

Program Announcement

Department of Defense Congressionally Directed Medical Research Programs

Tuberous Sclerosis Complex Research Program

Exploration – Hypothesis Development Award

Funding Opportunity Number: W81XWH-09-TSCRPEHDA

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I. FUNDING OPPORTUNITY DESCRIPTION

A. Program Objectives

The Tuberous Sclerosis Complex Research Program (TSCRP) was established in fiscal year 2002 (FY02) to promote innovative research focused on decreasing the clinical impact of tuberous sclerosis complex (TSC). Appropriations for the TSCRP from FY02 through FY08 totaled \$17.5 million (M). The FY09 appropriation is \$6M.

FY09 TSCRP Mission and Goals: The mission of the TSCRP is to encourage innovative research aimed at understanding the pathogenesis of TSC and to translate these findings to the care of individuals with TSC. Within this context, the TSCRP encourages applications to the FY09 program that address these vital program goals:

- To better understand the molecular mechanisms underlying TSC.
- To better characterize the manifestations of TSC in individual organ systems, including brain, lung, kidney, skin, and heart.
- To promote the translation of new research findings for the diagnosis and treatment of those with TSC.
- To encourage the development of new researchers in TSC and collaborations with other related fields.

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/tscresources.htm>. Investigators are urged to leverage and contribute to these resources. For more guidance on data sharing, refer to Application Instructions and General Information, Appendix 5.

B. Award Description

The Exploration – Hypothesis Development Award (EHDA) mechanism is being offered for the first time in FY09.

The TSCRP Exploration – Hypothesis Development Award supports the initial exploration of innovative, untested, high-risk, high-gain, and potentially groundbreaking concepts in tuberous sclerosis complex research. Results of studies conducted through this award may provide the scientific rationale upon which a new hypothesis can be based, or it should provide initial principles of an innovative hypothesis. This award is designed to provide investigators with the opportunity to pursue serendipitous observations. Some gaps in supporting rationale may exist due to a lack of available information. *The presentation of preliminary data is encouraged, but not required.*

It is the responsibility of the Principal Investigator (PI) to clearly and explicitly articulate the project's innovation and the potential impact on Tuberous Sclerosis Complex.

Because these awards are designed for preliminary investigations, projects involving human subjects or specimens will not be supported unless they are exempt under 32 CFR 219.101(b) or DOD Tuberous Sclerosis Complex Exploration – Hypothesis Development Award

eligible for expedited review (32 CFR 219.110 or 21 CFR 56.110). Studies that do not qualify for exempt or expedited status during review at any level will be administratively withdrawn and will not be funded.

C. Eligibility

PIs at all academic levels (or equivalent) are eligible to submit applications. Refer to Application Instructions and General Information, Appendix 1, for general eligibility information.

D. Funding

- The maximum period of performance is 2 years.
- The maximum allowable funding for the entire period of performance is **\$100,000** in direct costs.
- The applicant may request the entire maximum direct cost amount for a project that may be less than the maximum 2-year period of performance.
- Regardless of the period of performance proposed, the applicant may not exceed the maximum direct cost. In addition to the direct costs, indirect costs may be proposed in accordance with your institution's negotiated rate agreement.

Within the guidelines provided in the Application Instructions and General Information, funds can cover:

- Salary
- Research supplies
- Equipment
- Clinical costs (no clinical trials allowed)
- Travel between collaborating institutions
- Travel to scientific/technical meetings

The Office of the Congressionally Directed Medical Research Programs (CDMRP) expects to allot approximately \$0.75M of the \$6M FY09 TSCRP appropriation to fund approximately five EHDA applications, depending on the quality and number received. Funding of applications received in response to this Program Announcement/Funding Opportunity is contingent on the availability of Federal funds for this program.

E. Award Administration

No changes in institution will be allowed once the application has been funded. Refer to the Application Instructions and General Information, Appendix 5 for general award administration information.

II. TIMELINE FOR SUBMISSION AND REVIEW

Proposal submission is a two-step process consisting of (1) pre-application submission and (2) application submission.

Pre-application Submission Deadline:	March 24, 2009
Application Submission Deadline:	April 14, 2009
Scientific Peer Review:	Summer, 2009
Programmatic Review:	Late Summer/Early Fall, 2009

Awards will be made approximately 4 to 6 months after receiving a funding notification letter, but no later than September 30, 2010.

III. SUBMISSION PROCESS

Proposal submission is a two-step process consisting of (1) a pre-application submission through the [CDMRP eReceipt system \(https://cdmrp.org/\)](https://cdmrp.org/), and (2) an application submission through [Grants.gov \(http://www.grants.gov/\)](http://www.grants.gov/).

PIs and organizations identified in the application submitted through Grants.gov should be the same as those identified in the pre-application. If there is a change in PI or organization after submission of the pre-application, the PI must contact the eReceipt help desk at help@cdmrp.org or 301-682-5507.

The Government reserves the right to reject duplicative applications submitted to different award mechanisms within the same program or to other CDMRP programs.

A. Step 1 – Pre-Application Components and Submission

Pre-application submission is the required first step. The pre-application consists of the components discussed below. All pre-application components must be submitted electronically through the [CDMRP eReceipt system](https://cdmrp.org/) by **5:00 p.m. Eastern time (ET) on the deadline date**. Refer to the Application Instructions and General Information for detailed information.

- Proposal Information
- Proposal Contacts
- Collaborators and Conflicts of Interest (COI)
- Letter of Intent (LOI) Narrative

B. Step 2 – Application Components and Submission

Application submissions will not be accepted unless the pre-application process is completed by the pre-application deadline. Applications must be submitted electronically by the Authorized Organizational Representative (AOR) through Grants.gov (www.grants.gov).

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Each application submission must include the completed application package of forms and attachments identified in www.grants.gov for the US Army Medical Research Acquisition Activity (USAMRAA) Program Announcement/Funding Opportunity. In addition to the specific instructions below, please refer to the Application Instructions and General Information for detailed requirements of each component.

The package includes:

1. SF-424 (R&R) Application for Federal Assistance Form

2. Attachments Form

- Attachment 1: Project Narrative (Four-page limit)

Describe the proposed project in detail using the outline below. The presentation of preliminary data is encouraged, but not required.

- **Background:** Present the ideas and reasoning behind the proposed work. Cite relevant literature. Describe previous experience most pertinent to this project.
- **Hypothesis or Objective:** State the hypothesis to be tested or the objective to be reached.
- **Specific Aims:** Concisely explain the project's specific aims to be funded by this application. If this proposed work is part of a larger study, present only tasks that the DOD award would fund.
- **Research Strategy:** Describe the experimental design, methods, and analyses, including appropriate controls, in sufficient detail for analysis. Address potential problem areas and present alternative methods and approaches. ***This award may not be used to conduct clinical trials or studies that are not 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
 - References Cited
 - Acronyms and Symbol Definitions
 - Facilities & Other Resources
 - Description of Existing Equipment
 - Publications and/or Patent Abstracts (Five-document limit)
 - Letters of Institutional Support (Two-page limit per letter)
 - Letters of Collaboration (if applicable; two-page limit per letter)
 - Intellectual and Material Property Plan (if applicable)
- Attachment 3: Public Abstract (One-page limit)
- Attachment 4: Technical Abstract (One-page limit)

- Attachment 4: Statement of Work (SOW, three-page limit)
- Attachment 5: Impact Statement (One-page limit)

Explain how the expected results of the study will make an original and important contribution to the goal of advancing TSC research and its impact on patient care. Describe the potential clinical applications, benefits, and risks.

- Attachment 6: Detailed Budget and Justification
- Attachment 7: Innovation Statement (One-page limit)

Summarize how the proposed work is innovative. Investigating the next logical step or incremental advancement on published data is not considered innovative.

Although not all-inclusive, the following examples are ways in which the proposed work may be innovative, and are intended to help PIs frame the innovative features:

- Study concept – Investigation of a novel idea and/or research question.
- Research method or technology – Use of novel research methods or new technologies, including technology development, to address a research question.
- Novel method or technology – Development of a novel method or technology for preventing, detecting, diagnosing, or treatment.
- Existing methods or technologies – Application or adaptation of existing methods or technologies for novel research or clinical purposes, or for research or clinical purposes that differ fundamentally from those originally intended.
- Attachment 8: Federal Agency Financial Plan (if applicable)
- Attachment 9-15: Subaward Detailed Budget and Justification (if applicable)

3. Research & Related Senior/Key Person Profile (Expanded Form)

- PI Biographical Sketch (Four-page limit)
- PI Current/Pending Support
- Key Personnel Biographical Sketches (Four-page limit each)
- Key Personnel Current/Pending Support

4. Research & Related Project/Performance Site Location(s) Form

IV. INFORMATION FOR APPLICATION REVIEW

A. Application Review and Selection Overview

All applications are evaluated by scientists, clinicians, and consumer advocates using a two-tier review process. The first tier is a scientific peer review of applications against established criteria for determining scientific merit. The second tier is a programmatic review that compares submissions to each other and recommends proposals for funding based on scientific merit, overall goals of the program, and the specific intent of the award DOD Tuberous Sclerosis Complex Exploration – Hypothesis Development Award

mechanism. Additional information about the two-tier review process used by the CDMRP may be found at <http://cdmrp.army.mil/fundingprocess.htm>.

The peer review and programmatic review processes are conducted confidentially to maintain the integrity of the merit-based selection process. Each tier of review requires panelists to sign a non-disclosure statement attesting that application and evaluation information will not be disclosed outside the panel. Violations of the non-disclosure statement can result in the dissolving of a panel(s) and other corrective actions. Institutional personnel and PIs are prohibited from contacting persons involved in the application 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 institution's application. Violations by panelists or PIs that compromise the confidentiality of the peer review and programmatic review processes may also result in suspension or debarment of their employing institutions from Federal awards. Furthermore, it is a crime for Federal officials to disclose confidential information of one party to another third party (Title 18 United States Code 1905).

B. Review Criteria

1. Peer Review: All applications will be evaluated according to the following criteria, which are listed in decreasing order of importance.

- **Innovation**
 - How the proposed research is innovative in one or more of the following ways: Concept or question, research methods or technologies, adaptations of existing methods or technologies, or other ways.
 - How the project proposes new paradigms or challenges existing paradigms.
 - How the proposed research represents more than an incremental advance upon published data.
- **Impact**
 - How the application addresses a critical problem in tuberous sclerosis complex research or patient care.
 - How the project makes an original and important contribution to the goal of advancing research on the treatment of tuberous sclerosis complex or on the quality of life of patients.
- **Research Strategy and Feasibility (preliminary data allowed but not required)**
 - How the scientific rationale supports the project and its feasibility as demonstrated by a critical review and analysis of the literature and logical reasoning.
 - How well the hypotheses or objectives, aims, experimental design, methods, and analyses are developed.

- How well the PI acknowledges potential problems and addresses alternative approaches.
- How the intended results should give rise to a testable hypothesis.

The following criteria will not be individually scored, but may impact the overall evaluation of the application:

- **Personnel**
 - The PI's potential for contributing to the tuberous sclerosis complex research field.
 - How the PI's record of accomplishment demonstrates his/her ability to accomplish the proposed work.
 - Appropriateness of the levels of effort for successful conduct of the proposed work.
- **Environment**
 - How the scientific environment is appropriate for the proposed research.
 - How the research requirements are supported by the availability of and accessibility to facilities and resources (including collaborative arrangements).
 - How the quality and extent of institutional support are appropriate for the proposed research.
- **Budget**
 - Whether the budget is appropriate for the proposed research and within the limitations of the award mechanism.
- **Application Presentation**
 - How the writing and components of the application influenced the review.

Programmatic Review: Criteria used by programmatic reviewers to make funding recommendations that maintain the program's broad portfolio include:

- Ratings and evaluations of the peer reviewers,
- Program portfolio balance,
- Programmatic relevance,
- Relative innovation and impact,
- Adherence to the intent of the award mechanism.

Scientifically sound proposals that best fulfill the above criteria and most effectively address the unique focus and goals of the program will be identified by Integration Panel members and recommended for funding to the Commanding General, USAMRMC.

The highest scoring applications from the first tier of review are not automatically recommended for funding. All applications are carefully considered to ensure that the DOD Tuberous Sclerosis Complex Exploration – Hypothesis Development Award

funds available are allocated to those proposals that best fulfill the goals and objectives of the program.

Investigators are urged to view previously TSCRP-funded proposals at <http://cdmrp.army.mil/search.aspx?program=TSCRP> to aid in the development of applications that represent novel areas of research, as portfolio balance is an important consideration at programmatic review to ensure that gaps in the research are adequately addressed.

V. 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:

- Project Narrative exceeds page limit.
- Project Narrative is missing.
- Budget is missing.
- Page size is larger than 8.5 inches x 11.0 inches (approximately 21.59 cm x 27.94 cm).

B. Modifications

- Pages exceeding the specified limits will be removed for all documents other than the Project Narrative.
- Documents not requested will be removed.
- **NEW for FY09:** Following the application deadline, you may be contacted by CDMRP via email with a request to provide certain missing supporting documents (excluding those listed directly above in Section A, Rejection). The missing documents must be provided within 48 hours of the date and time the email was sent. Otherwise, the application will be peer reviewed without the missing documents.

C. Withdrawal

The following may result in administrative withdrawal of the application:

- FY09 IP member(s) is found to be involved in the pre-application or application processes including, but not limited to, concept design, application development, budget preparation, and the development of any supporting document. A list of the FY09 IP members may be found at <http://cdmrp.army.mil/research.htm>.
- Submission of the same research project to different award mechanisms within the same program or to other CDMRP programs.

- The application does not conform to this funding opportunity description to an extent that precludes appropriate scientific peer and programmatic review.
- Direct costs as shown on the detailed budget form exceed the maximum allowed by the award mechanism.
- Inclusion of URLs, with the exception of links to published references.
- Studies not exempt under 32 CFR 219.101(b) or eligible for expedited review (32 CFR 219.110 or 21 CFR 56.110).

D. Withhold

Applications that appear to involve research misconduct will be administratively withheld from further consideration pending institutional investigation. The institution will be requested to provide the findings of the investigation to the USAMRAA Contracting/Grants Officer for a determination of the final disposition of the application.

VI. CONTACT INFORMATION

A. Program Announcement/Funding Opportunity, application format, or required documentation: To view all funding opportunities offered by the CDMRP, perform a Grants.gov basic search using the CFDA Number 12.420. Submit questions as early as possible. Response times will vary depending upon the volume of inquiries. Every effort will be made to answer questions within 5 working days.

Phone: 301-619-7079
 Fax: 301-619-7792
 Email: cdmrp.pa@amedd.army.mil

B. eReceipt system: Questions related to pre-application components through the CDMRP eReceipt system should be directed to the eReceipt help desk, which is available Monday through Friday from 8:00 a.m. to 5:00 p.m. ET.

Phone: 301-682-5507
 Website: <https://cdmrp.org>
 Email: help@cdmrp.org

C. Grants.gov contacts: Questions related to application submission through the [Grants.gov](http://www.grants.gov/) (<http://www.grants.gov/>) portal should be directed to the Grants.gov help desk, which is available Monday through Friday, 7:00 a.m. to 9:00 p.m. ET. Deadlines for application submission are 11:59 p.m. ET on the deadline date. Please note that the CDMRP help desk is unable to answer questions about Grants.gov submissions.

Phone: 800-518-4726,
 Email: support@grants.gov

Grants.gov will notify PIs of changes made to this Program Announcement/Funding Opportunity and/or application package ONLY if the PI subscribes to the mailing list by clicking on the “send me change notification emails” link on the Opportunity Synopsis page for this announcement. If the PI does not subscribe and the application package is updated or changed, the original version of the application package may not be accepted.