or, if the project does not address a Focus Area, provide justification that the proposed research project addresses an important problem in TSC research and/or patient care. Describe the anticipated outcomes (short-term gains) from the proposed research and how they will be used as a foundation for future research projects. Explain the anticipated long-term gains from the proposed research project, including how the new understanding may ultimately contribute to the goal of advancing TSC research and/or patient care.

• **Attachment 8: Data and Research Resources Sharing Plan (if applicable):** Upload as “ResourceSharing.pdf.” Describe how data and resources generated during the performance of the proposed research project will be shared with the research community. Specifically describe a plan to make animal models, tissue samples, and other resources developed as part of the proposed research project available to the scientific community. Refer to the General Application Instructions, Appendix 4, Section L, for more information about the CDMRP expectations for making data and research resources publicly available.
3. **Research & Related Senior/Key Person Profile (Expanded):** Refer to the General Application Instructions, Section II.C.3., for detailed information. *Note: Some of the items in this attachment may be made available for programmatic review.*

- PI Biographical Sketch (four-page limit): Upload as “Biosketch_LastName.pdf.”
- PI Previous/Current/Pending Support (no page limit): Upload as “Support_LastName.pdf.”
- Key Personnel Biographical Sketches (four-page limit each): Upload as “Biosketch_LastName.pdf.”
- Key Personnel Previous/Current/Pending Support (no page limit): Upload as “Support_LastName.pdf.”

4. **Research & Related Budget:** Refer to the General Application Instructions, Section II.C.4., for detailed information.

- Budget Justification (no page limit): Upload as “BudgetJustification.pdf.”

5. **Project/Performance Site Location(s) Form:** Refer to the General Application Instructions, Section II.C.5., for detailed information.

6. **R & R Subaward Budget Attachment(s) Form (if applicable):** Refer to the General Application Instructions, Section II.C.6., for detailed information.

D. **Verification of Grants.gov Application in eBRAP**

For FY14, a new process has been initiated whereby organizational representatives and PIs can view their applications as submitted through Grants.gov and prior to peer review of the application. This will enable applicants to make modifications prior to scientific and programmatic evaluation of applications, provided the modifications are made by either the end of the application verification period or, for changes to the Project Narrative or Budget, by the application submission deadline.

After application submission to Grants.gov, eBRAP will retrieve and validate the application submission. eBRAP will notify the organizational representatives and PI via email and instruct them to log into eBRAP to review, modify, and verify the application. Files that fail eBRAP validation will be noted in both the email and in the Full Application Files tab. eBRAP does not validate the accuracy or completeness of content in the files. PIs are strongly encouraged to review all application components. If either the Project Narrative or the Budget fail eBRAP validation, an updated Grants.gov application package must be submitted via Grants.gov prior to the application submission deadline, which occurs earlier than the end of the application verification period. *The Project Narrative and Budget cannot be changed after the application submission deadline. Any other application component cannot be changed after the end of the application verification period.*
E. Submission Dates and Times

All submission dates and times are indicated on the title page of this Program Announcement/Funding Opportunity. Pre-application and application submissions are required. Failure to meet either of these deadlines will result in application rejection.

F. Other Submission Requirements

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

All applications must be submitted through Grants.gov. Applicant organizations and all subrecipient organizations must have a DUNS number to submit applications to Grants.gov. The applicant organization must also be registered in the Entity Management functional area of the SAM with an “Active” status to submit applications through the Grants.gov portal. Refer to the General Application Instructions, Appendix 3, for information on Grants.gov requirements.

III. APPLICATION REVIEW INFORMATION

A. Application Review and Selection Process

All applicants are evaluated by scientists, clinicians, and consumer advocates using a two-tier review process. The first tier is peer review of applications against established criteria for determining technical merit. The second tier is a programmatic review that makes recommendations for funding to the Commanding General, U.S. Army Medical Research and Materiel Command (USAMRMC), based on (a) technical merit and (b) the relevance to the mission of the DHP and TSCRP and to the specific intent of the award mechanism. The highest scoring applications from the first tier of review are not automatically recommended for funding. Additional information about the two-tier process used by the CDMRP can be found at http://cdmrp.army.mil/about/fundingprocess.

All CDMRP review processes are conducted confidentially to maintain the integrity of the merit-based selection process. Panel members sign a non-disclosure statement 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 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 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 Title 18 United States Code 1905.
B. Application Review Process

1. 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:

   - **Innovation**
     - To what extent the proposed research project is innovative to the field of TSC in one or more of the following ways: research concept or question, development of novel research methods or technologies, adaptations of existing methods or technologies, or other ways.
     - To what extent the proposed research project represents more than an incremental advance upon published data and/or may be considered high risk.

   - **Impact**
     - Assuming the objectives/goals of the research project are realized:
       - To what extent the anticipated outcomes (short-term) will be used as the foundation for future research projects.
       - To what extent the anticipated long-term gains will contribute to the goal of advancing TSC research and/or patient care.
     - How well the proposed research project addresses one or more of the FY14 TSCRCP Focus Areas or a critical problem in TSC research and/or patient care.

   - **Research Strategy and Feasibility**
     - How well the research questions and/or concepts, aims, experimental design, methods, and analyses are developed.
     - To what extent the proposed research project is feasible as described.
     - How well the PI identifies potential problems and addresses alternative approaches.

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

- **Personnel**
  - How well the PI’s experience, expertise, and record of accomplishment demonstrate his/her ability to successfully complete the proposed research project.
  - To what extent the levels of effort by the PI and other key personnel are appropriate to ensure success of the proposed research project.
• Environment
  ○ To what degree the scientific environment is appropriate for the proposed research project.
  ○ How well the research requirements are supported by the availability of and accessibility to facilities and resources (including collaborative arrangements).
  ○ To what degree the quality and extent of institutional support/commitment are appropriate for the proposed research project.
  ○ If applicable, to what degree the intellectual and material property plan is appropriate.

• Budget
  ○ Whether the budget is appropriate for the proposed research and within the limitations of this Program Announcement/Funding Opportunity.

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

2. Programmatic Review: To make funding recommendations, the following equally considered criteria are used by programmatic reviewers:

   a. Ratings and evaluations of the peer reviewers

   b. Relevance to the mission of the DHP and FY14 TSCRP, as evidenced by the following:
      • Adherence to the intent of the award mechanism
      • Program portfolio composition
      • Programmatic relevance
      • Relative innovation and impact

C. Recipient Qualification

For general information on required qualifications for award recipients, refer to the General Application Instructions, Appendix 1.

D. Application Review Dates

All application review dates and times are indicated on the title page of this Program Announcement/Funding Opportunity.

E. Notification of Application Review Results

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.
IV. ADMINISTRATIVE ACTIONS

After receipt of applications from Grants.gov, the following administrative actions may occur:

A. Rejection

The following will result in administrative rejection of the application:

- Pre-application was not submitted.
- Project Narrative exceeds page limit.
- Project Narrative is missing.
- Budget is missing.
- Submission of the same research project to different funding opportunities within the same program and fiscal year.

B. Modification

- Pages exceeding the specific limits will be removed prior to review for all documents other than the Project Narrative.
- Documents not requested will be removed.
- Following application submission to Grants.gov, the PI will receive an email request from eBRAP to review, modify, and verify the application submitted to Grants.gov. During this verification period, the PI may upload missing documents (excluding those listed in Section IV.A., Rejection), replace files, and re-categorize files. These modifications must be completed by the end of the application verification period; otherwise, the application will be reviewed as submitted.

C. Withdrawal

The following may result in administrative withdrawal of the application:

- A FY14 TSCRP IP 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 FY14 TSCRP IP members can be found at http://cdmrp.army.mil/tscrp/panels/panels14.
- The application fails to conform to this Program Announcement/Funding Opportunity description to the extent that appropriate review cannot be conducted.
- Direct costs as shown on the Research & Related Budget exceed the maximum allowed by this Program Announcement/Funding Opportunity.
- 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).
• Inclusion of any employee of CDMRP review contractors in applications for funding without adequate plans to mitigate conflicts of interest. Refer to the General Application Instructions, Section II.B., for detailed information.

• Personnel from applicant or collaborating organizations are found to have contacted persons involved in the review process to gain protected evaluation information or to influence the evaluation process.

• The proposed research project does not qualify for exempt status under Title 32, Code of Federal Regulations, Part 219, Section 101(b) (32 CFR 219.101[b]) or is not eligible for expedited review (32 CFR 219.110 or 21 CFR 56.110).

• The proposed research is, or requests funding for, a clinical trial.

D. Withhold

Applications that appear to involve research misconduct will be administratively withheld from further consideration pending institutional investigation. The institution 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.

V. AWARD ADMINISTRATION INFORMATION

A. Award Notice

Awards will be made no later than September 30, 2015. Refer to the General Application Instructions, Appendix 4, for additional award administration information.

B. Administrative Requirements

Refer to the General Application Instructions, Appendix 4 for general information regarding administrative requirements.

C. National Policy Requirements

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

D. Reporting

Refer to the General Application Instructions, Appendix 4, Section J, for general information on reporting requirements.

E. Award Transfers

Changes in PI are not allowed, except under extenuating circumstances that will be evaluated on a case-by-case basis and at the discretion of the Grants Officer.

Refer to the General Application Instructions, Appendix 4, Section M, for general information on organization or PI changes.
VI. AGENCY CONTACTS

A. CDMRP Help Desk

Questions related to Program Announcement/Funding Opportunity content or submission requirements as well as questions related to the submission of the pre-application through eBRAP should be directed to the CDMRP 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

B. Grants.gov Contact Center

Questions related to 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 CDMRP Help Desk is unable to provide technical assistance with Grants.gov submission.

- Phone: 800-518-4726
- 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/Funding Opportunity or by responding to the prompt provided by Grants.gov when first downloading the application package. If the application package is updated or changed, the original version of the application package may not be accepted by Grants.gov.
## VII. APPLICATION SUBMISSION CHECKLIST

<table>
<thead>
<tr>
<th>Grants.gov Application Components</th>
<th>Action</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>SF-424 (R&amp;R) Application for Federal Assistance</td>
<td>Complete form as instructed.</td>
<td></td>
</tr>
<tr>
<td>Attachments Form</td>
<td>Project Narrative: Upload as Attachment 1 with file name “ProjectNarrative.pdf.”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Supporting Documentation: Upload as Attachment 2 with file name “Support.pdf.”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Technical Abstract: Upload as Attachment 3 with file name “TechAbs.pdf.”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lay Abstract: Upload as Attachment 4 with file name “LayAbs.pdf.”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statement of Work: Upload as Attachment 5 with file name “SOW.pdf.”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Innovation Statement: Upload as Attachment 6 with file name “Innovation.pdf.”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Impact Statement: Upload as Attachment 7 with file name “Impact.pdf.”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Data and Research Resources Sharing Plan: Upload as Attachment 8 with file name “ResourceSharing.pdf,” if applicable.</td>
<td></td>
</tr>
<tr>
<td>Research &amp; Related Senior/Key Person Profile (Expanded)</td>
<td>Attach PI Biographical Sketch (Biosketch_LastName.pdf) to the appropriate field.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Attach PI Previous/Current/Pending Support (Support_LastName.pdf) to the appropriate field.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Attach Biographical Sketch (Biosketch_LastName.pdf) for each senior/key person to the appropriate field.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Attach Previous/Current/Pending (Support_LastName.pdf) for each senior/key person to the appropriate field.</td>
<td></td>
</tr>
<tr>
<td>Research &amp; Related Budget</td>
<td>Complete as instructed. Attach Budget Justification (BudgetJustification.pdf) to the appropriate field.</td>
<td></td>
</tr>
<tr>
<td>Project/Performance Site Location(s) Form</td>
<td>Complete form as instructed.</td>
<td></td>
</tr>
<tr>
<td>R &amp; R Subaward Budget Attachment(s) Form</td>
<td>Complete form as instructed.</td>
<td></td>
</tr>
</tbody>
</table>