

SOURCES SOUGHT NOTICE

Solicitation Number: 75N98027R00005

Title: Quantitative Analysis of Longitudinal MR Images

Classification Code/Title: AN11 - Health R&D Services; Health Care Services; Basic Research

NAICS Code/Title: 541714 Research and Development in Biotechnology (except Nanobiotechnology)

Size Standard: 1,000 employees

Description:

This is a Research and Development (R & D) Sources Sought notice. This is NOT a solicitation for proposals, proposal abstracts, or quotations. The purpose of this notice is to obtain information regarding the availability and capability of all qualified sources to perform a potential R & D requirement.

This notice is issued to help determine the availability of qualified companies technically capable of meeting the Government requirement and to determine the method of acquisition. It is not to be construed as a commitment by the Government to issue a solicitation or ultimately award a contract. Responses will not be considered as proposals or quotes. No award will be made as a result of this notice. The Government will NOT be responsible for any costs incurred by the respondents to this notice. This notice is strictly for research and information purposes only. Small businesses are encouraged to respond.

Background:

Since 1958, the Baltimore Longitudinal Study of Aging (BLSA) has been a major research program conducted by the National Institute on Aging (NIA). The BLSA is a multi-disciplinary study of physiologic and psychological aspects of normal aging in community-dwelling men and women. Active BLSA participants are volunteers who visit the Clinical Unit of the NIA-Intramural Research Program (IRP) in Baltimore, MD for testing every 1 to 4 years. Since 1994, the NIA has been conducting a longitudinal brain imaging study of older adults in the BLSA to characterize individual differences in longitudinal brain changes, to investigate the extent to which these brain changes underlie individual differences in cognitive aging, to identify brain changes that may be predictors of cognitive decline and Alzheimer's disease, and to assess the impact of potential modulators of brain and cognitive aging. As of October, 2024, more than 4000 neuroimaging evaluations have been performed for BLSA participants. As part of this research program, it has also been necessary to develop and validate sophisticated tools for analysis of longitudinal neuroimaging data that can be applied in large-scale studies. Thus, this project has involved the development, validation, and refinement of

novel image analysis tools and the application of these tools to longitudinal Magnetic Resonance (MR) imaging scans and Positron Emission Tomography (PET) measures of regional cerebral blood flow, amyloid and tau deposition in brain. More recently, these tools include advanced machine learning approaches using pattern analysis to classify clinical status and aging trajectories of individuals based on structural and functional brain images.

The work of this requirement will continue to focus on the application of sophisticated tools and quantitative analysis of longitudinal MRI data acquired from BLSA participants. Thus, the proposed contract will apply methods developed in prior acquisitions, that allow continuity of research and provide longitudinal consistency of measures of global and regional brain volumes and ischemic lesion volumes, as well as functional MR data, including consistency with MR data acquired during earlier phases of this project (since 1994). This Contract will also require the application of sophisticated analytic approaches, including previously developed machine learning and pattern analysis methods, to allow classification of risk for cognitive impairment and likelihood of maintenance of cognitive resilience on an individual subject basis.

Purpose and Objectives:

The principal goal of this procurement is to provide quantification of MR imaging scans to provide measures of brain structure and function in BLSA participants, including heterogeneous brain aging trajectories. Specifically, these data will allow NIA investigators to continue to address the following questions:

- What are the rates and regional distribution of changes in brain anatomy in non-demented men and women throughout adulthood?
- What is the frequency and progression of brain abnormalities in older adults and what is the clinical significance of these findings for cognitive aging?
- Against a background of age-related changes in brain structure, which changes predict cognitive impairment and Alzheimer's disease, and conversely, what are the predictors of the maintenance of cognitive health or cognitive resilience?
- What factors modulate cognitive and brain aging and how do they impact brain-behavior associations?

Project Requirements:

See attached Draft Statement of Work.

Anticipated Period of Performance:

The anticipated period of performance is one year from date of award.

Capability Statement/Information Sought:

Companies that believe they possess the capabilities to provide the required products should submit documentation of their ability to meet each of the project requirements to the Contracting Officer. The capability statement must specifically address each of the project requirements separately. Additionally, the capability statement should include 1) the total number of employees, 2) the professional qualifications of personnel as it relates to the requirements outlined, 3) any contractor GSA Schedule contracts and/or other government-wide acquisition contracts (GWACs) by which all of the requirements

may be met, if applicable, and 4) any other information considered relevant to this program. Capability statements must also include the Company Name, Unique Entity ID from SAM.gov, Physical Address, and Point of Contact Information. The response must include the respondents' technical and administrative points of contact, including names, titles, addresses, telephone and fax numbers, and e-mail addresses.

Interested companies are required to identify their type of business, applicable North American Industry Classification System (NAICS) Code, and size standards in accordance with the Small Business Administration. The government requests that no proprietary or confidential business data be submitted in a response to this notice. However, responses that indicate the information therein is proprietary will be properly safeguarded for Government use only. Capability statements must include the name and telephone number of a point of contact having authority and knowledge to discuss responses with Government representatives. Capability statements in response to this market survey that do not provide sufficient information for evaluation will be considered non-responsive. When submitting this information, please reference the solicitation notice number.

One (1) copy of the response is required and must be in Microsoft Word or Adobe PDF format using 11-point or 12-point font, 8-1/2" x 11" paper size, with 1" top, bottom, left and right margins, and with single or double spacing.

The information submitted must be in an outline format that addresses each of the elements of the project requirement and in the capability statement /information sought paragraphs stated herein. A cover page and an executive summary may be included but is not required.

The response is limited to ten (10) page limit. The 10-page limit does not include the cover page, executive summary, or references, if requested.

All responses to this notice must be submitted electronically to the Contract Specialist and Contracting Officer. Facsimile responses are **NOT** accepted.

The response must be submitted to Sneha Singh, Contract Specialist at e-mail address sneha.singh@nih.gov.

The response must be received on or before Monday, November 9, 2026, 9:00 AM, Eastern Time.

Disclaimer and Important Notes: This notice does not obligate the Government to award a contract or otherwise pay for the information provided in response. The Government reserves the right to use information provided by respondents for any

purpose deemed necessary and legally appropriate. Any organization responding to this notice should ensure that its response is complete and sufficiently detailed to allow the Government to determine the organization's qualifications to perform the work.

Respondents are advised that the Government is under no obligation to acknowledge receipt of the information received or provide feedback to respondents with respect to any information submitted. After a review of the responses received, a presolicitation synopsis and solicitation may be published in betaSAM. However, responses to this notice will not be considered adequate responses to a solicitation.

Confidentiality: No proprietary, classified, confidential, or sensitive information should be included in your response. The Government reserves the right to use any non-proprietary technical information in any resultant solicitation(s).