

**Joint Science and Technology Office for Chemical and Biological
Defense (JSTO-CBD)
Medical Chemical and Biological Defense Research Program
(MCBDRP)
FY06 Supplement to the Broad Agency Announcement (BAA) 05-1**

SUMMARY

The JSTO-CBD, Defense Threat Reduction Agency, is soliciting proposals for participation in an extramural research program. All extramural efforts must be able to integrate with intramural MCBDRP research efforts conducted by the Department of Defense (DoD). Thus, collaborative efforts with a DoD lab are strongly encouraged. It is anticipated that approximately \$5 million will be awarded. The contract period of performance will be one to two years. No single award will exceed \$1M. The funding provided is in Budget Activity 2 (BA2 or Applied Research) and Budget Activity 3 (BA3 or Advanced Technology Development).

These projects will be focused on the development of medical pretreatment and therapeutic countermeasures to chemical and biological threats and associated medical diagnostics systems. This solicitation is open to agencies of local, state and federal governments; educational institutions; non-profit organizations and private industry, both foreign and domestic.

Full proposals with an accompanying quad chart will be accepted. These will be reviewed and considered for award based on a schedule paralleling the DoD intramural proposal process. Full proposals will be reviewed in April, 2005. Awards will be initiated at the beginning of the FY06 fiscal year. Additional calls for proposals within the fiscal year may be made depending on the availability of funding.

Research Proposal Topics: The JSTO-CBD is soliciting proposals for research in the following areas:

1. Pretreatments:

- Investigations into the development and application of novel adjuvant formulations to enhance the delivery/efficacy of vaccines/immunogens
- Evaluation of novel mechanisms for enhancing the immune response to intracellular bacterial pathogens
- Human immune response to biothreat agent pathogens – T and B-cell epitope mapping studies

2. Diagnostic Technology:

- Novel and definitive analytic procedures for chemical warfare agent detection/diagnosis (e.g., acetylcholinesterase)
- Whole blood cholinesterase assays based on a finger prick and correlation/indication of altered liver or erythropoietic/hematopoietic system with blood acetylcholinesterase (AChE) and / or butyrylcholinesterase (BuChE) levels
- Clinical sample processing methods capable of detecting low levels of bloodborne pathogens through DNA and RNA isolation
- Novel ways of identifying targets for assay development

3. Therapeutics:

- Proteomics approaches to support rapid identification of suitable therapeutics to treat or prevent adverse effects of chemical and biological warfare (CBW) agents
- Investigations into the combined use of FDA-approved drugs to treat patients with symptoms from CBW agents
- Design and development of small molecule therapeutics to treat the adverse effects of CBW agents
- Investigations to design broad spectrum therapeutics to defend against CBW agents
- Investigation into FDA-approved gastrointestinal medication as adjunctive detoxifying therapeutics for specific CW agents
- Development of adjunctive detoxification or mitigation/prevention of effects from CBW agents using gastrointestinal therapeutics
- Development or demonstration of hands-free patient monitoring (e.g., non-contact diagnostic or vital signs) while the provider wears CBW protective clothing

Application Materials and Procedures:

Proposals will be assessed for balance with ongoing DoD research. Investigators are expected to survey the peer-reviewed literature to support their proposals to avoid duplication of previous research efforts, including those

previously supported by the DoD and/or its investigators. An additional source of previously accomplished research supported by the DoD can be found on the Defense Technical Information Center web site at <http://www.dtic.mil> using the Science and Technical Documents Search.

It is anticipated that no individual award be more than \$1M inclusive of direct and indirect costs, with a maximum period of performance of 2 years. Reasonableness of budget for the proposed research is a component of the peer review evaluation process.

Proposals: Proposals must be received by 4:00 p.m. on 1 February 2005 to be eligible for consideration. The proposal template, quad chart template, and instructions for completion are available in the USAMRMC Broad Agency Announcement (BAA) 05-1 on the Internet at <http://www.usamraa.army.mil> and can be submitted online or mailed to: US Army Medical Research Acquisition Activity, ATTN: MCMR-AAA-DTRACB05, 820 Chandler Street, Fort Detrick, MD 21702-5014.

The proposal will consist of three sections: **a quad chart, a technical statement of work (SOW) and an administrative portion.** These sections must be in accordance with relevant portions (primarily proposal preparation section) of BAA 05-1 (available at <http://www.usamraa.army.mil>). Once you access the web site, click the "BAA" button located on the main page. The USAMRMC BAA 04-1, Appendices are located at the "USAMRMC BAA 04-1" link. The FY06 DTRA JSTO Supplement is a downloadable file located at the "USAMRMC BAA 04-1" link.

The technical SOW is not to exceed 5 pages and is to include the following sections:

- Brief summary of concept (not to exceed ½ page in length)
- Background and discussion of relevant work in the field
- Discussion of concept
- Timeline of objectives

The administrative portion must include the following appendices from BAA 05-1:

- Cover Page (Appendix 3)
- Detailed Cost Estimate (Appendix 6)
- Certificate of Environmental Compliance (Appendix 8)
- Safety Program Plan (Appendix 11)
- Representation for Assistance Agreements (Appendix 12)

If applicable, the following must also be included:

- Research involving human subjects and anatomical substances (Appendix 9)
- Research involving animals (Appendix 10)

- Matching funds, potential/other sources of funding for this effort and similar efforts proposed by the submitter
- Indicate if this work is part of an intramural effort at one of the DoD laboratories

Anticipated Awards:

Awards are anticipated to take the form of grants to each selected organization. It is anticipated that awards will be announced on or about June, 2005.

Proposal Evaluation and Selection:

The proposal evaluation criteria listed below are specific to this announcement and take precedence over any evaluation criteria that are listed in BAA 05-1. The JSTO-CBD will use a two-tiered review process for proposal evaluation, which consists of a scientific peer review and a programmatic review. The two tiers are fundamentally different.

1. The first tier is a **scientific peer review** of proposals against established criteria for determination of scientific merit. These reviews provide unbiased, expert advice on the scientific and technical merit of proposals, based upon the following review criteria:

- research strategy and objectives
- impact
- PI and key personnel qualifications
- facilities
- budget

The peer review summary statement is a product of scientific peer review. Each statement includes the investigator's structured, technical abstract and an evaluation of the project as assessed by the peer reviewers according to the above evaluation criteria. Summary statements are forwarded to the next stage of the review process, the programmatic review.

2. The second tier of review, the **programmatic review**, is conducted by a team of military scientists, researchers and/or other federal agency representatives. Panel members use the peer review summary statements to make funding recommendations. Programmatic review uses the following four criteria to make their recommendations:

- peer review recommendations
- relevance of proposed research to military programs
- programmatic priorities
- portfolio balance

Scientifically sound proposals that best fulfill the above criteria and most

effectively address the unique focus and goals of the DoD Chemical and Biological Defense Program will be recommended for funding.

JSTO-CBD Technical Point-of-Contact:

Lt. Col. Patricia Reilly

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USA

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Proposal Receipt Deadline and Procedures

Unlike other proposals submitted under BAA 05-1, which can be submitted throughout the year, completed FY06 JSTO-CBD full proposal packages submitted in response to the FY06 Supplement are due no later than 1 February 2005 at 4:00 p.m., Eastern Time. Clearly mark all packages as "FY06 JSTO-CBD Research Program." The complete submission should include: the original proposal and quad chart and an electronic copy of the proposal (in a format readable by IBM-compatible versions of Microsoft Office or Adobe Acrobat) on a formatted disk or CD. Proposals should be sent by mail, courier, or hand delivered to the following address:

FY06 JSTO-CBD Research Program
U.S. Army Medical Research Acquisition Activity
ATTN: MCMR-AAA/Cheryl R. Miles
820 Chandler Street
Fort Detrick, Maryland 21702-5014

Proposal Compliance

Failure to adhere to deadlines specified within this supplement may result in proposal rejection.

Any proposal received after the exact time and date specified for receipt will not be considered. Investigators are advised that documentation of the time of receipt by the delivery agent may be necessary if a problem should occur.

Exceptions are:

1. It was sent by mail, and it is determined by the Government that late receipt was due solely to mishandling by the Government after receipt at the Government installation; or
2. It was sent by U.S. Postal Service Express Mail Next Day Delivery to Addressee (do not use Second Day Delivery) and postmarked no later than 8:00

p.m. (local time at point of origination) the day before the proposal receipt deadline; or

3. It was placed into the control of a commercial courier service no later than 8:00 p.m. (local time at point of origination) the day before the proposal receipt deadline and guaranteed for delivery by 4:00 p.m. Eastern Time on the due date by the courier service. (International Applicants: Please be advised that NEXT DAY DELIVERY MAY NOT BE AVAILABLE from your location; check with your commercial courier service.); or

4. The Government, in its sole discretion, decides to accept the late proposal if it determines that no competitive advantage has been conferred and that the integrity of the competitive grants process will not be compromised.

Address all questions to Ms. Cheryl Miles by email at Cheryl.miles@amedd.army.mil