

Subject: Histology and Immunohistochemistry Support Services for Brain Injury studies at the Brain Trauma Neuroprotection and Neurorestoration (BTN) Branch for the Walter Reed Army Institute of Research (WRAIR)

THIS IS NOT A REQUEST FOR PROPOSALS (RFP) OR A REQUEST FOR QUOTATIONS (RFQ); IT IS STRICTLY A REQUEST FOR INFORMATION (RFI). NEITHER UNSOLICITED PROPOSALS NOR ANY OTHER KINDS OF OFFERS WILL BE CONSIDERED IN RESPONSE TO THIS RFI. NO CONTRACT WILL BE AWARDED PURSUANT TO THIS ANNOUNCEMENT.

1.0 DISCLAIMER: This RFI is issued solely for information and planning purposes and does not constitute a solicitation. Neither unsolicited proposals nor any other kind of offers will be considered in response to this RFI. Responses to this notice are not offers and will not be accepted by the Government to form a binding contract. Responders are solely responsible for all expenses associated with responding to this RFI. All information received in response to this RFI that is marked Proprietary will be handled accordingly. Responses to the RFI will not be returned. At this time, questions concerning the composition and requirements for a future RFQ will not be entertained.

2.0 SUBJECT: WRAIR is the largest and most diverse biomedical research laboratory in the Department of Defense (DoD). The main facility, the Daniel K. Inouye building, is located in Silver Spring, Maryland. Other laboratory and clinical facilities also carry out research studies in Asia, Africa, and Europe through cooperative partnerships with a host of other governments and militaries through the U.S. State Department. WRAIR's greatest resources are the dedicated scientists, clinicians, and support personnel who make up the core of WRAIR today. By integrating basic research and advanced technology for the primary goal of protecting the Warfighter, WRAIR serves as the premier biomedical research organization within the DoD.

3.0 BACKGROUND: The Brain Trauma Neuroprotection and Neurorestoration (BTN) Branch at Walter Reed Army Institute of Research (WRAIR) conducts preclinical research identifying the pathophysiology processes of mild-severe traumatic brain injury (TBI), as well as, evaluating novel therapeutic strategies to diagnose and/or treat TBI occurring in military centric environments. The ultimate goal of these studies is to identify drugs or other forms of therapy which can transition to clinical products (i.e. biomarkers discovery and drug development). This bench-to-bedside strategy relies on the use of clinically, and militarily relevant, animal models of penetrating and concussive brain injury, e.g. the rat penetrating ballistic-like brain injury (PBBi) model and the rat projectile concussive impact (PCI) brain injury model. In both of these TBI models, the occurrence of histological, cellular, and/or molecular changes in the brain are believed to be responsible for the underlying mechanisms of the secondary injuries, which are considered targets for therapeutic treatments. In order to identify and quantitatively measure brain injury induced histopathology (e.g. tissue tearing, lesion, or cavity) and cellular/molecular pathology (e.g. neuroinflammation, axonal injury, blood brain barrier damage, etc.), the brain samples must be carefully prepared and processed for histopathology and immunohistochemistry analysis. Since our PCI and PBBi models represent different etiologies and severities, it is critically important to acquire a histological service known for its expertise in neuroanatomy, neurohistopathology and immunohistopathology. This service will be responsible for processing severely injured brain samples, containing lesions and cavities, while preserving the anatomical architecture for volumetric and immunohistopathological analysis (e.g. in the PBBi model), as well as, detecting subtle cellular and molecular changes in the brain which may not show gross tissue damage (e.g. for the PCI model).

4.0 RESPONSE INSTRUCTIONS: Respondents should address the following in their capabilities statement:

The purpose of this requirement is to provide technical expertise and support service necessary to perform histopathy and immunohistochemistry non-personal support services for the Brain Trauma, Neuroprotection and Neurorestoration Branch and Blast-induced Neurotrauma, Center for Military Psychiatry and Neuroscience, Walter Reed Army Institute of Research (WRAIR) as well as the Neuroscience Branch, U.S. Army Medical Research Institute of Chemical Defense (ICD).

Contractor must show how they can process severely injured brain samples, containing lesions and cavities, while preserving the anatomical architecture for volumetric and immunohistopathological analysis (e.g. in the PBB1 model), as well as, detecting subtle cellular and molecular changes in the brain which may not show gross tissue damage (e.g. for the PCI model). They must also be able to show how samples will be transported or shipped.

5.0 CONTACT INFORMATION: All information regarding Capabilities Statements or any other proprietary information relative to this RFI shall be submitted via email to the Contract Specialist, Brenda Mena at brenda.i.mena.civ@health.mil no later than **10:00 a.m. E.S.T. on Monday, 17 April 2023.**