

Posting Date: December 21, 2021

Closing Date: December 31, 2021 10:30 a.m. ET

Reference Number:

To: NCI Bid Board

From: Tanika Crossen

NCI P-ARC Program Analyst: crossent@nih.gov

Subject: NCI Bid Board Posting – Purchase of five (5) concurrent web-based scientific software licenses to enable NCI scientists to analyze and explore multivariate, large omics data.

NCI is poised to accelerate developments in cancer research through data science by empowering scientists and clinicians with the data and tools needed to drive their research. NCI embraces this charge and is committed to enhancing the data sharing and analysis infrastructure, creating a comprehensive data sharing vision and strategy, and strengthening the data science workforce for NCI and the cancer research community. This is done in collaboration across NCI's divisions, offices, and centers, and throughout the cancer research community.

CBIIT accelerates cancer research by empowering scientists and clinicians with the data and tools they need to drive their research. CBIIT partners with NCI programs and cancer researchers to meet the informatics, data, and information technology needs of the community today. With our partners, we envision the future of cancer research and how informatics, data science, and information technology will shape that future.

The National Cancer Institute plans to purchase these web-based scientific software licenses from Qlucore to perform this work. 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 December 31, 2021 ET. 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:

The Qlucore Omics Explorer software includes two new integrated tools that focus on facilitating the analysis of data by comparing how the experiment corresponds to public information and results. The GO browser allows users to search within any ontology; interesting results can then be exported to the variable window and used as a normal variable list. Gene Set Enrichment Analysis workbench (GSEA) provides a complete set of results for large data sets (132 x 50,000) with just three mouse clicks, and in less than 30 seconds – This is much faster and easier than any other available commercial software of this type. This functionality allows scientists to view all elements of a specific list in a dedicated color in all open plots. This is designed to aid the scientist in interpreting the combination of their own experiment against publically available information.

In the past many scientists have had to overcome the problem of working with identifiers for variables in public data being different from those used in their own experiments. This has made their work complicated and tedious when comparing information. The new Qlucore Omics Explorer aims to solve this problem by introducing the variable collapse function. The variable collapse function is used for data sets with multiple measurements for the same variable. A typical

example is for gene expression microarrays where you measure several probes or features that match to one gene. Using the variable collapse you can either study data at gene level or probe/feature level.

In addition, the projection score system has been introduced, which provides the user with information on how well the visual representation actually represents the data. The projection score measures how informative a low-dimensional representation obtained by PCA is. It also provides explicit comparison of representations corresponding to different variable subsets. The software's unique capability lies in the interactive PCA tool that is extremely useful for clinical investigators wanting to find out which patient variables are important in separating outpatient groups.

Attached Documents:

SF18

Statement of Work

FAR Clause 52.204-24 Representation Regarding Certain Telecommunications and Video Surveillance Services or Equipment.

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 checked="" type="checkbox"/> IS <input type="checkbox"/> IS NOT A SMALL BUSINESS SET-ASIDE		PAGE OF PAGES 1 OF 1	
1. REQUEST NO. 22-012653		2. DATE ISSUED 12/21/2021		3. REQUISITION/PURCHASE REQUEST NO.	
5a. ISSUED BY		4. CERT. FOR NAT. DEF. UNDER BDSA REG. 2 AND/OR DMS REG. 1		RATING	
5b. FOR INFORMATION CALL (NO COLLECT CALLS)		6. DELIVER BY (Date)		7. DELIVERY	
NAME		TELEPHONE NUMBER		<input type="checkbox"/> FOB DESTINATION <input type="checkbox"/> OTHER (See Schedule)	
Tanika Crossen		AREA CODE NUMBER 301 480-0602		9. DESTINATION	
8. TO:		a. NAME OF CONSIGNEE		NIH, NCI	
a. NAME		b. COMPANY		b. STREET ADDRESS	
c. STREET ADDRESS		Qlucore		c. CITY	
d.. CITY		e.. STATE		f.. ZIP CODE	
				MD 20892	
10. PLEASE FURNISH QUOTATIONS TO THE ISSUING OFFICE IN BLOCK 5a ON OR BEFORE CLOSE OF BUSINESS (Date)		11. SCHEDULE (Include applicable Federal, State and local taxes)			
12/21/21 11:30 AM		<p>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.</p>			
ITEM NO. (a)	SUPPLIES/SERVICES (b)	QUANTITY (c)	UNIT (d)	UNIT PRICE (e)	AMOUNT (f)
	Qlucore Omics Explore software; 5 academic floating licenses with NGS modules Contact: Tanika Crossen NIH, NCI 11400 Rockville Pike Rockwall I, Rm 762 Rockville, MD 20852-9163 301-480-0602 crossent@mail.nih.gov				
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. STREET ADDRESS			a. NAME (Type or print)		b. TELEPHONE AREA CODE
c. COUNTY			c. TITLE (Type or print)		NUMBER
d. CITY			e. STATE f. ZIP CODE		

STATEMENT OF NEED (SON)

1.0 TITLE

Purchase of five (5) concurrent web-based scientific software licenses to enable NCI scientists to analyze and explore multivariate, large omics data.

2.0 BACKGROUND

The Center for Cancer Research (CCR) at the National Cancer Institute requires a web-based, scientific software that allows their scientists embedded in over 240 basic, translational and clinical research labs, to easily analyze and explore their multivariate, large omics datasets.

3.0 TYPE OF ORDER

This is a Firm Fixed-Price Purchase Order.

4.0 SPECIAL ORDER REQUIREMENTS

4.1 PRODUCT FEATURES/SALIENT CHARACTERISTICS

The following salient characteristics are applicable to this acquisition:

- Software shall be web-based
- The software shall allow biologists to easily analyze and explore multivariate, large omics data without the need to become a statistical expert. This data shall be derived from gene expression experiments including RNA-seq, single cell RNA-seq, mRNA, microRNA and SNP microarrays, DNA methylation, metabolomics, proteomics and flow cytometry.
- The software shall use Python scripts to allow pattern recognition of omics data analyzed by projection scores using supervised and non-supervised methods.
- The software shall support multiple data formats including but not limited to, csv, bam, vcf, gtf, bed, fasta, cel, txt etc. The software shall also enable import of any processed data in matrix format and include the ability to import its annotation.
- The software shall allow users to easily visualize their data using dynamic and interactive 2-dimensional and 3-dimensional plots types, including but not limited to two-way PCA-to-heat map transitions, to check both the quality of the data and identify data structure or trends in order that help generate new hypothesis.
- The software shall allow novice users to easily perform statistical analysis of data, including but not limited to well-established methods like t-test, ANOVA, Tukey and regression analysis.
- The software shall also have an Application Programming Interface (API) that enables expert users to integrate their own R language-based statistical methods into the software to perform custom and advanced analysis.
- The software shall allow users to build their own analysis scripts to run the software using workflow templates to enable automation of repetitive tasks.
- The software shall allow users to build data classifiers and use those for predictions, including using machine learning to generate predictive models.
- The software should have additional capability, even if available as an additional line item cost, to include more in-depth Next Generation Sequencing (NGS) workflow. This should include the ability to perform a deeper analysis of NGS data, including the ability to compare data to reference genomes in order to identify point mutations and other sequence perturbations.

STATEMENT OF NEED (SON)

- The software shall include integration data from well-curated publicly available databases like GEO, TCGA, GO browser, integrated GSEA workbench to allow functional analysis of omics data.
- The software shall enable sharing of results and analysis by enabling users to share saved sessions and tracking and documentation of settings used with collaborators.

4.2 DELIVERY / INSTALLATION

Software licenses will be made available within 5 business from date of purchase. Vendor will work with designated NCI CBIIT (Center for Biomedical Informatics and Information Technology) Point of Contact (POC) to set up access.

CBIIT POC:

David Silver
NCI/OD/CBIIT/BOB
9609 Medical Center Dr.
Rockville, MD 20850
Ph# 240.276.7635

4.3 TRAINING

Support services shall be provided during normal hours of operation, Monday through Friday (9:00 AM to 5:00 PM EST), excluding Federal holidays found at <https://www.opm.gov/policy-data-oversight/pay-leave/federal-holidays/#url=2020>. This requirement shall include two days of onsite training, to be coordinated with the NCI Contracting Officer's Representative (COR), and provided by an Original Equipment Manufacturer (OEM)-certified representative, at no additional cost to the Government.

5.0 PAYMENT

Payment shall be made *in full*. Payment authorization requires submission and approval of invoices to the COR and NIH OFM, in accordance with the payment provisions listed below:

The following clause is applicable to all Purchase Orders, Task or Delivery Orders, and Blanket Purchase Agreement (BPA) Calls: PROMPT PAYMENT (JUL 2013) FAR 52.232-25. Highlights of this clause and NIH implementation requirements follow:

I INVOICE REQUIREMENTS

- A. An invoice is the Contractor's bill or written request for payment under the contract for supplies delivered or services performed. A proper invoice is an "Original" which must include the items listed in subdivisions 1 through 12, below, in addition to the requirements of FAR 32.9. If the invoice does not comply with these requirements, the Contractor will be notified of the defect within 7 days after the date the designated billing office received the invoice (3 days for meat, meat food products, or fish, and 5 days for perishable agricultural commodities, dairy products, edible fats or oils) with a statement of the reasons why it is not a proper invoice. (See exceptions under II., below.) Untimely notification will be taken into account in the computation of any interest penalty owed the Contractor.

STATEMENT OF NEED (SON)

1. Vendor/Contractor: Name, Address, Point of Contact for the invoice (Name, title, telephone number, e-mail and mailing address of point of contact).
2. Remit-to address (Name and complete mailing address to send payment).
3. Remittance name must match exactly with name on original order/contract. If the Remittance name differs from the Legal Business Name, then both names must appear on the invoice.
4. Invoice date.
5. Unique invoice #s for all invoices per vendor regardless of site.
6. NBS document number formats must be included for awards created in the NBS: Contract Number; Purchase Order Number; Task or Delivery Order Number and Source Award Number (e.g., Indefinite Delivery Contract number; General Services Administration number); or, BPA Call Number and BPA Parent Award Number.
7. Data Universal Numbering System (DUNS) or DUNS + 4 as registered in the Central Contractor Registration (CCR).
8. Federal Taxpayer Identification Number (TIN). In those exceptional cases where a contractor does not have a DUNS number or TIN, a Vendor Identification Number (VIN) must be referenced on the invoice. The VIN is the number that appears after the contractor's name on the face page of the award document.
9. Identify that payment is to be made using a three-way match.
10. Description of supplies/services that match the description on the award, by line billed.*
11. Freight or delivery charge must be billed as shown on the award. If it is included in the item price do not bill it separately. If identified in the award as a separate line item, it must be billed separately.
12. Quantity, Unit of Measure, Unit Price, Extended Price of supplies delivered or services performed, as applicable, and that match the line items specified in the award.*

* NOTE: If your invoice must differ from the line items on the award, please contact the Contracting Officer before submitting the invoice. A modification to the order or contract may be needed before the invoice can be submitted and paid.

B. Shipping costs will be reimbursed only if authorized by the Contract/Purchase Order. If authorized, shipping costs must be itemized. Where shipping costs exceed \$100, the invoice must be supported by a bill of lading or a paid carrier's receipt.

C. Mail an original and 1 copy of the itemized invoice to:

National Institutes of Health
Office of Financial Management, Commercial Accounts
2115 East Jefferson Street, Room 4B-432, MSC 8500
Bethesda, MD 20892-8500

For inquiries regarding payment call: (301) 496-6088

In order to facilitate the prompt payment of invoices, it is recommended that the vendor submit a photocopy of the invoice to the "Consignee" designated for the acquisition in blocks 6A – 6E of the face page of the Order/Award document.

II. INVOICE PAYMENT

STATEMENT OF NEED (SON)

- A. Except as indicated in paragraph B., below, the due date for making invoice payments by the designated payment office shall be the later of the following two events:
 - 1. The 30th day after the designated billing office has received a proper invoice.
 - 2. The 30th day after Government acceptance of supplies delivered or services performed.
- B. The due date for making invoice payments for meat and meat food products, perishable agricultural commodities, dairy products, and edible fats or oils, shall be in accordance with the Prompt Payment Act, as amended.

III. INTEREST PENALTIES

- A. An interest penalty shall be paid automatically, if payment is not made by the due date and the conditions listed below are met, if applicable.
 - 1. A proper invoice was received by the designated billing office.
 - 2. A receiving report or other Government documentation authorizing payment was processed and there was no disagreement over quantity, quality, or contractor compliance with a term or condition.
 - 3. In the case of a final invoice for any balance of funds due the contractor for supplies delivered or services performed, the amount was not subject to further settlement actions between the Government and the Contractor.
- B. Determination of interest and penalties due will be made in accordance with the provisions of the Prompt Payment Act, as amended, the Contract Disputes Act, and regulations issued by the Office of Management and Budget.

IV. PROVIDING ACCELERATED PAYMENT TO SMALL BUSINESS SUBCONTRACTORS, FAR 52.232-40 (DEC 2013)

- a) Upon receipt of accelerated payments from the Government, the Contractor shall make accelerated payments to its small business subcontractors under this contract, to the maximum extent practicable and prior to when such payment is otherwise required under the applicable contract or subcontract, after receipt of a proper invoice and all other required documentation from the small business subcontractor.
- b) The acceleration of payments under this clause does not provide any new rights under the prompt Payment Act.

Include the substance of this clause, include this paragraph c, in all subcontracts with small business concerns, including subcontracts with small business concerns for the acquisition of commercial items.

52.204-24 Representation Regarding Certain Telecommunications and Video Surveillance Services or Equipment.

As prescribed in 4.2105(a), insert the following provision:

REPRESENTATION REGARDING CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT (AUG 2019)

(a) Definitions. As used in this provision—

Covered telecommunications equipment or services, Critical technology, and Substantial or essential component have the meanings provided in clause 52.204-25, Prohibition on Contracting for Certain Telecommunications and Video Surveillance Services or Equipment.

(b) Prohibition. Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2019, from procuring or obtaining, or extending or renewing a contract to procure or obtain, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. Contractors are not prohibited from providing—

- (1) A service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or
- (2) Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles.

(c) Representation. The Offeror represents that—

It [] will, [] will not provide covered telecommunications equipment or services to the Government in the performance of any contract, subcontract or other contractual instrument resulting from this solicitation.

(d) Disclosures. If the Offeror has responded affirmatively to the representation in paragraph (c) of this provision, the Offeror shall provide the following information as part of the offer—

- (1) All covered telecommunications equipment and services offered (include brand; model number, such as original equipment manufacturer (OEM) number, manufacturer part number, or wholesaler number; and item description, as applicable);
- (2) Explanation of the proposed use of covered telecommunications equipment and services and any factors relevant to determining if such use would be permissible under the prohibition in paragraph (b) of this provision;
- (3) For services, the entity providing the covered telecommunications services (include entity name, unique entity identifier, and Commercial and Government Entity (CAGE) code, if known); and
- (4) For equipment, the entity that produced the covered telecommunications equipment (include entity name, unique entity identifier, CAGE code, and whether the entity was the OEM or a distributor, if known).

(End of provision)