Biomedical Laboratory Research & Development (BLRD)

Guidance for Submission of a Letter of Intent to Validate Novel Animal or Cell-based Models of Diseases for a Merit Review Pilot Award

I. Introduction

The application process for a BLRD Validation of a Novel Animal or Cell-base Models of Diseases Merit Review Pilot Award application begins with the preparation and submission of a Letter of Intent (LOI). **The primary purpose of the LOI is to provide BLRD with the opportunity to determine whether the proposed studies fit within the purview of the validation RFA and if the proposed studies will address a critically important area of concern that is prevalent in the Veteran population**.

II. Purpose

This RFA is specifically directed at validating an identified potential animal model for a Veteran health condition that would significantly advance the understanding of the condition or accelerate development of treatments. Note that this RFA is not directed at the development of animal models. Also note that studies designed to establish and/or validate animal models to replace/reduce use of canines, felines and non-human primates in VA research should be submitted to RFA BX-22-032.

The purpose of this RFA is to allow BLRD to fund studies which validate published results of high importance to Veteran health. Applications submitted to this RFA should validate clinically relevant novel animal or cell-based models of health conditions important to Veterans. The original study should meet a high scientific standard, must have demonstrated that the proposed model recapitulates the human condition, and have important implications in terms of the etiology, pathogenesis, and/or genetics of service-related illness and injury which are more common in US military Veterans, and a clear translational potential to improve the current clinical care of Veterans. Application should describe the need to validate this model for its acceptance by the scientific community and how the proposed Validation study will mitigate that need. Additionally, if appropriate, prior to submitting an application, investigators should submit an invention disclosure to VA-Technology Transfer Program for proposals that may result in a model system having a commercial potential.

Veteran related health topics responsive to this announcement include, but are not limited to:

- Long- and short-term consequences of military environmental exposures (e.g., burn pits) relevant to deployment in Iraq and Afghanistan
- Spinal cord injury (SCI)
- Traumatic brain injury (TBI)
- Polytrauma

- Post-traumatic epilepsy
- Vision and/or hearing deficits related to blast injury
- Burns
- Fracture Repair
- Chronic pain related to neurotrauma
- Wound Healing
- Mood and anxiety disorders (including depression, PTSD, acute stress disorder, etc.)

III. Studies appropriate for this RFA are studies that:

- 1. Validate an animal model for a Veteran Health condition lacking an animal model that recapitulates the human condition. The proposed model should be far superior to the current animal models, address the needs of the research community, and is not developed to address the needs of a specific project.
- 2. Validate cell/tissue culture models of diseases (e.g., organs-on-chip) to replace currently used animal models of diseases important to the healthcare of Veterans.

IV. Studies that are not appropriate for this RFA are studies that are:

- Hypothesis driven studies, mechanistic studies, and studies extending findings from one disease/condition to another disease/condition are not appropriate for this RFA and can be submitted under other RFAs.
- Unable to justify the need to validate the model to increase its acceptance by the scientific community.
- Merit award applications that could be submitted under other RFAs from investigators lacking BLRD eligibility.
- Merit award applications that could be submitted under other RFAs from investigators who wish to avoid restriction of one funded project for each RFA.

V. LOI Approval Considerations

- The proposed project must fall within the BLRD purview.
- The proposed model must have the potential to improve the understanding of pathogenesis and treatment options of an unmet clinical need of Veterans.
- The proposed project must address Department of Veterans Affairs (VA) investigator eligibility. Non-clinician PD/PIs are not required to apply for eligibility for this RFA only but must have a 5/8ths VA paid position at the time of application; a promise of employment after funding or WOC appointment is not a sufficient qualification to apply for this RFA.
- The proposed project provides BLRD an opportunity to plan for appropriate resources that allow for an efficient and effective review process.

VI. Components of the LOI Submission

LOIs must be submitted using the following template. Each LOI must contain the following three required components (A-C):

A. VHA Research & Development Letter of Intent Cover Page (VA Form 10-1313-13)

This form is available on the <u>forms page of the VA Research website</u>.

B. Completed LOI Template

The template is available on the BLRD <u>webpage</u>. Please clearly and succinctly address **all** of the requirements.

C. PI's Biographical Sketch

The biographical sketch template is available on the <u>VA Research Intranet</u>. If you cannot access the intranet, please contact your local research office.

VII. Submission of the LOI

BLRD will review and respond to submitted LOIs at any time; however, an LOI must be submitted no later than the date specified in the RFA. LOIs must be e-mailed to <u>VHABLRD-CSRD@va.gov</u> by <u>the local VA facility research office</u>. Applicants may not upload LOIs directly to the mailbox. Questions relating to the LOI preparation and submission process may also be directed to <u>VHABLRD-CSRD@va.gov</u>. **Applicants are strongly encouraged to submit LOIs as early as possible.**

LOIs with the following issues will be administratively withdrawn:

- Multiple submissions on behalf of the same PI;
- LOIs lacking the requisite information;
- LOIs submitted by investigators who are not eligible to receive VA funding.

LOIs meeting all of the administrative requirements are subject to disapproval if:

- Lacking in innovation/impact;
- Do not fall within the purview of BLRD and/or research priority area;
- Are overly represented by ongoing ORD-funded studies;

VIII. Approval

The LOI approval letter must be submitted with the full application package (in the Letters of Support attachment, o8b_VA_Letters.pdf). A submitted validation application must not deviate significantly in specific aims from the original approved validation trial LOI. BLRD may administratively withdraw from review any application that substantially deviates from what was described and approved at the LOI stage.

An approved validation application LOI is valid for a maximum of three (3) submissions of an application (initial submission and up to two resubmissions) during a period that encompasses four (4) *consecutive* review cycles following the initial approval of the LOI.

Effective: April 2022