

Limited Source Justification

1. Identification of the agency and contracting activity.

- a. **Federal agency and contracting activity.** HHS. National Institutes of Health (NIH)
- b. **Sponsoring organization.** The National Cancer Institute (NCI), Center for Cancer Research (CCR), Laboratory of Biochemistry and Molecular Biology (LBMB)
- c. **Project Officer information.**

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2. Nature and/or description of the action being approved.

- a. **Acquisition purpose and objectives.** The U.S. Department of Health and Human Services (DHHS), National Institutes of Health (NIH), National Cancer Institute (NCI), Center for Cancer Research (CCR), Laboratory of Biochemistry and Molecular Biology (LBMB) requires one (1) new, commercially available, Amersham Typhoon NIR with IP upgrade. Within the LBMB group, the Koivomagi lab plans to procure on a sole source basis the Amersham Typhoon NIR system with IP upgrade to replace an end-of-life model (Typhoon 9500) that is no longer be repairable or serviceable. Acquisition of the new supported Amersham Typhoon NIR model with IP upgrade will allow continued use of this laser scanning technology in their research.
- b. **Project background.** Laboratories within LBMB investigate many aspects of chromosome biology, including heterochromatin formation, chromosome segregation, regulation of genome stability, and cell cycle regulation. These functions are critical for many fundamental cellular processes, such as chromosome segregation, stem cell proliferation, and prevention of translocations that can lead to cancer. Particularly relevant to this acquisition is the use of laser scanning technology in experiments conducted by the Koivomagi and other LBMB labs. Many of these experiments require laser scanning for detecting fluorescent, near-infrared, or radioisotope labeled proteins or nucleic acids on gels and membranes. The Typhoon has been a heavily used single platform resource for all of these experimental requirements and is available to all

members of LBMB. After many years of service, support services and parts are now no longer available, and an end of service was issued for this instrument that is now affecting our ability to keep it operational. Continued use of this instrument is required to meet the research needs of the Koivomagi lab as well as multiple other labs within LBMB. The replacement of the end-of-life model instrument will ensure that the research goals can continue to be met.

3. Description of the supplies or services required to meet the agency's needs (including the estimated value).

- a. **Project title.** Amersham Typhoon NIR with IP upgrade laser scanner
- b. **Project description.** Within the LBMB, the Koivomagi lab focuses on uncovering the mechanisms that control cell division and seeks to identify small molecules that could be used as therapeutic agents for the treatment of diseases such as cancer. Yeast and mammalian cell culture techniques, in addition to biochemical analysis protocols, are utilized in these studies. To support the molecular biology needs of the lab, including DNA and protein analysis, the lab requires an imaging system capable detecting fluorescent, near-infrared, or radioisotope labeled proteins or nucleic acids on gels and membranes. The Typhoon NIR with IP upgrade will meet these needs in a compact, all in one unit and will support important basic research efforts into the underlying causes of cancer.

c.

- **Requirement type.**

- ☐ Support services (non-research & development)
- ☒ Supplies/equipment
- ☐ Information technology (IT)
- ☐ Other (specify): _____

- **Type of action.**

- ☒ New requirement
- ☐ Follow-on
- ☐ Other (specify): _____

- **Proposed contract/order type.**

- ☒ Firm-fixed-price
- ☐ Time and materials
- ☐ Indefinite delivery (specify whether indefinite quantity, definite quantity, or requirements): _____
- ☐ Other (specify): _____

- **Acquisition identification number.**

- c. **Total estimated dollar value and performance/delivery period.** The total cost, including delivery and set up, is estimated to be \$98,993.85. Estimated delivery is 6-10 weeks.
4. **Identification of the justification rationale [see 8.405-6(a) and (b)] and, if applicable, a demonstration of the proposed contractor's unique qualifications to provide the required supply or service.**
- a. **Acquisition authority.**
- ☐ **This acquisition is conducted under the authority of the Multiple Award Schedule Program. Consideration of schedule contractors will be restricted to fewer than the number required by Federal Acquisition Regulation (FAR) 8.405-6(a)(1) (i.e., fewer than three FSS contractors).**
- ☒ **This acquisition is conducted under the authority of the Multiple Award Schedule Program. Consideration of schedule contractors will be restricted only to the item peculiar to one manufacturer as provided in FAR 8.405-6(a)(2).**
- b. **Demonstration of the proposed contractor(s) unique qualifications to provide the required supply or service.**
- **Name and address of the proposed contractor(s).**
Government Scientific Source, Inc.
Veteran Owned Small Business
12355 Sunrise Valley Drive Suite 400
Reston, VA 20191
800 248-8030
 - **Nature of the acquisition and proposed contractor(s) unique qualifications.** LBMB/Koivomagi lab have need of a replacement single platform system capable of variable mode laser scanning for the detection of labeled (fluorescent, near infrared, and radioisotope) biomolecules. The system will replace an end-of-life Typhoon 9500. Listed below are some of the required features that are provided exclusively on the current Typhoon model, which are required for our research needs:
 1. Maximum pixel resolution of 10um, and a dynamic range of over 5 orders of magnitude. This is required for accurate quantitation of detected signal from proteins or nucleic acids in gels and membranes.
 2. Imaging modes including near infrared fluorescence, autoradiography, and fluorescent Cy5 detection

3. Equipped with bi-alkali and multi-alkali photomultiplier tubes, allowing a broad spectrum of detection optimized to respond to the specific emission wavelength of the sample.
4. Scan area (40 x 46cm) that can accommodate large gel sizes, up to 9 multiwell plates, or up to 20 small gels. Simultaneous detection of multiple small gels or blots or 2 large gels is a required feature.
5. Increased sensitivity due to direct optical imaging of samples without an intervening glass plate.
6. Emission filters capable of supporting multiplex detection capability, allowing fluorescently Cy5 labeled samples to be detected as well as near infrared. Filters must be easily accessible and changed without requiring tools to accommodate a wide range of individual user requirements. In particular, we require band pass filters allowing detection of fluorophore Cy5.
7. Included ImageQuant TL image analysis software for quantitating gels and arrays

5. Determination by the ordering activity Contracting Officer that the order represents the best value consistent with FAR 8.404(d).

The NCI contract specialist will consider the independent government estimate and previous purchase order prices as a determining factor for reasonableness.

Based on the aforementioned, there is no reason to believe that price will not be fair and reasonable to the Government.

A final determination will be conducted prior to the award of this contract.

6. Description of the market research conducted among schedule holders and the results, or a statement of the reasons market research was not conducted. We have need of a variable mode imaging system to replace a Typhoon 9500 system that has reached end of service. The LBMB has depended heavily for many years on the capabilities of this laser scanner and this system is proven capable of fulfilling our research requirements. Our attempts to identify any other suitable platform that would allow imaging capabilities of similar quality have not yielded any other alternative options, as the Typhoon system includes features that cannot be matched by competitors' products currently on the market. A few critical features are especially important for our research. In particular, the need for a large scan area (40 x 46) to accommodate large gel sizes and multiplexing capabilities with band pass filters allowing detection of visible Cy5 fluorophores and near-infrared has led us to conclude that a replacement with the current model Amersham Typhoon NIR with IP upgrade is the only instrument that will meet our needs. In identifying the Amersham Typhoon available on the GSA schedule contract we have concluded that: 1) no other company or small business manufactures the Typhoon system and 2) no

other company offers a device or system with the necessary features to achieve similar or superior results. These features are described in Section 4b. In addition, the Amersham Typhoon NIR with IP upgrade system manufactured by Cytiva is distributed solely through Government Scientific Source, Inc. via GSA schedule contract.

7. **Any other facts supporting the justification.** None.
8. **Statement of the actions, if any, the agency may take to remove or overcome any barriers that led to the restricted consideration before any subsequent acquisition for the supplies or services is made.**
 - a. **Removal of barriers to competition.** There are no future plans to acquire this device again.
 - b. **Listing of sources, if any, that expressed an interest, in writing, in the acquisition.** N/A
9. **Program office certification.**

This is to certify that the portions of this justification that have been developed by the undersigned program office personnel, including supporting information and/or data verifying the Government's minimum needs or requirements, or other rationale for limited sources, are accurate and complete.

Official	Name & Title	Signature	Date
Project Officer	Mardo Koivomagi, Ph.D. LBMB Technical Lab Manager		4/12/2024
Project Officer's Immediate Supervisor	Shiv Grewal, Ph.D. NIH Distinguished Investigator Lab Chief, LBMB		4/12/2024
Head of the Sponsoring Program Office			

10. Contracting Officer certification.

This is to certify that the justification for the proposed acquisition has been reviewed and that to the best of my knowledge and belief the information and/or data provided to support the rationale and recommendation for approval is accurate and complete.

Official	Name & Title	Signature	Date
Contracting Officer			

11. Chief of the Contracting Office and Head of the Contracting Activity signature(s).

Official	Name & Title	Signature	Date
Chief of the Contracting Office			
Head of the Contracting Activity			

12. Competition Advocate signature.

Official	Name & Title	Signature	Date
Competition Advocate			

13. HHS Senior Procurement Executive signature.

Official	Name & Title	Signature	Date
HHS Senior Procurement Executive			

Posting Date: July 10, 2024

Closing Date: June 20, 2024, 11:30 a.m. ET

Reference Number: 24-038173

To: NCI Bid Board

From: Jasmine Ruffin
Purchasing Agent
jasmine.ruffin@nih.gov

Subject: NCI Bid Board Posting – Repair to the wash manifold assembly of a MicroCal PEAQ-ITC instrument

The Laboratory of Biochemistry and Molecular Biology (**LBMB**) carries out basic research into the mechanisms underlying cell growth, division, differentiation and homeostasis with a focus on the biology of chromosomes and the cell nucleus.

LBMB will acquire repairs to the wash manifold assembly of a MicroCal PEAQ-ITC instrument, which is used to measure biomolecular interactions, requires repair. This instrument is essential for the research in the Laboratory of Biochemistry and Molecular Biology and is used to study the interactions among chromatin-associated proteins and their links to cancer.

The National Cancer Institute plans to purchase repairs for the MicroCal PEAQ-ITC instrument. This is not a request for competitive quotation. However, if any interested party believes it can meet the attached requirements, it may submit a statement of capabilities. The capability statement must be in writing and must contain information and material in sufficient detail to allow NCI to determine if the party can fully meet this requirement. The capability statement must be received in the contracting office by 11:30 AM on July 20, 2024. A determination by the Government not to compete this requirement based upon responses to this notice is solely within the discretion of the Government. Information received will be considered solely for the purpose of determining whether to conduct a competitive procurement.

Sole Source Justification:

Malvern Panalytical is the sole source provider of factory parts, technical service training, and servicing for all Malvern Panalytical systems in the United States and Canada. Their capabilities cover all service, preventive maintenance, parts and calibration procedures. Malvern has experienced and certified customer support engineers and has achieved ISO certification. Due to the proprietary nature of the systems developed by Malvern, it is not possible to obtain service coverage for this instrument elsewhere.

Attached Documents:

SF18
Statement of Work

FAR Clause 52.213-4 Simplified Acquisitions Terms and Conditions (AUG 2019) is applicable and available in full text upon request.

REQUEST FOR QUOTATION (THIS IS NOT AN ORDER)			THIS RFQ <input type="checkbox"/> IS <input type="checkbox"/> IS NOT A SMALL BUSINESS SET-ASIDE		PAGE <input type="text"/> OF <input type="text"/> PAGES
1. REQUEST NO.	2. DATE ISSUED	3. REQUISITION/PURCHASE REQUEST NO.	4. CERT. FOR NAT. DEF. UNDER BDSA REG. 2 AND/OR DMS REG. 1		RATING
5a. ISSUED BY			6. DELIVER BY (Date)		
5b. FOR INFORMATION CALL (NO COLLECT CALLS)			7. DELIVERY		
NAME		TELEPHONE NUMBER		<input type="checkbox"/> FOB DESTINATION <input type="checkbox"/> OTHER (See Schedule)	
		AREA CODE	NUMBER	9. DESTINATION	
8. TO:			a. NAME OF CONSIGNEE		
a. NAME		b. COMPANY		b. STREET ADDRESS	
c. STREET ADDRESS			c. CITY		
d.. CITY		e.. STATE	f.. ZIP CODE	d.. STATE	e. ZIP CODE
10. PLEASE FURNISH QUOTATIONS TO THE ISSUING OFFICE IN BLOCK 5a ON OR BEFORE CLOSE OF BUSINESS (Date)		IMPORTANT: This is a request for information, and quotations furnished are not offers. If you are unable to quote, please indicate on this form and return it to the address in Block 5a. This request does not commit the Government to pay any costs incurred in the preparation of the submission of this quotation or to contract for supplies or services. Supplies are of domestic origin unless otherwise indicated by quoter. Any representations and/or certifications attached to this Request for Quotations must be completed by the quoter.			

11. SCHEDULE (Include applicable Federal, State and local taxes)

ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)

12. DISCOUNT FOR PROMPT PAYMENT	a. 10 CALENDAR DAYS (%)	b. 20 CALENDAR DAYS (%)	c. 30 CALENDAR DAYS (%)	d.. CALENDAR DAYS	
				NUMBER	PERCENTAGE

NOTE: Additional provisions and representations ☐ are ☐ are not attached.

13. NAME AND ADDRESS OF QUOTER		14. SIGNATURE OF PERSON AUTHORIZED TO SIGN QUOTATION		15. DATE OF QUOTATION	
a. NAME OF QUOTER		16. SIGNER		b. TELEPHONE	
b. STREET ADDRESS					
c. COUNTY		a. NAME (Type or print)		AREA CODE	
d. CITY	e. STATE	f. ZIP CODE	c. TITLE (Type or print)		NUMBER

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NAME			TELEPHONE NUMBER			9. DESTINATION	
			AREA CODE NUMBER			a. NAME OF CONSIGNEE	
8. TO:							
a. NAME			b. COMPANY			b. STREET ADDRESS	
c. STREET ADDRESS						c. CITY	
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